



**PRECISION  
THAT  
DRIVES  
PERFORMANCE**



PRICE LIST

**0426**



**Birla Precision Technologies Limited (BPTL)** stands as one of India's most trusted tooling solution providers, with a legacy dating back to 1937, when its division Indian Tool Manufacturer's (ITM) pioneered the manufacture of High-Speed Steel (HSS) Cutting Tools in the country.

Over the decades, BPTL has grown into a multi-division enterprise, offering a comprehensive portfolio of tooling solutions:

**Indian Tool Manufacturer's (ITM)** - A leader in HSS cutting tools, with three state-of-the-art plants at Nashik, Aurangabad, and Chalisgaon. ITM manufactures both standard and customized tools in grades like M2, M35, M42, and T42, marketed under the iconic "Dagger" brand, supported by a robust nationwide network.

**Birla Durotool** - Specializes in power tool accessories and engineering files, serving industries, tradesmen, and DIY users with products designed for durability, precision, and consistent performance.

**Carbomach** - Dedicated to producing high-quality carbide drills & end mills, ensuring dependable input materials for precision cutting tools in domestic and global markets.

**Tool Holder Division** - Established in 1986, BPT is India's first tool holder manufacturer, producing AT3 tool holders, collets, work holding, and production boosters. As the only domestic producer of several products, it serves as a true import substitute and a Make in India pioneer. BPT caters to leading customers in India and exports extensively to the USA, Germany, APAC, and China.

**Precision Components Division** specializes in manufacturing high-precision machined components mainly for engine, hydraulic and industrial applications, serving leading Tier 1 & OEMs.

All BPTL plants are ISO 9001:2015 certified by TÜV-RW, upholding the highest standards of manufacturing excellence. With a pan-India network of distributors, dealers, branch offices, and service engineers, BPTL delivers more than just tools - it delivers trust, performance, and precision.

Birla Precision Technologies Limited continues to innovate, expanding its reach as a complete tooling solutions provider for industries in India and worldwide.



**NASHIK PLANT**



**AURANGABAD PLANT**



**CHALISGAON PLANT**

## Price List Effective : 1<sup>st</sup> April 2026

### TERMS AND CONDITIONS

#### Prices :

- This supersedes all our previous price lists.
- Prices given in this pricelist are base prices. Taxes are extra as applicable.
- Price given here are for standard products.
- For unlisted intermediate sizes, the higher price of the nearest listed size will apply.
- The prices are for delivery on F.O.R Destination
- The prices are based on the present input costs and are subject to revision without prior notice.
- The dealers / stockiest are free to sell the goods at prices lower than the prices indicated in this price list.

#### Minimum Order Quantities (MOQ) :

The Minimum Ordering (MOQ) mentioned against each product in this price list are for each size / length / bore size of that product. Any order for a quantity lesser than MOQ can be supplied with an additional surcharge, which will be furnished on request.

#### Delivery :

Standard deliveries are indicated below, however Special Deliveries can be considered on request based on available load position at the time of ordering.

\* FMI (Fast Moving Items) – within 6 weeks for MOQ Quantities from the date of Firm Order

SFMI (Semi-fast Moving Items) – within 8 weeks for MOQ Quantities from the date of Firm Order

OTHER Items – within 12 weeks for MOQ Quantities from the date of Firm Order

#### Other Instructions :

The products indicated in this pricelist are conforming to National & International Standards. However, we can manufacture and supply special and customized tools as per the requirement of the customers and end-users on request. For special requirements please send your enquiries to : [info@birlaprecision.com](mailto:info@birlaprecision.com)

| Quick Spiral and Slow Spiral Drills |                       |                                                                                                        |                                                                |
|-------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Series                              | Size                  | Standard                                                                                               | Surcharge (extra) on listed price indicated in this Price List |
| Parallel Shank Twist Drills         |                       |                                                                                                        |                                                                |
| Jobber Series                       | 1.0mm - 3.17mm (1/8") | IS 5101 - 2002<br>ISO 235 - 1980<br>BS 328 (PART 1) - 1993<br>DIN 338 - 1984                           | 50%                                                            |
|                                     | Above 3.17mm (1/8")   | IS 5101 - 1991<br>BS 328 (PART 1) - 1986<br>ISO 235 - 1980<br>BS 328 (PART 1) - 1986<br>DIN 338 - 1984 | 25%                                                            |
| Stub Series                         | 1.0mm - 3.17mm (1/8") | IS 5100 - 2002<br>ISO 235 - 1980<br>BS 328 (PART 1) - 1993<br>DIN 1897 - 1984                          | 50%                                                            |
|                                     | Above 3.17mm (1/8")   | IS 5100 - 1969<br>ISO 235 - 1980<br>BS 328 (PART 1) - 1993<br>DIN 1897 - 1984                          | 25%                                                            |

|                    |                       |                                                                              |     |
|--------------------|-----------------------|------------------------------------------------------------------------------|-----|
| <b>Long Series</b> | 1.0mm - 3.17mm (1/8") | IS 5102 - 2002<br>ISO 494 - 1975<br>BS 328 (PART 1) - 1993<br>DIN 340 - 1978 | 50% |
|                    | Above 3.17mm (1/8")   | IS 5102 - 2002<br>ISO 494 - 1975<br>BS 328 (PART 1) - 1993<br>DIN 340 - 1978 | 25% |

### Taper Shank Twist Drills

|                                  |                      |                                                                                |     |
|----------------------------------|----------------------|--------------------------------------------------------------------------------|-----|
| <b>All Series of Taper Shank</b> | 3.0mm - 102.0mm (4") | IS 5103 - 2002<br>ISO 235/1 - 1980<br>BS 328 (PART 1) - 1993<br>DIN 345 - 1978 | 25% |
|----------------------------------|----------------------|--------------------------------------------------------------------------------|-----|

### Extra Long Series

|                                           |                        |                                                                                |     |
|-------------------------------------------|------------------------|--------------------------------------------------------------------------------|-----|
| <b>Parallel Shank</b>                     | 3.0mm - 12.50mm (1/2") | IS 7823 - 2005<br>ISO 3292 - 1995<br>IS 7822 - 2005<br>ISO 3291 - 19795        | 25% |
| <b>Taper Shank</b>                        | 3.0mm - 102.0mm (4")   |                                                                                |     |
| <b>Taper Shank Twist Drills</b>           | 3.0mm - 102.0mm (4")   | IS 5103 - 2002<br>ISO 235/1 - 1980<br>BS 328 (PART 1) - 1993<br>DIN 345 - 1978 | 25% |
| <b>Taper Shank Core Shank Core Drills</b> | 7.0mm - 76.2mm         | IS 5103 - 2002<br>ISO 235/1 - 1980<br>BS 328 (PART 1) - 1993<br>DIN 345 - 1978 | 25% |
| <b>Over Size Shank Taper Shank Drills</b> | Any Size               | IS 5103 - 2002<br>ISO 235/1 - 1980<br>BS 328 (PART 1) - 1993<br>DIN 345 - 1978 | 25% |

### Milling Cutter :

- 1) For Convex cutters, Concave Cutter, Single Corner Rounding Cutters, we will manufacture to current IS - IS 6323-2002, IS 6322 - 2002 and IS 6314 - 2002.
- 2) Slotting Cutter to BSS. Cutters of width 3/4" and above will be supplied with LH Helix as Standard.
- 3) Convex Cutters, Concave Cutters, Single Corner Rounding Cutters, Cutters will be radially Machine Turned Relieved.



## **End Mills :**

### **Parallel Shank End Mills :**

- 1) Type 'N' RH Helical Flutes for RH Cutting will be supplied as Standard
- 2) Long Series End Mills can be supplied at 30% Surcharge over the Standard Price with
  - MOQ Up to 13mm - 100 Nos. Each
  - 14mm to 16mm - 50 Nos. Each
  - 17mm to 22mm - 25 Nos. Each
  - Above 22mm - 10 Nos. Each

### **Taper Shank End Mills :**

- 1) Tanged TS End Mills in Tool Type 'N' with LH Helical Flutes for RH Cutting will be supplied as Standard
- 2) TS End Mills with Tapped End from 6.0mm dia. can be manufactured and supplied as per IS 6354 - 1991

## **Slot Drills :**

### **Parallel Shank Slot Drills :**

- 1) Metric Sizes Type 'A' Flat Face of Short Series with RH Helical Flutes for RH Cutting..
- 2) Prices and MOQ for Standard series can be furnished on request.
- 3) Metric Sizes RH Cutting RH Helical Flutes will be supplied as Standard.

### **Taper Shank Slot Drills :**

- 1) Metric Sizes with Tapped End from 7.0mm dia. can be manufactured and supplied as per IS 6388 - 1991.
- 2) RH Cutting RH Helical Flutes will be supplied as Standard.

## **Taps :**

### **Hand Taps - MCP**

A Set consists of Taper, Second and Bottoming.  
 Part 2 Design will be supplied from M3 to M10 and Part 3 design will be supplied above M10.

### **Hand Taps - MFP**

A Set consists of Taper and Bottoming.  
 Part 2 Design will be supplied from 3mm to 10mm and Part 3 design will be supplied above 10mm.

### **Long Shank Machine Taps**

Type-A - 5 Deg. Taper Angle with Long Taper Lead  
 Type-B - 10 Deg. Taper Lead Angle with Spiral Point  
 Type-C - 20 Deg. Taper Angle with Short Taper Lead  
 Type-D - 10 Deg. Taper Angle without Spiral Point

### **BS CONDUIT & BSCY**

A Set consists of 3 Taps (Taper, Second & Bottoming)  
 The following Items of Taps can also be supplied at price indicated (MOQ as per the standard given in this Price List)

- a) LH Taps – Surcharge 25% extra on the Listed Price
- b) Part 3 Design taps (up to and Including 10mm) - Surcharge 15% Extra on the Listed Price
- c) Serial Taps - No Surcharge

### **BSP (P), NPS, NPSF, BSPT, NPT & NPTF**

A Set consists of 2 Taps (Taper & Bottoming)

## DRILLS

## PAGE NO.

|                                                       |          |
|-------------------------------------------------------|----------|
| • <b>Parallel Shank Twist Drills – Jobber Series</b>  | 02 to 07 |
| M2 Ground Drills                                      |          |
| M2 Ground Drills TIN Coated                           |          |
| M35 Ground Drills - Panther                           |          |
| M42 Ground Drills - Ninja                             |          |
| M2 ForgeLine Drills                                   |          |
| M2 Hathyar Drills                                     |          |
| • <b>Parallel Shank Twist Drills – M2 Stub Series</b> | 08 to 10 |
| Parallel Shank Twist Drills - Long Series             |          |
| M2 Ground Drills                                      |          |
| M2 Ground Drills TIN Coated                           |          |
| M2 ForgeLine Drills                                   |          |
| M2 Hathyar Drills                                     |          |
| Parallel Shank Twist Drills - M2 Stub Series          |          |
| • <b>Parallel Shank Twist Drills – M2 Long Series</b> | 11 to 13 |
| • <b>Taper Shank Twist Drills</b>                     | 14 to 18 |
| M2                                                    |          |
| M35 - Panther                                         |          |
| M42 - Ninja                                           |          |
| • <b>Taper Shank Core Drills – M2</b>                 | 19 & 20  |
| • <b>Shell Drills</b>                                 | 21       |
| • <b>Centre Drills – BS, Type ‘A’, ‘B’ and ‘R’</b>    | 21 to 22 |
| M2                                                    |          |
| • <b>Taper Shank Twist Drills – M2 Long Series</b>    | 23 to 25 |
| • <b>Taper Shank Twist Drills – M2 Extra Long</b>     | 26 to 30 |
| • <b>Parallel Shank Twist Drills – Extra Long</b>     | 31 to 32 |

## REAMERS

|                                                                                                         |         |
|---------------------------------------------------------------------------------------------------------|---------|
| • <b>Parallel Hand Reamers, Long Fluted Machine Reamers And Parallel / Taper Shank Chucking Reamers</b> | 34 & 37 |
| • <b>Taper Shank Extra Long Machine Reamers</b>                                                         | 38      |
| • <b>Taper Pin, Taper Reamers Hand / Machine, Machine Jig Reamers</b>                                   | 39      |
| • <b>Socket Reamers Parallel / Taper, Machine Bridge Reamers</b>                                        | 40      |
| • <b>Shell Reamers</b>                                                                                  | 41      |

## MILLING CUTTERS

## PAGE NO.

|                                                                   |          |
|-------------------------------------------------------------------|----------|
| • <b>Taper Shank Counter Bores</b>                                | 43       |
| • <b>Cylindrical Cutters – High Power &amp; Helical</b>           | 43 & 44  |
| • <b>Side &amp; Face Cutters – Straight &amp; Staggered Teeth</b> | 44 to 48 |
| • <b>Single Angle Milling Cutters</b>                             | 49       |
| • <b>Double Angle Milling Cutters</b>                             | 50       |
| • <b>Convex Cutters, Concave Cutters</b>                          | 51 & 52  |
| • <b>Corner Rounding Cutters (Single &amp; Double)</b>            | 52 & 53  |

## END MILLS

|                                                                |          |
|----------------------------------------------------------------|----------|
| • <b>Parallel Shank End Mills</b>                              | 55       |
| • <b>Taper Shank End Mills</b>                                 | 56       |
| • <b>Parallel Shank Slot Cutters</b>                           | 57 & 58  |
| • <b>Taper Shank Slot Cutters, Slot Drills, T-Slot Cutters</b> | 58 to 60 |
| • <b>Wood Ruff Cutters</b>                                     | 61       |
| • <b>Key Way Milling Cutters</b>                               | 62       |
| • <b>HSS Slotting Cutters</b>                                  | 63       |
| • <b>HSS Shell End Mills</b>                                   | 63       |

## TAPS

|                                                                                                                     |          |
|---------------------------------------------------------------------------------------------------------------------|----------|
| • <b>Hand Taps : MCP</b><br>M2<br>M35 - Panther<br>M2 Spiral Flute<br>M2 SPPT - Type B                              | 65 & 66  |
| • <b>Machine Taps : MCP</b>                                                                                         | 67 & 68  |
| • <b>Hand Taps : MFP</b><br>M2<br>M35<br>M2 Spiral Flute<br>M2 SPPT - Type B                                        | 69       |
| • <b>Long Shank Machine Taps : Coarse &amp; Fine Pitch<br/>       Hand Taps &amp; Nut Taps (BSW, BSF, UNC, UNF)</b> | 70 & 71  |
| • <b>Hand Taps – BSP (P), NPS, NPSF, BSPT<br/>       NPT, NPTF, BS COND &amp; BSCY LPG Cylinder – NGT Taps</b>      | 72 to 74 |

- **Panther Series Taps** 75 to 80
- **Ninja Series Taps** 81 & 82

## TOOL BITS

- **HSS Square Tool Bits** 83 & 84  
M2  
T42  
T42C

## ANNULAR CUTTER

- **HSS M2 ANNULAR CUTTER (DEPTH OF CUT - 35MM)** 97
- **HSS M2 ANNULAR CUTTER (DEPTH OF CUT - 50MM)** 97 & 98
- **TCT ANNULAR CUTTER (DEPTH OF CUT - 35MM)** 98 & 99
- **TCT ANNULAR CUTTER (DEPTH OF CUT - 50MM)** 99 & 100
- **TCT ANNULAR CUTTER (DEPTH OF CUT - 75MM)** 100 & 101
- **TCT ANNULAR CUTTER (DEPTH OF CUT - 100MM)** 101 & 102
- **RAIL TCT ANNULAR CUTTER (DEPTH OF CUT - 25MM & 50MM)** 103
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*Kushal Karigaron Ki Pasand*

|                                                  |            |
|--------------------------------------------------|------------|
| <b>SDS PLUS HAMMER DRILLS (FLAT &amp; CROSS)</b> | 124 to 126 |
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| <b>TUNGSTEN CARBIDE TIP (TCT)</b>                |            |
| <b>CIRCULAR SAWS WOOD &amp; ALUMINIUM</b>        | 132        |
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| <b>DUROMASTER</b>                                | 141 to 148 |

## HSS TWIST DRILLS



**ITM** offer a extensive range of standard and special twist drills in different grades of HSS, available in various diameters.

### **RANGE :**

**Type :** Parallel Shank Stub Series, Jobber Series, Long Series, Taper Shank Drills, Core Drills, Extra Long Drills with Parallel & Taper Shank, Combined Drills and Countersinks (Center Drills), Taper Pin Drills, Shell Drills, Special Drills etc.

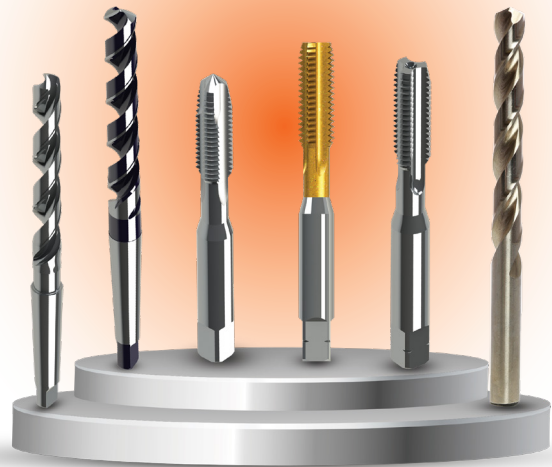
**Size :** Parallel Shank Twist Drills : **3mm - 31.5mm, 3/64" - 1.15/64"**  
Taper Shank Drills : **3.0mm - 102mm : 1/8" - 4"**  
MAL - **2000mm**

**Material :** HSS - M2

**Note :** Drills can be supplied as per specific Customers needs on request as follows :

- Intermediate Diameters.
- Non Standard and Special Drills.
- In different grades of HSS like M35, M42 etc.
- Various surface coating like TiN, TiAlN etc.
- Special geometry to suit various applications.

## PANTHER PRODUCTS



**DRILLS** Panther series Drills are made-out of finest HSS Presmium Materials and manufactured from latest CNC Machines, having special point geometry to produce better finish and accurate holes. These drills designed especially to machine difficult to cut material like Stainless steels, Nickel chromium steel and Forged steel etc.

### **Advantages :**

- Best Suitable for tougher material.
- Unique point geometry to reduce thrust forced during drilling.
- Special surface treatment for maximum wear resistance.
- Longer Tool Life.

### **TAPS**

Panther series Taps are made-out of premium grades of HSS Materials. These taps are produced from our latest CNC Machines, having unique geometries to suit different work materials. Panther series consists of Spiral Flute, Spiral Point, Roll Form and Cast Iron Taps. We can supply these taps with TiN, TiCN and Ti(Al)N coating to enhance performance of taps.

- **Spiral Flute Taps :** Best suitable for Blind Hole applications, spiral flutes eliminate the chip clogging.
- **Spiral Point Taps :** Best suitable for through hole applications, spiral point works as a chip breaker, to push chip towards forward direction.
- **Roll Form Taps :** Roll form tapping operation is a chip less operation, Form threads are produced by displacement of material. Best suitable for soft materials like Aluminum, Copper and Brass etc.
- **Cast Iron Taps :** Best suitable for blind and through application of Cast Iron materials.

## NINJA PRODUCTS



### TAPS

After successful launch of Panther Taps, we at Indian Tool Manufacturers (ITM) - A division of Birla Precision Technologies Ltd., are proud to announce launch of our "NINJA Taps", a new series of superior quality Taps. These Taps are made out of premium quality of HSS grade of Materials.

ITM NINJA Taps meets the customer needs of precise thread quality and improved productivity. The range of these products consists of SPPT Taps, Spiral Taps, St. Flute Taps and Roll Form Taps.

- Spiral Point Taps : (Size Range **M3 - M16**)
- Spiral Flute Taps : (Size Range **M3 - M16**)
- St. Flute Taps : (Size Range **M3 - M16**)
- Roll Form Taps : (Size Range **M6 - M16**)

### DRILLS

NINJA Series of Drills are made out of highest quality of HSS grade of Materials. These drills are manufactured on our latest CNC Machines, with special geometry to give better performance. These Drills can be used for Stainless Steel, Nickel Chromium Steel and Forged Steels etc.

#### Size Range :

Ninja Series Drills are manufactured; as per IS:5101 and BS:328.

Metric Size : **3.0mm to 13.0mm**

Inch Series : **1/8" to 1/2"**

#### Applications :

Ninja series drills are best suitable for drilling on; Stainless Steels, Forged Steels, Nickel Chromium Steels and Tougher Machining Applications.

## HSS SCREWING TAPS



Available in a wide range of sizes, types and combinations.

#### RANGE :

**Type :** Hand and Short Machine Taps, Long Shank Machine Taps, Nut Taps, Pipe Taps, BSW, UNC, NC, NE, NGT and special Taps.

**Size :** 3mm - 100mm : 1/8 - 4"

**Material :** HSS - M2

**Note :** Taps can be supplied as per Customers needs on request as follows :

- Serial or Non Serial.
- Individual Pieces or in Sets.
- Different type of Flute like Straight, Helical, Spiral, Spiral Point & Fluteless.
- In different grades of HSS like M35, M42 etc.
- Special Taps as per Customer's Drawing.



## HSS REAMERS



Available in a wide range of diameters and manufactures to suit specific reaming operations to provide perfect accuracy and optimum surface Finish.

### **RANGE :**

**Type :** Parallel hand reamers, Long fluted machine reamers, Chucking reamers with parallel shank or Taper shank, Bridge reamers, Taper pin reamers, Socket reamers, Machine jig reamers, Center reamers, Shell reamers etc.

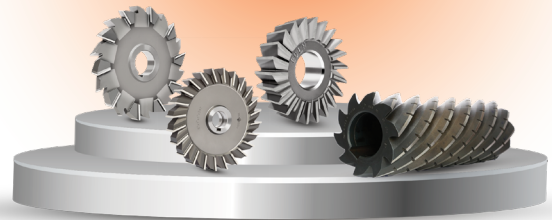
**Size :** 3.0mm - 76.2mm : 1/8" - 3"

**Material :** HSS - M2

**Note :** Reamers can also be supplied as per specific Customers need as follows :

- Non standard and special as per Customers drawing.
- Intermediate diameters.
- In different grades of HSS like M35, M42 etc.
- Various surface coating like TiN, TiAlN etc.

## HSS MILLING CUTTERS



Available in a wide range of diameters and types suitable for various types of milling operations.

### **RANGE :**

**Type :** Cylindrical cutters, Side & Face cutters, Shell end mills, Single and Double angle cutters, Face cutters, Slotting cutters, Keyway milling cutters, Hollow mill, Convex and Concave milling cutters, Single and Double corner rounding cutters, Parallel and Taper shank slot drills, End mills, "T" Slot cutters, Counter bores, Counter sinks, Woodruff key slot cutters with parallel shank and cutters as per special design.

**Size :** Shank Type cutters : 3mm - 63mm : 1/8" - 2.1/2"  
Bore Type cutter : 40mm - 250mm : 1.1/2" - 10"

**Material :** HSS - M2

**Note :** Milling cutters can also be supplied as per specific Customers needs as follows :

- Non standard and special as per Customers drawing.
- Intermediate diameters.
- In different grades of HSS like M35, M42 etc.

## MASONRY DRILLS



**ITM's :** Carbide Tipped Masonry Drills are manufactured from Alloy Steel, have Ground Flutes, are in Bright Finish and combined with ITM's unique brazing and treatment process results in with standing shock and outstanding resistance to wear during its use.

**RANGE :**

**Type :** ITM Masonry Drills are available in two categories Standard and Delux.

**Size :** 3.0mm - 13mm : 1/8" - 1/2" in all two categories

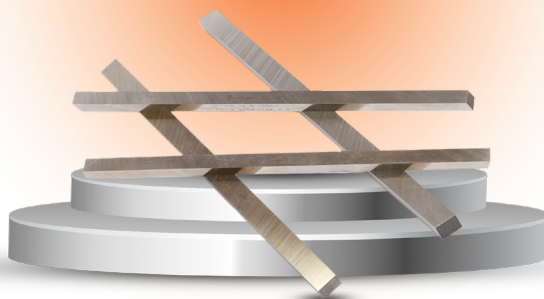
**Standard Masonry Drills :**

Suitable for all general purpose. Available in 10 pcs packing.

**Deluxe Masonry Drills :**

Specially developed for use on tougher material like Stonework. Concrete and Marble etc.

## HSS TOOL BITS



Backed by the high quality of High Speed Steel material ITM manufactures a comprehensive range of HSS Tool Bits, Dagger Tool bits ensure maximum red hardness for greater endurance.

Rigorous and regular metallurgical tests are undertaken to analyze the quality as well as the composition of the raw materials used. These include determination of carbide size, decarb, segregation, grain size, response to heat treatment etc., thus guaranteeing smooth, trouble free performance.

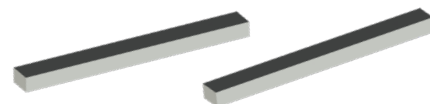
**RANGE :**

**Size :** Square tool size 5mm - 25mm : 3/16" - 1"

**Material :** HSS - M2 & T42.

**Note :**

- Cryogenic treatment for special applications on request.
- All square tool bite are supplied with the bevel angle of 150.



**HATHYAR - TOOL BITS**

ITM Hathyar Square Tool Bits are manufactured out of finest grades of HSS materials. All Tool Bits made with 150 bevel angle. This will give advantage to make easy end grinding preparation for end user.

**HATHYAR - 600** - Suitable for free cutting materials.

**HATHYAR - 900** - Suitable for difficult to cut materials.

**HATHYAR - 1000** - Suitable for Harder Alloy steels and stainless steels.

## CARBIDE TIPPED DRILLS



Carbide Tipped Drills are made out of highest quality of "Carbide Tips". These CT drills are manufactured on our latest CNC Machines with special geometry to give better performance. The Carbide Tipped are brazed by special process to ensure the better fitment to ensure faster, effective, correct drilling of hole sizes with highest finish.

**Application :**

- These drills are used at Brake Lines, Foundry Industry, Composite materials and general Applications.

**Size Range :**

**Metric : 4mm - 13mm**  
**Inch : 11/64" - 1/2"**

## ENGINEERING FILES



Dagger Brand Files are made from the finest file steel material on State-of-the-Art Production Line. Files are manufactured on unique hydro pneumatically controlled machines resulting in uniform Teeth geometry and consistent desired finish cutting quality with.

**RANGE :**

**Type :** Machine Files, Saw Files, Rasps, Special Files & Mill Files

**Size Range : 100mm to 350mm : 4" to 14"**

**Cuts :** Single Cut, Double Cut, Bastard Cut, 2nd Cut, Smooth Cut & Rasp Cut.

**Shapes :** Rectangle, Square, Round, Triangle, Half Round

Files are available in 10pcs packing up to 250mm & 5pcs packing for above 250mm.

**TABLE COLOURS**

|                    |                 |                                                                                       |
|--------------------|-----------------|---------------------------------------------------------------------------------------|
| <b>Bastard Cut</b> | <b>: GREEN</b>  |  |
| <b>2nd Cut</b>     | <b>: YELLOW</b> |  |
| <b>Smooth Cut</b>  | <b>: RED</b>    |  |

## FORGELINE DRILLS



### APPLICATION :

**Best Suitable For Forged Steel & Cast Iron**

### KEY FEATURES :

- Robust design with high-precision grinding for exceptional accuracy.
- Developed and tested to ensure optimum productivity.
- High-speed drilling with fewer tool changes
- Special geometry ensures smooth chip flow, excellent heat dissipation, enhanced wear resistance and improved toughness.
- Supplied in both Non-Cobalt and Cobalt (on demand) grades of HSS to suit diverse applications needs.
- Offered in both Jobber and Stub series.

### SIZE RANGE :

**Metric : 3.0 - 13.0mm**  
**Imperial : 1/8" - 1/2"**

## ANNULAR CUTTERS



### TUNGSTEN CARBIDE TIPPED (TCT) :

TCT Annular Cutters are new series of product from ITM's product range. These cutters are manufactured on latest CNC Machines to get highest quality of Cutters. These cutters are used with Special Carbide Tips to give accurate hole finish.

### Advantages :

- No Pre Drilling & Step Drilling Required
- Burr Free Holes
- Required Less Thrust
- Less energy Peripheral Cutting
- Hole Finish Precise and Accurate

### HSS ANNULAR CUTTER :

HSS Annular Cutters are new series of product from ITM's product range. These cutters are manufactured on latest CNC Machines to get highest quality of Cutters. These cutter having special geometry to produce accurate hole finish.

### Advantages :

- Increased Cutting Speed
- Minimize Tool Wear
- Better Alignment of Hole Axis
- Reduced Tooth Load
- Extended Tool Life

### Application : TCT & HSS Annular Cutter

These cutters are widely used at Fabrication Industries, Tower Manufacturers, Railway Wagons etc.

### Size Range : TCT & HSS Annular Cutter :

**Metric : Dia 12mm to 50mm**  
**DOC 50mm (Depth of Cut - DOC)**

## DRILLS



# HSS PARALLEL SHANK (JOBBER SERIES) TWIST DRILLS - IS : 5101 HSN CODE - 8207

| SIZE |       |     | PRICE PER 10 PCS (RS.) |              |         |       |           |         |     |
|------|-------|-----|------------------------|--------------|---------|-------|-----------|---------|-----|
| MM   | INCH  | DG  | ITM STD.               | ITM STD. TIN | PANTHER | NINJA | FORGELINE | HATHYAR | MOQ |
| 0.30 |       |     | 2163                   | 2517         | -       | -     | -         | -       | 200 |
| 0.40 |       |     | 1876                   | 2230         | -       | -     | -         | -       | 200 |
| 0.50 |       |     | 1362                   | 1716         | -       | -     | -         | -       | 200 |
| 0.60 |       |     | 1362                   | 1716         | -       | -     | -         | -       | 200 |
| 0.70 |       |     | 1362                   | 1716         | -       | -     | -         | -       | 200 |
| 0.80 |       |     | 1140                   | 1494         | -       | -     | -         | -       | 200 |
| 0.90 |       |     | 1087                   | 1442         | -       | -     | -         | -       | 200 |
| 1.00 |       |     | 694                    | 1049         | -       | -     | -         | 690     | 200 |
| 1.02 |       | 60  | 694                    | 1049         | -       | -     | -         | -       | 200 |
| 1.04 |       | 59  | 694                    | 1049         | -       | -     | -         | -       | 200 |
| 1.07 |       | 58  | 694                    | 1049         | -       | -     | -         | -       | 200 |
| 1.09 |       | 57  | 694                    | 1049         | -       | -     | -         | -       | 200 |
| 1.10 |       |     | 694                    | 1049         | -       | -     | -         | 690     | 200 |
| 1.18 |       | 56  | 694                    | 1049         | -       | -     | -         | -       | 200 |
| 1.19 | 3/64★ |     | 694                    | 1049         | -       | -     | -         | 690     | 200 |
| 1.20 |       |     | 694                    | 1049         | -       | -     | -         | 690     | 200 |
| 1.30 |       |     | 694                    | 1049         | -       | -     | -         | 690     | 200 |
| 1.32 |       | 55  | 694                    | 1049         | -       | -     | -         | -       | 200 |
| 1.40 |       | 54  | 694                    | 1049         | -       | -     | -         | 690     | 200 |
| 1.50 |       |     | 694                    | 1049         | -       | -     | -         | 690     | 200 |
| 1.51 |       | 53  | 694                    | 1049         | -       | -     | -         | -       | 200 |
| 1.59 | 1/16★ |     | 694                    | 1049         | -       | -     | -         | 735     | 200 |
| 1.60 |       |     | 694                    | 1049         | -       | -     | -         | 735     | 200 |
| 1.61 |       | 52  | 747                    | 1101         | -       | -     | -         | -       | 200 |
| 1.70 |       | 51  | 747                    | 1101         | -       | -     | -         | 735     | 200 |
| 1.78 |       | 50★ | 747                    | 1101         | -       | -     | -         | -       | 200 |
| 1.80 |       |     | 747                    | 1101         | -       | -     | -         | 735     | 200 |
| 1.85 |       | 49  | 747                    | 1101         | -       | -     | -         | -       | 200 |
| 1.90 |       |     | 747                    | 1101         | -       | -     | -         | 735     | 200 |
| 1.93 |       | 48★ | 747                    | 1101         | -       | -     | -         | -       | 200 |
| 1.98 | 5/64★ |     | 747                    | 1101         | -       | -     | -         | 735     | 200 |
| 1.99 |       | 47★ | 747                    | 1101         | -       | -     | -         | -       | 200 |
| 2.00 |       |     | 747                    | 1101         | -       | -     | -         | 735     | 200 |
| 2.06 |       | 46  | 747                    | 1101         | -       | -     | -         | -       | 200 |
| 2.08 |       | 45  | 747                    | 1101         | -       | -     | -         | -       | 200 |
| 2.10 |       |     | 747                    | 1101         | -       | -     | -         | 735     | 200 |
| 2.18 |       | 44  | 747                    | 1101         | -       | -     | -         | -       | 200 |
| 2.20 |       |     | 747                    | 1101         | -       | -     | -         | 735     | 200 |
| 2.26 |       | 43★ | 747                    | 1101         | -       | -     | -         | -       | 200 |
| 2.30 |       |     | 747                    | 1101         | -       | -     | -         | 780     | 200 |
| 2.37 |       | 42  | 747                    | 1191         | -       | -     | -         | -       | 200 |
| 2.38 | 3/32★ |     | 747                    | 1191         | -       | -     | -         | 780     | 200 |
| 2.40 |       |     | 747                    | 1191         | -       | -     | -         | 780     | 200 |
| 2.44 |       | 41  | 747                    | 1191         | -       | -     | -         | -       | 200 |
| 2.49 |       | 40  | 747                    | 1191         | -       | -     | -         | -       | 200 |
| 2.50 |       |     | 747                    | 1191         | -       | -     | -         | 780     | 200 |



# HSS PARALLEL SHANK (JOBBER SERIES)

## TWIST DRILLS - IS : 5101

### HSN CODE - 8207

| SIZE |        |     | PRICE PER 10 PCS (RS.) |              |         |       |           |         |     |
|------|--------|-----|------------------------|--------------|---------|-------|-----------|---------|-----|
| MM   | INCH   | DG  | ITM STD.               | ITM STD. TIN | PANTHER | NINJA | FORGELINE | HATHYAR | MOQ |
| 2.53 |        | 39  | 747                    | 1191         | -       | -     | -         | -       | 200 |
| 2.58 |        | 38  | 747                    | 1191         | -       | -     | -         | -       | 200 |
| 2.60 |        |     | 747                    | 1191         | -       | -     | -         | 825     | 200 |
| 2.64 |        | 37  | 747                    | 1191         | -       | -     | -         | -       | 200 |
| 2.70 |        |     | 747                    | 1191         | -       | -     | -         | 825     | 200 |
| 2.71 |        | 36  | 747                    | 1191         | -       | -     | -         | -       | 200 |
| 2.78 | 7/64★  |     | 747                    | 1191         | -       | -     | -         | 825     | 200 |
| 2.79 |        | 35  | 820                    | 1266         | -       | -     | -         | -       | 200 |
| 2.80 |        |     | 820                    | 1266         | -       | -     | -         | 825     | 200 |
| 2.82 |        | 34  | 820                    | 1266         | -       | -     | -         | -       | 200 |
| 2.87 |        | 33  | 820                    | 1266         | -       | -     | -         | -       | 200 |
| 2.90 |        |     | 820                    | 1266         | -       | -     | -         | 825     | 200 |
| 2.95 |        | 32  | 820                    | 1266         | -       | -     | -         | -       | 200 |
| 3.00 |        |     | 820                    | 1266         | 1044    | 1501  | 760       | 810     | 200 |
| 3.05 |        | 31★ | 977                    | 1422         | -       | -     | -         | -       | 200 |
| 3.10 |        |     | 977                    | 1422         | 1243    | 1790  | 905       | 960     | 200 |
| 3.17 | 1/8★   |     | 977                    | 1422         | 1243    | 1790  | 905       | 960     | 200 |
| 3.20 |        |     | 1012                   | 1456         | 1289    | 1850  | 936       | 1065    | 200 |
| 3.26 |        | 30★ | 1012                   | 1456         | -       | -     | -         | -       | 200 |
| 3.30 |        |     | 1012                   | 1456         | 1289    | 1850  | 936       | 1065    | 200 |
| 3.40 |        |     | 1012                   | 1456         | 1289    | 1850  | 936       | 1065    | 200 |
| 3.45 |        | 29  | 1012                   | 1456         | -       | -     | -         | -       | 200 |
| 3.50 |        |     | 1012                   | 1456         | 1289    | 1850  | 936       | 1065    | 200 |
| 3.57 | 9/64★  | 28  | 1064                   | 1531         | 1289    | 1850  | 985       | 1125    | 200 |
| 3.60 |        |     | 1502                   | 1970         | 1817    | 2618  | 1391      | 1335    | 200 |
| 3.66 |        | 27  | 1502                   | 1970         | -       | -     | -         | -       | 200 |
| 3.70 |        |     | 1502                   | 1970         | 1817    | 2618  | 1391      | 1440    | 200 |
| 3.73 |        | 26  | 1502                   | 2034         | -       | -     | -         | -       | 200 |
| 3.80 |        | 25  | 1502                   | 2034         | 1817    | 2618  | 1391      | 1440    | 200 |
| 3.86 |        | 24  | 1502                   | 2034         | -       | -     | -         | -       | 200 |
| 3.90 |        |     | 1502                   | 2034         | 1817    | 2618  | 1391      | 1440    | 200 |
| 3.91 |        | 23  | 1502                   | 2034         | -       | -     | -         | -       | 200 |
| 3.97 | 5/32★  |     | 1502                   | 2034         | 1817    | 2618  | 1391      | 1410    | 200 |
| 3.99 |        | 22  | 1502                   | 2034         | -       | -     | -         | -       | 200 |
| 4.00 |        |     | 1502                   | 2034         | 1817    | 2618  | 1391      | 1410    | 200 |
| 4.04 |        | 21  | 1824                   | 2356         | -       | -     | -         | -       | 200 |
| 4.09 |        | 20  | 1824                   | 2356         | -       | -     | -         | -       | 200 |
| 4.10 |        |     | 1824                   | 2356         | 2207    | 3174  | 1688      | 1710    | 200 |
| 4.20 |        |     | 1824                   | 2356         | 2207    | 3174  | 1688      | 1710    | 200 |
| 4.22 |        | 19★ | 1824                   | 2356         | -       | -     | -         | -       | 200 |
| 4.30 |        | 18  | 1824                   | 2356         | 2207    | 3174  | 1688      | 1710    | 200 |
| 4.37 | 11/64★ |     | 1824                   | 2356         | 2207    | 4169  | 1688      | 1740    | 200 |
| 4.39 |        | 17  | 1824                   | 2356         | -       | -     | -         | -       | 200 |
| 4.40 |        |     | 1824                   | 2356         | 2207    | 3174  | 1688      | 1740    | 200 |
| 4.50 |        | 16  | 2395                   | 2928         | 2897    | 4169  | 2218      | 2115    | 200 |
| 4.57 |        | 15  | 2395                   | 2928         | -       | -     | -         | -       | 200 |

# HSS PARALLEL SHANK (JOBBER SERIES) TWIST DRILLS - IS : 5101 HSN CODE - 8207

| SIZE |        |    | PRICE PER 10 PCS (RS.) |              |         |       |           |         |     |
|------|--------|----|------------------------|--------------|---------|-------|-----------|---------|-----|
| MM   | INCH   | DG | ITM STD.               | ITM STD. TIN | PANTHER | NINJA | FORGELINE | HATHYAR | MOQ |
| 4.60 |        |    | 2395                   | 2928         | 2897    | 4169  | 2218      | 2115    | 200 |
| 4.62 |        | 14 | 2395                   | 2928         | -       | -     | -         | -       | 200 |
| 4.70 |        | 13 | 2395                   | 2928         | -       | -     | 2218      | 2115    | 200 |
| 4.76 | 3/16★  |    | 2395                   | 2928         | 2897    | 4169  | 2218      | 2115    | 200 |
| 4.80 |        | 12 | 2395                   | 2928         | 2897    | 4169  | 2218      | 2190    | 200 |
| 4.85 |        | 11 | 2600                   | 3132         | -       | -     | -         | -       | 200 |
| 4.90 |        |    | 2600                   | 3132         | -       | -     | 2407      | 2280    | 200 |
| 4.92 |        | 10 | 2600                   | 3132         | -       | -     | -         | -       | 200 |
| 4.98 |        | 9  | 2600                   | 3132         | -       | -     | -         | -       | 200 |
| 5.00 |        |    | 2600                   | 3132         | 3145    | 4526  | 2407      | 2295    | 200 |
| 5.06 |        | 8  | 2600                   | 3132         | -       | -     | -         | -       | 100 |
| 5.10 |        |    | 2600                   | 3132         | 3145    | 4526  | 2407      | 2295    | 100 |
| 5.11 |        | 7  | 2600                   | 3132         | -       | -     | -         | -       | 100 |
| 5.16 | 13/64★ |    | 2600                   | 3132         | 3145    | 4526  | 2407      | 2295    | 100 |
| 5.18 |        | 6  | 2600                   | 3132         | -       | -     | -         | -       | 100 |
| 5.20 |        |    | 2600                   | 3132         | 3145    | 4526  | 2407      | 2295    | 100 |
| 5.22 |        | 5  | 2805                   | 3337         | -       | -     | -         | -       | 100 |
| 5.30 |        |    | 2805                   | 3337         | 3391    | 4884  | 2597      | 2625    | 100 |
| 5.31 |        | 4  | 2805                   | 3337         | -       | -     | -         | -       | 100 |
| 5.40 |        |    | 2805                   | 3337         | 3391    | 4884  | 2597      | 2625    | 100 |
| 5.41 |        | 3  | 2805                   | 3337         | -       | -     | -         | -       | 100 |
| 5.50 |        |    | 2805                   | 3337         | 3391    | 4884  | 2597      | 2625    | 100 |
| 5.56 | 7/32★  |    | 2805                   | 3337         | 3391    | 4884  | 2597      | 2820    | 100 |
| 5.60 |        |    | 2805                   | 3337         | 3391    | 4884  | 2597      | 2625    | 100 |
| 5.61 |        | 2  | 3156                   | 3688         | -       | -     | -         | -       | 100 |
| 5.70 |        |    | 3156                   | 3688         | -       | -     | 2922      | 2910    | 100 |
| 5.79 |        | 1  | 3156                   | 3688         | -       | -     | -         | -       | 100 |
| 5.80 |        |    | 3156                   | 3688         | 3816    | 5495  | 2922      | 2910    | 100 |
| 5.90 |        |    | 3156                   | 3688         | -       | -     | 2922      | 2910    | 100 |
| 5.94 |        | A  | 3156                   | 3688         | -       | -     | -         | -       | 100 |
| 5.95 | 15/64★ |    | 3156                   | 3688         | -       | -     | 2922      | 2910    | 100 |
| 6.00 |        |    | 3156                   | 4006         | 3816    | 5495  | 2922      | 2910    | 100 |
| 6.04 |        | B  | 3437                   | 4287         | -       | -     | -         | -       | 100 |
| 6.10 |        |    | 3437                   | 4287         | 4155    | 5985  | 3182      | 3225    | 100 |
| 6.15 |        | C  | 3437                   | 4287         | -       | -     | -         | -       | 100 |
| 6.20 |        |    | 3437                   | 4287         | 4155    | 5985  | 3182      | 3225    | 100 |
| 6.25 |        | D  | 3437                   | 4287         | -       | -     | -         | -       | 100 |
| 6.30 |        |    | 3437                   | 4287         | 4155    | 5985  | 3182      | 3270    | 100 |
| 6.35 | 1/4★   | E  | 3437                   | 4287         | 4155    | 5985  | 3182      | 3270    | 100 |
| 6.40 |        |    | 3375                   | 4226         | -       | -     | 3182      | 3270    | 100 |
| 6.50 |        |    | 4304                   | 5156         | 5201    | 7493  | 3986      | 4110    | 100 |
| 6.53 |        | F★ | 4410                   | 5283         | -       | -     | -         | -       | 100 |
| 6.60 |        |    | 4410                   | 5283         | 5201    | 7493  | 4084      | 4110    | 100 |
| 6.63 |        | G  | 4410                   | 5283         | -       | -     | -         | -       | 100 |
| 6.70 |        |    | 4410                   | 5283         | 5201    | 7493  | 4084      | 4110    | 100 |
| 6.75 | 17/64★ | H  | 4410                   | 5283         | 5201    | 7493  | 4084      | 4110    | 100 |



# HSS PARALLEL SHANK (JOBBER SERIES)

## TWIST DRILLS - IS : 5101

### HSN CODE - 8207

| SIZE |         |     | PRICE PER 10 PCS (RS.) |              |         |       |           |         |     |
|------|---------|-----|------------------------|--------------|---------|-------|-----------|---------|-----|
| MM   | INCH    | DG  | ITM STD.               | ITM STD. TIN | PANTHER | NINJA | FORGELINE | HATHYAR | MOQ |
| 6.80 |         |     | 4410                   | 5283         | 5201    | 7493  | 4084      | 4110    | 100 |
| 6.90 |         | I   | 4828                   | 5700         | -       | -     | 4470      | 4455    | 100 |
| 7.00 |         |     | 4828                   | 5700         | 5695    | 8201  | 4470      | 4455    | 100 |
| 7.03 |         | J   | 4828                   | 5700         | -       | -     | -         | -       | 100 |
| 7.10 |         |     | 4828                   | 5700         | -       | -     | 4470      | 4725    | 100 |
| 7.14 | 9/32 ★  | K   | 4828                   | 5700         | 5695    | 8201  | 4470      | 4875    | 100 |
| 7.20 |         |     | 4828                   | 5700         | 5695    | 8201  | 4470      | 4815    | 100 |
| 7.30 |         |     | 5094                   | 5966         | -       | -     | 4716      | 4815    | 100 |
| 7.37 |         | L   | 5094                   | 5966         | -       | -     | -         | -       | 100 |
| 7.40 |         |     | 5094                   | 5966         | 6011    | 8655  | 4716      | 4815    | 100 |
| 7.49 |         | M   | 5094                   | 5966         | -       | -     | -         | -       | 100 |
| 7.50 |         |     | 5094                   | 5966         | 6011    | 8655  | 4716      | 4815    | 100 |
| 7.54 | 19/64 ★ |     | 5514                   | 6821         | -       | -     | 5105      | 5363    | 100 |
| 7.60 |         |     | 5514                   | 6821         | 6508    | 9369  | 5105      | 5505    | 100 |
| 7.67 |         | N   | 5514                   | 6821         | -       | -     | -         | -       | 100 |
| 7.70 |         |     | 5514                   | 6821         | -       | -     | 5105      | 5400    | 100 |
| 7.80 |         |     | 5514                   | 6821         | 6508    | 9369  | 5105      | 5400    | 100 |
| 7.90 |         |     | 5514                   | 6821         | -       | -     | 5105      | 5400    | 100 |
| 7.94 | 5/16 ★  |     | 6055                   | 7364         | 7141    | 10287 | 5606      | 5715    | 100 |
| 8.00 |         |     | 6055                   | 7364         | 7141    | 10287 | 5606      | 6450    | 100 |
| 8.03 |         | O   | 6055                   | 7364         | -       | -     | -         | -       | 100 |
| 8.10 |         |     | 6055                   | 7690         | 7141    | 10287 | 5606      | 6450    | 100 |
| 8.20 |         | P   | 6055                   | 7690         | 7141    | 10287 | 5606      | 6450    | 100 |
| 8.30 |         |     | 7338                   | 8973         | 8656    | 12467 | 6794      | 6720    | 100 |
| 8.33 | 21/64 ★ |     | 7338                   | 8973         | 8656    | 12467 | 6794      | 6720    | 100 |
| 8.40 |         |     | 7338                   | 8973         | -       | -     | 6794      | 7035    | 100 |
| 8.43 |         | Q   | 7338                   | 8973         | -       | -     | -         | -       | 100 |
| 8.50 |         |     | 7338                   | 8973         | 8656    | 12467 | 6794      | 7035    | 100 |
| 8.60 |         |     | 7338                   | 9355         | 8656    | 12467 | 6794      | 7035    | 100 |
| 8.61 |         | R   | 7338                   | 9355         | -       | -     | -         | -       | 100 |
| 8.70 |         |     | 7338                   | 9355         | 8656    | 12467 | 6794      | 7035    | 100 |
| 8.73 | 11/32 ★ |     | 7729                   | 9746         | -       | -     | 7156      | 7575    | 100 |
| 8.80 |         |     | 7729                   | 9746         | 9120    | 13130 | 7156      | 7410    | 100 |
| 8.84 |         | S   | 7729                   | 9746         | -       | -     | -         | -       | 100 |
| 8.90 |         |     | 7729                   | 9746         | -       | -     | 7156      | 7410    | 100 |
| 9.00 |         |     | 7729                   | 10073        | 9120    | 13130 | 7156      | 7410    | 100 |
| 9.09 |         | T   | 8064                   | 10408        | -       | -     | -         | -       | 100 |
| 9.10 |         |     | 8064                   | 10408        | -       | -     | 7466      | 8325    | 100 |
| 9.13 | 23/64 ★ |     | 8064                   | 10408        | -       | -     | 7466      | 825     | 100 |
| 9.20 |         |     | 8064                   | 10408        | -       | -     | 7466      | 8325    | 100 |
| 9.30 |         |     | 8064                   | 10408        | 9511    | 13701 | 7466      | 8325    | 100 |
| 9.34 |         | U ★ | 8064                   | 10408        | -       | -     | -         | -       | 100 |
| 9.40 |         |     | 8064                   | 10408        | 9511    | 13701 | 7466      | 8325    | 100 |
| 9.50 |         |     | 8064                   | 10408        | 9511    | 13701 | 7466      | 8325    | 100 |
| 9.52 | 3/8 ★   |     | 9140                   | 11484        | 10785   | 15529 | 8463      | 8790    | 100 |
| 9.58 |         | V   | 9140                   | 11484        | -       | -     | -         | -       | 100 |

# HSS PARALLEL SHANK (JOBBER SERIES) TWIST DRILLS - IS : 5101 HSN CODE - 8207

| SIZE  |        |    | PRICE PER 10 PCS (RS.) |              |         |       |           |         |     |
|-------|--------|----|------------------------|--------------|---------|-------|-----------|---------|-----|
| MM    | INCH   | DG | ITM STD.               | ITM STD. TIN | PANTHER | NINJA | FORGELINE | HATHYAR | MOQ |
| 9.60  |        |    | 9140                   | 11484        | -       | -     | 8463      | 9600    | 100 |
| 9.70  |        |    | 9140                   | 11484        | 10785   | 15529 | 8463      | 9600    | 100 |
| 9.80  |        | W  | 9140                   | 11484        | 10785   | 15529 | 8463      | 9600    | 100 |
| 9.90  |        |    | 10231                  | 12576        | -       | -     | 9474      | 9630    | 100 |
| 9.92  | 25/64★ |    | 10231                  | 12576        | -       | -     | 9474      | 9630    | 100 |
| 10.00 |        |    | 10231                  | 12958        | 12071   | 17384 | 9474      | 9630    | 100 |
| 10.08 |        | X  | 10231                  | 12958        | -       | -     | -         | -       | 100 |
| 10.10 |        |    | 10231                  | 12958        | -       | -     | 9474      | 10800   | 100 |
| 10.20 |        |    | 10231                  | 12958        | 12071   | 17384 | 9474      | 10800   | 100 |
| 10.26 |        | Y  | 11086                  | 13813        | -       | -     | -         | -       | 100 |
| 10.30 |        |    | 11086                  | 13813        | 13085   | 18836 | 10265     | 10950   | 100 |
| 10.32 | 13/32★ |    | 11086                  | 13813        | 13085   | 18836 | 10265     | 10950   | 100 |
| 10.40 |        |    | 11086                  | 13813        | 13085   | 18836 | 10265     | 10950   | 100 |
| 10.49 |        | Z  | 11086                  | 13813        | -       | -     | -         | -       | 100 |
| 10.50 |        |    | 11086                  | 13813        | 13085   | 18836 | 10265     | 11025   | 100 |
| 10.60 |        |    | 11086                  | 13813        | -       | -     | 10265     | 11700   | 50  |
| 10.70 |        |    | 11739                  | 14464        | 13851   | 19946 | 10869     | 12150   | 50  |
| 10.72 | 27/64★ |    | 11739                  | 14464        | -       | -     | 10869     | 12150   | 50  |
| 10.80 |        |    | 11739                  | 14464        | -       | -     | 10869     | 12150   | 50  |
| 10.90 |        |    | 11739                  | 14464        | -       | -     | 10869     | 12150   | 50  |
| 11.00 |        |    | 11739                  | 14464        | 13851   | 19946 | 10869     | 12150   | 50  |
| 11.10 |        |    | 13101                  | 16373        | -       | -     | 12131     | 13650   | 50  |
| 11.11 | 7/16★  |    | 13101                  | 16373        | 15460   | 22264 | 12131     | 13575   | 50  |
| 11.20 |        |    | 13101                  | 16373        | -       | -     | 12131     | 13650   | 50  |
| 11.30 |        |    | 13101                  | 16373        | -       | -     | 12131     | 13650   | 50  |
| 11.40 |        |    | 13101                  | 16373        | -       | -     | 12131     | 13650   | 50  |
| 11.50 |        |    | 13820                  | 17091        | 16306   | 23481 | 12796     | 13650   | 50  |
| 11.51 | 29/64★ |    | 13820                  | 17091        | -       | -     | 12796     | 13650   | 50  |
| 11.60 |        |    | 13820                  | 17091        | -       | -     | 12796     | 14625   | 50  |
| 11.70 |        |    | 13820                  | 17091        | -       | -     | 12796     | 14625   | 50  |
| 11.80 |        |    | 13820                  | 17091        | 16306   | 23481 | 12796     | 14625   | 50  |
| 11.90 |        |    | 14760                  | 18031        | -       | -     | 13666     | 15300   | 50  |
| 11.91 | 15/32★ |    | 14760                  | 18031        | -       | -     | 13666     | 15450   | 50  |
| 12.00 |        |    | 14760                  | 18031        | 17416   | 25076 | 13666     | 15300   | 50  |
| 12.10 |        |    | 14760                  | 18576        | -       | -     | -         | 15600   | 50  |
| 12.20 |        |    | 14760                  | 18576        | -       | -     | -         | 15600   | 50  |
| 12.30 | 31/64★ |    | 15655                  | 19470        | -       | -     | 14495     | 16350   | 50  |
| 12.40 |        |    | 15655                  | 19470        | -       | -     | 14495     | 16350   | 50  |
| 12.50 |        |    | 15655                  | 19470        | 18473   | 26600 | 14495     | 16350   | 50  |
| 12.60 |        |    | 15655                  | 19470        | -       | -     | 14495     | 16350   | 50  |
| 12.70 | 1/2★   |    | 16528                  | 20344        | 19501   | 28085 | 15304     | 17400   | 50  |
| 12.80 |        |    | 16671                  | 20488        | 19672   | 28328 | 15436     | 17400   | 50  |
| 12.90 |        |    | 16671                  | 20488        | -       | -     | 15436     | 17400   | 50  |
| 13.00 |        |    | 16671                  | 20488        | 19672   | 28328 | 15436     | 17400   | 50  |
| 13.10 | 33/64★ |    | 19908                  | 24199        | -       | -     | -         | -       | 20  |
| 13.20 |        |    | 19908                  | 24199        | -       | -     | -         | -       | 20  |

# HSS PARALLEL SHANK (JOBBER SERIES)

## TWIST DRILLS - IS : 5101

### HSN CODE - 8207

| SIZE  |        |    | PRICE PER 10 PCS (RS.) |              |         |       |           |         |     |
|-------|--------|----|------------------------|--------------|---------|-------|-----------|---------|-----|
| MM    | INCH   | DG | ITM STD.               | ITM STD. TIN | PANTHER | NINJA | FORGELINE | HATHYAR | MOQ |
| 13.30 |        |    | 19908                  | 24199        | -       | -     | -         | -       | 20  |
| 13.40 |        |    | 19908                  | 24199        | -       | -     | -         | -       | 20  |
| 13.49 | 17/32★ |    | 21193                  | 25484        | -       | -     | -         | -       | 20  |
| 13.50 |        |    | 21193                  | 25484        | -       | -     | -         | -       | 20  |
| 13.60 |        |    | 21193                  | 25484        | -       | -     | -         | -       | 20  |
| 13.70 |        |    | 21193                  | 25484        | -       | -     | -         | -       | 20  |
| 13.80 |        |    | 21193                  | 25484        | -       | -     | -         | -       | 20  |
| 13.89 | 35/64  |    | 22993                  | 27284        | -       | -     | -         | -       | 20  |
| 13.90 |        |    | 22993                  | 27284        | -       | -     | -         | -       | 20  |
| 14.00 |        |    | 22993                  | 27284        | -       | -     | -         | -       | 20  |
| 14.25 |        |    | 22993                  | 27703        | -       | -     | -         | -       | 20  |
| 14.29 | 9/16★  |    | 24125                  | 28835        | -       | -     | -         | -       | 20  |
| 14.50 |        |    | 24125                  | 28835        | -       | -     | -         | -       | 20  |
| 14.68 | 37/64  |    | 25996                  | 30706        | -       | -     | -         | -       | 20  |
| 14.75 |        |    | 25996                  | 30706        | -       | -     | -         | -       | 20  |
| 15.00 |        |    | 25996                  | 30706        | -       | -     | -         | -       | 20  |
| 15.08 | 19/32  |    | 25996                  | 31229        | -       | -     | -         | -       | 20  |
| 15.25 |        |    | 25996                  | 31229        | -       | -     | -         | -       | 20  |
| 15.48 | 39/64  |    | 28166                  | 33400        | -       | -     | -         | -       | 20  |
| 15.50 |        |    | 28166                  | 33400        | -       | -     | -         | -       | 20  |
| 15.75 |        |    | 28166                  | 33400        | -       | -     | -         | -       | 20  |
| 15.87 | 5/8★   |    | 28166                  | 33400        | -       | -     | -         | -       | 20  |
| 16.00 |        |    | 28166                  | 33400        | -       | -     | -         | -       | 20  |
| 17.00 |        |    | 29794                  | 36074        | -       | -     | -         | -       | 20  |
| 17.46 | 11/16  |    | 29794                  | 36074        | -       | -     | -         | -       | 20  |
| 18.00 |        |    | 32239                  | 38520        | -       | -     | -         | -       | 20  |
| 19.00 |        |    | 34098                  | 40902        | -       | -     | -         | -       | 20  |
| 19.05 | 3/4    |    | 34098                  | 40902        | -       | -     | -         | -       | 20  |
| 20.00 |        |    | 40732                  | 47536        | -       | -     | -         | -       | 20  |
| 21.00 |        |    | 40732                  | 47536        | -       | -     | -         | -       | 20  |
| 22.00 |        |    | 45674                  | 52478        | -       | -     | -         | -       | 20  |
| 22.22 | 7/8    |    | 45674                  | 52478        | -       | -     | -         | -       | 20  |

ITEMS MARKED ★ (ONLY IN RH) ARE EX-STOCK ITEMS. ALL REMAINING ITEMS (RH & LH) WILL ATTRACT MINIMUM ORDER VALUE OF RS. 50,000/- NETT MOQ OR 50 NOS. PER SIZE WHICHEVER IS HIGHER.

#### IMPORTANT NOTES :

- All sizes to be ordered in multiples of 10 only.
- For non listed intermediate sizes, the higher price of the nearest listed size (INCH or MM) will be applicable.
- Quick Spiral or Slow Spiral Drills :  
 Sizes up to (3.17mm) 1/8" **50 % extra**  
 Sizes over (3.17mm) 1/8" **25 % extra**
  - Jobbers with Tenon **10 % extra**

## HSS PARALLEL SHANK (JOBBER SERIES)

### TWIST DRILLS - IS : 5101

Price Rs. / Set

Jobber Drill **25 Pcs. Set** (0.5mm Rise)  
1.00 To 13.00mm **16488**

Jobber Drill **13 Pcs. Set** (1/64" Rise)  
1/16" To 1/4" **3030**

Hathyar Drill **25 Pcs. Set** (0.5mm Rise)  
1.00 To 13.00mm **13685**

Hathyar Drill **13 Pcs. Set** (1/64" Rise)  
1/16" To 1/4" **2727**

# HSS PARALLEL SHANK (STUB SERIES) TWIST DRILLS - IS : 5100 HSN CODE - 8207

| SIZE |       | PRICE 10 PCS (RS.) |         |     |
|------|-------|--------------------|---------|-----|
| MM   | INCH  | ITM STD.           | HATHYAR | MOQ |
| 1.00 |       | 727                | 660     | 200 |
| 1.19 | 3/64  | 727                | 660     | 200 |
| 1.20 |       | 727                | 660     | 200 |
| 1.50 |       | 727                | 660     | 200 |
| 1.59 | 1/16  | 727                | 705     | 200 |
| 1.80 |       | 727                | 705     | 200 |
| 1.98 | 5/64  | 727                | 705     | 200 |
| 2.00 |       | 727                | 705     | 200 |
| 2.20 |       | 727                | 705     | 200 |
| 2.38 | 3/32  | 727                | 728     | 200 |
| 2.50 |       | 727                | 728     | 200 |
| 2.78 | 7/64  | 727                | 750     | 200 |
| 2.80 |       | 786                | 750     | 200 |
| 3.00 |       | 820                | 750     | 200 |
| 3.17 | 1/8   | 952                | 923     | 200 |
| 3.20 |       | 999                | 959     | 200 |
| 3.50 |       | 999                | 959     | 200 |
| 3.57 | 9/64  | 1050               | 959     | 200 |
| 3.80 |       | 1454               | 1296    | 200 |
| 3.97 | 5/32  | 1454               | 1296    | 200 |
| 4.00 |       | 1454               | 1296    | 200 |
| 4.20 |       | 1615               | 1566    | 200 |
| 4.37 | 11/64 | 1615               | 1566    | 200 |
| 4.50 |       | 2141               | 1904    | 200 |
| 4.76 | 3/16  | 2141               | 1904    | 200 |
| 4.80 |       | 2141               | 1904    | 200 |
| 5.00 |       | 2277               | 2066    | 200 |
| 5.16 | 13/64 | 2277               | 2066    | 100 |
| 5.20 |       | 2277               | 2066    | 100 |
| 5.50 |       | 2473               | 2363    | 100 |
| 5.56 | 7/32  | 2473               | 2363    | 100 |
| 5.80 |       | 2785               | 2619    | 100 |
| 5.95 | 15/64 | 2785               | 2619    | 100 |
| 6.00 |       | 2785               | 2619    | 100 |
| 6.20 |       | 3116               | 2943    | 100 |
| 6.35 | 1/4   | 3116               | 2943    | 100 |
| 6.50 |       | 3766               | 3699    | 100 |
| 6.75 | 17/64 | 3859               | 3699    | 100 |
| 6.80 |       | 3859               | 3699    | 100 |
| 7.00 |       | 4230               | 4334    | 100 |
| 7.14 | 9/32  | 4230               | 4334    | 100 |
| 7.20 |       | 4230               | 4334    | 100 |
| 7.50 |       | 4394               | 4334    | 100 |
| 7.54 | 19/64 | 4828               | 4860    | 100 |
| 7.80 |       | 4828               | 4860    | 100 |
| 7.94 | 5/16  | 5311               | 5144    | 100 |

| SIZE  |       | PRICE 10 PCS (RS.) |         |     |
|-------|-------|--------------------|---------|-----|
| MM    | INCH  | ITM STD.           | HATHYAR | MOQ |
| 8.00  |       | 5311               | 5144    | 100 |
| 8.20  |       | 5311               | 5144    | 100 |
| 8.33  | 21/64 | 6635               | 6332    | 100 |
| 8.50  |       | 6635               | 6332    | 100 |
| 8.73  | 11/32 | 6920               | 6669    | 100 |
| 8.80  |       | 6920               | 6669    | 100 |
| 9.00  |       | 6920               | 6669    | 100 |
| 9.13  | 23/64 | 7309               | 7493    | 100 |
| 9.20  |       | 7309               | 7493    | 100 |
| 9.50  |       | 7309               | 7493    | 100 |
| 9.52  | 3/8   | 7641               | 8640    | 100 |
| 9.80  |       | 7641               | 8640    | 100 |
| 9.92  | 25/64 | 9349               | 8667    | 100 |
| 10.00 |       | 9349               | 8667    | 100 |
| 10.20 |       | 9349               | 9855    | 50  |
| 10.32 | 13/32 | 10064              | 9855    | 50  |
| 10.50 |       | 10064              | 9855    | 50  |
| 10.72 | 27/64 | 11330              | 11273   | 50  |
| 10.80 |       | 11330              | 11273   | 50  |
| 11.00 |       | 11330              | 11273   | 50  |
| 11.11 | 7/16  | 11801              | 12285   | 50  |
| 11.20 |       | 11801              | 12285   | 50  |
| 11.50 |       | 12626              | 12285   | 50  |
| 11.51 | 29/64 | 12626              | 12285   | 50  |
| 11.80 |       | 12626              | 13770   | 50  |
| 11.91 | 15/32 | 13359              | 13770   | 50  |
| 12.00 |       | 13359              | 13770   | 50  |
| 12.20 |       | 13359              | 14715   | 50  |
| 12.30 | 31/64 | 14518              | 14715   | 50  |
| 12.50 |       | 14518              | 14715   | 50  |
| 12.70 | 1/2   | 14831              | 15930   | 50  |
| 12.80 |       | 14959              | 15930   | 50  |
| 13.00 |       | 14959              | 15930   | 50  |
| 13.20 |       | 16817              | -       | 50  |
| 13.49 | 17/32 | 16817              | -       | 50  |
| 13.50 |       | 17921              | -       | 50  |
| 13.80 |       | 17921              | -       | 50  |
| 14.00 |       | 19511              | -       | 50  |
| 14.25 |       | 19511              | -       | 50  |
| 14.29 | 9/16  | 19511              | -       | 50  |
| 14.50 |       | 20321              | -       | 50  |
| 14.75 |       | 21972              | -       | 50  |
| 15.00 |       | 21972              | -       | 50  |
| 15.08 | 19/32 | 21972              | -       | 50  |
| 15.25 |       | 21972              | -       | 50  |
| 15.50 |       | 23785              | -       | 50  |

# HSS PARALLEL SHANK (STUB SERIES)

## TWIST DRILLS - IS : 5100

### HSN CODE - 8207

| SIZE  |       | PRICE 10 PCS (RS.) |         |     |
|-------|-------|--------------------|---------|-----|
| MM    | INCH  | ITM STD.           | HATHYAR | MOQ |
| 15.75 |       | 23785              | -       | 50  |
| 15.87 | 5/8   | 23785              | -       | 50  |
| 16.00 |       | 23785              | -       | 50  |
| 16.25 |       | 24166              | -       | 50  |
| 16.50 |       | 24166              | -       | 50  |
| 16.67 | 21/32 | 24166              | -       | 50  |
| 16.75 |       | 24653              | -       | 50  |
| 17.00 |       | 24653              | -       | 50  |
| 17.25 |       | 25100              | -       | 50  |
| 17.46 | 11/16 | 25100              | -       | 50  |
| 17.50 |       | 25100              | -       | 50  |
| 17.75 |       | 25444              | -       | 50  |
| 18.00 |       | 25444              | -       | 50  |
| 18.25 |       | 25895              | -       | 50  |
| 18.26 | 23/32 | 25895              | -       | 50  |
| 18.50 |       | 25895              | -       | 50  |
| 18.75 |       | 26356              | -       | 50  |
| 19.00 |       | 26356              | -       | 50  |
| 19.05 | 3/4   | 26356              | -       | 50  |
| 19.25 |       | 26802              | -       | 50  |
| 19.50 |       | 26802              | -       | 50  |
| 19.75 |       | 26802              | -       | 50  |
| 19.84 | 25/32 | 26802              | -       | 50  |
| 20.00 |       | 27262              | -       | 50  |
| 20.25 |       | 27829              | -       | 10  |
| 20.50 |       | 27829              | -       | 10  |
| 20.64 | 13/16 | 27829              | -       | 10  |
| 20.75 |       | 28943              | -       | 10  |
| 21.00 |       | 28943              | -       | 10  |
| 21.25 |       | 29294              | -       | 10  |
| 21.43 | 27/32 | 29294              | -       | 10  |
| 21.50 |       | 30281              | -       | 10  |
| 21.75 |       | 30668              | -       | 10  |
| 22.00 |       | 30668              | -       | 10  |
| 22.22 | 7/8   | 30668              | -       | 10  |
| 22.25 |       | 32622              | -       | 10  |
| 22.50 |       | 32622              | -       | 10  |
| 22.75 |       | 33076              | -       | 10  |
| 23.00 |       | 33076              | -       | 10  |
| 23.02 | 29/32 | 33076              | -       | 10  |
| 23.25 |       | 34976              | -       | 10  |
| 23.50 |       | 34976              | -       | 10  |
| 23.75 |       | 34976              | -       | 10  |
| 23.81 | 15/16 | 34976              | -       | 10  |
| 24.00 |       | 38705              | -       | 10  |
| 24.25 |       | 38705              | -       | 10  |

| SIZE  |         | PRICE 10 PCS (RS.) |         |     |
|-------|---------|--------------------|---------|-----|
| MM    | INCH    | ITM STD.           | HATHYAR | MOQ |
| 24.50 |         | 38705              | -       | 10  |
| 24.61 | 31/32   | 38705              | -       | 10  |
| 24.75 |         | 42457              | -       | 10  |
| 25.00 |         | 42457              | -       | 10  |
| 25.25 |         | 42665              | -       | 10  |
| 25.40 | 1       | 42665              | -       | 10  |
| 25.50 |         | 48151              | -       | 10  |
| 26.00 |         | 48151              | -       | 10  |
| 26.19 | 1.1/32  | 49264              | -       | 10  |
| 26.50 |         | 49264              | -       | 10  |
| 26.99 | 1.1/16  | 49835              | -       | 10  |
| 27.00 |         | 52516              | -       | 10  |
| 27.50 |         | 52516              | -       | 10  |
| 27.78 | 1.3/32  | 55577              | -       | 10  |
| 28.00 |         | 55577              | -       | 10  |
| 28.50 |         | 55999              | -       | 10  |
| 28.57 | 1.1/8   | 55999              | -       | 10  |
| 29.00 |         | 58763              | -       | 10  |
| 29.37 | 1.5/32  | 64688              | -       | 10  |
| 29.50 |         | 64688              | -       | 10  |
| 30.00 |         | 65552              | -       | 10  |
| 30.16 | 1.3/16  | 65552              | -       | 10  |
| 30.50 |         | 73770              | -       | 10  |
| 30.96 | 1.7/32  | 73770              | -       | 10  |
| 31.00 |         | 73770              | -       | 10  |
| 31.50 |         | 74876              | -       | 10  |
| 31.75 | 1.1/4   | 74876              | -       | 10  |
| 32.00 |         | 76489              | -       | 10  |
| 32.50 |         | 78884              | -       | 10  |
| 32.54 | 1.9/32  | 78884              | -       | 10  |
| 33.00 |         | 78884              | -       | 10  |
| 33.34 | 1.5/16  | 78884              | -       | 10  |
| 33.50 |         | 82979              | -       | 10  |
| 34.00 |         | 82979              | -       | 10  |
| 34.13 | 1.11/32 | 91067              | -       | 10  |
| 34.50 |         | 91067              | -       | 10  |
| 34.92 | 1.3/8   | 91067              | -       | 10  |
| 35.00 |         | 100134             | -       | 10  |
| 35.50 |         | 101562             | -       | 10  |
| 35.72 | 1.13/32 | 101562             | -       | 10  |
| 36.00 |         | 101562             | -       | 10  |
| 36.50 |         | 101562             | -       | 10  |
| 36.51 | 1.7/16  | 101562             | -       | 10  |
| 37.00 |         | 109177             | -       | 10  |
| 37.31 | 1.15/32 | 110810             | -       | 10  |
| 37.50 |         | 110810             | -       | 10  |

# HSS PARALLEL SHANK (STUB SERIES)

## TWIST DRILLS - IS : 5100

### HSN CODE - 8207

| SIZE  |       | PRICE 10 PCS (RS.) |         |     |
|-------|-------|--------------------|---------|-----|
| MM    | INCH  | ITM STD.           | HATHYAR | MOQ |
| 38.00 |       | 110810             | -       | 10  |
| 38.10 | 1.1/2 | 110810             | -       | 10  |
| 38.50 |       | 123733             | -       | 10  |

| SIZE  |      | PRICE 10 PCS (RS.) |         |     |
|-------|------|--------------------|---------|-----|
| MM    | INCH | ITM STD.           | HATHYAR | MOQ |
| 39.00 |      | 123733             | -       | 10  |
| 39.50 |      | 125863             | -       | 10  |
| 40.00 |      | 125863             | -       | 10  |

ITEMS MARKED ★ (ONLY IN RH) ARE EX-STOCK ITEMS. ALL REMAINING ITEMS (RH & LH) WILL ATTRACT MINIMUM ORDER VALUE OF RS. 50,000/- NETT MOQ OR 50 NOS. PER SIZE WHICHEVER IS HIGHER.

#### IMPORTANT NOTES :

- Sizes up to 13 mm should be ordered in multiples of 10 only.
- For non listed intermediate sizes, the higher price of the nearest listed size (INCH or MM) will be applicable.
- Quick Spiral or Slow Spiral Drills :
    - Sizes up to (3.17mm) 1/8" **50 % extra**
    - Sizes over (3.17mm) 1/8" **25 % extra**
  - Left Hand Drills to IS : 5362 can be supplied from
    - Sizes (3.00mm) 1/8" and above only **25 % extra**

# HSS PARALLEL SHANK (LONG SERIES)

## TWIST DRILLS - IS : 5102

### HSN CODE - 8207

| SIZE  |       | PRICE (RS.) EACH |         |
|-------|-------|------------------|---------|
| MM    | INCH  | HSS M2           | HSS M35 |
| 0.60  |       | 775              | -       |
| 0.70  |       | 723              | -       |
| 0.80  |       | 648              | -       |
| 1.00  |       | 411              | -       |
| 1.10  |       | 411              | -       |
| 1.19  | 3/64  | 411              | -       |
| 1.20  |       | 411              | -       |
| 1.30  |       | 411              | -       |
| 1.40  |       | 411              | -       |
| 1.50  |       | 411              | -       |
| 1.59  | 1/16  | 411              | -       |
| 1.60  |       | 411              | -       |
| 1.70  |       | 411              | -       |
| 1.80  |       | 411              | -       |
| 1.90  |       | 411              | -       |
| 1.98  | 5/64  | 411              | -       |
| 2.00★ |       | 411              | 575     |
| 2.10  |       | 411              | 575     |
| 2.20  |       | 411              | 575     |
| 2.30  |       | 525              | 735     |
| 2.38  | 3/32★ | 525              | 735     |
| 2.40  |       | 525              | 735     |
| 2.50★ |       | 525              | 735     |
| 2.60  |       | 525              | 735     |
| 2.70  |       | 525              | 735     |
| 2.78  | 7/64  | 525              | 735     |
| 2.80★ |       | 525              | 735     |
| 2.90  |       | 525              | 735     |
| 3.00★ |       | 530              | 742     |
| 3.10  |       | 530              | 742     |
| 3.17  | 1/8★  | 530              | 742     |
| 3.20  |       | 530              | 742     |
| 3.30★ |       | 530              | 742     |
| 3.40  |       | 530              | 742     |
| 3.50★ |       | 530              | 742     |
| 3.57  | 9/64  | 530              | 742     |
| 3.60  |       | 571              | 800     |
| 3.70  |       | 571              | 800     |
| 3.80  |       | 571              | 800     |
| 3.90  |       | 571              | 800     |
| 3.97  | 5/32★ | 571              | 800     |
| 4.00★ |       | 571              | 800     |
| 4.10  |       | 571              | 800     |
| 4.20  |       | 571              | 800     |
| 4.30  |       | 571              | 800     |
| 4.37  | 11/64 | 571              | 800     |

| SIZE   |       | PRICE (RS.) EACH |         |
|--------|-------|------------------|---------|
| MM     | INCH  | HSS M2           | HSS M35 |
| 4.40   |       | 571              | 800     |
| 4.50   |       | 571              | 800     |
| 4.60   |       | 571              | 800     |
| 4.70   |       | 571              | 800     |
| 4.76   | 3/16  | 571              | 800     |
| 4.80   |       | 571              | 800     |
| 4.90   |       | 671              | 940     |
| 5.00★  |       | 671              | 940     |
| 5.10   |       | 671              | 940     |
| 5.16   | 13/64 | 671              | 940     |
| 5.20   |       | 671              | 940     |
| 5.30   |       | 772              | 1080    |
| 5.40   |       | 772              | 1080    |
| 5.50   |       | 772              | 1080    |
| 5.56   | 7/32  | 772              | 1080    |
| 5.60   |       | 838              | 1173    |
| 5.70   |       | 838              | 1173    |
| 5.80   |       | 838              | 1173    |
| 5.90   |       | 838              | 1173    |
| 5.95   | 15/64 | 838              | 1173    |
| 6.00 u |       | 838              | 1173    |
| 6.10   |       | 956              | 1338    |
| 6.20   |       | 956              | 1338    |
| 6.30   |       | 956              | 1338    |
| 6.35   | 1/4★  | 874              | 1224    |
| 6.40   |       | 1218             | 1705    |
| 6.50   |       | 1218             | 1705    |
| 6.60   |       | 1469             | 2057    |
| 6.70   |       | 1469             | 2057    |
| 6.75   | 17/64 | 1469             | 2057    |
| 6.80   |       | 1469             | 2057    |
| 6.90   |       | 1469             | 2057    |
| 7.00   |       | 1469             | 2057    |
| 7.10   |       | 1469             | 2057    |
| 7.14   | 9/32  | 1469             | 2057    |
| 7.20   |       | 1469             | 2057    |
| 7.30   |       | 1469             | 2057    |
| 7.40   |       | 1469             | 2057    |
| 7.50   |       | 1469             | 2057    |
| 7.54   | 19/64 | 1469             | 2057    |
| 7.60   |       | 1469             | 2057    |
| 7.70   |       | 1469             | 2057    |
| 7.80   |       | 1469             | 2057    |
| 7.90   |       | 1514             | 2120    |
| 7.94   | 5/16  | 1514             | 2120    |
| 8.00★  |       | 1514             | 2120    |



# HSS PARALLEL SHANK (LONG SERIES) TWIST DRILLS - IS : 5102 HSN CODE - 8207

| SIZE   |       | PRICE (RS.) EACH |         |
|--------|-------|------------------|---------|
| MM     | INCH  | HSS M2           | HSS M35 |
| 8.10   |       | 1514             | 2120    |
| 8.20   |       | 1514             | 2120    |
| 8.30   |       | 1514             | 2120    |
| 8.33   | 21/64 | 1514             | 2120    |
| 8.40   |       | 1514             | 2120    |
| 8.50   |       | 1526             | 2136    |
| 8.60   |       | 1604             | 2245    |
| 8.70   |       | 1604             | 2245    |
| 8.73   | 11/32 | 1604             | 2245    |
| 8.80   |       | 1941             | 2718    |
| 9.00   |       | 1686             | 2361    |
| 9.13   | 23/64 | 1908             | 2671    |
| 9.20   |       | 1941             | 2718    |
| 9.50   |       | 1686             | 2361    |
| 9.52   | 3/8   | 1686             | 2361    |
| 9.80   |       | 1951             | 2731    |
| 9.92   | 25/64 | 1951             | 2731    |
| 10.00★ |       | 1764             | 2470    |
| 10.20  |       | 1951             | 2731    |
| 10.32  | 13/32 | 1764             | 2470    |
| 10.50  |       | 2118             | 2965    |
| 10.72  | 27/64 | 2407             | 3370    |
| 10.80  |       | 2407             | 3370    |
| 11.00  |       | 2216             | 3102    |
| 11.11  | 7/16  | 2216             | 3102    |
| 11.20  |       | 2575             | 3605    |
| 11.50  |       | 2279             | 3191    |
| 11.51  | 29/64 | 2575             | 3605    |
| 11.80  |       | 2575             | 3605    |
| 11.91  | 15/32 | 2279             | 3191    |
| 12.00  |       | 2351             | 3291    |
| 12.20  |       | 2620             | 3668    |
| 12.30  | 31/64 | 2620             | 3668    |
| 12.50  |       | 2348             | 3287    |
| 12.70  | 1/2   | 2348             | 3287    |
| 12.80  |       | 3595             | 5033    |
| 13.00  |       | 3259             | 4563    |
| 13.10  | 33/64 | 3623             | 5072    |
| 13.20  |       | 3623             | 5072    |
| 13.49  | 17/32 | 3324             | 4654    |
| 13.50  |       | 3623             | 5072    |
| 13.80  |       | 3944             | 5522    |
| 13.89  | 35/64 | 3944             | 5522    |
| 14.00  |       | 3623             | 5072    |
| 14.25  |       | 3623             | 5072    |
| 14.29  | 9/16  | 3623             | 5072    |

| SIZE  |       | PRICE (RS.) EACH |         |
|-------|-------|------------------|---------|
| MM    | INCH  | HSS M2           | HSS M35 |
| 14.50 |       | 3796             | 5314    |
| 14.68 | 37/64 | 4181             | 5853    |
| 14.75 |       | 3796             | 5314    |
| 15.00 |       | 3796             | 5314    |
| 15.08 | 19/32 | 3796             | 5314    |
| 15.25 |       | 3944             | 5522    |
| 15.48 | 39/64 | 4308             | 6031    |
| 15.50 |       | 3944             | 5522    |
| 15.75 |       | 3944             | 5522    |
| 15.87 | 5/8   | 3944             | 5522    |
| 16.00 |       | 4005             | 5607    |
| 16.25 |       | 4005             | 5607    |
| 16.27 | 41/64 | 4458             | 6241    |
| 16.50 |       | 4082             | 5715    |
| 16.67 | 21/32 | 4082             | 5715    |
| 16.75 |       | 4181             | 5853    |
| 17.00 |       | 4181             | 5853    |
| 17.07 | 43/64 | 4542             | 6359    |
| 17.25 |       | 4181             | 5853    |
| 17.46 | 11/16 | 4181             | 5853    |
| 17.50 |       | 4458             | 6241    |
| 17.75 |       | 4458             | 6241    |
| 17.86 | 45/64 | 4928             | 6899    |
| 18.00 |       | 4542             | 6359    |
| 18.25 |       | 4542             | 6359    |
| 18.26 | 23/32 | 4542             | 6359    |
| 18.50 |       | 4731             | 6623    |
| 18.65 | 47/64 | 4770             | 6678    |
| 18.75 |       | 4817             | 6744    |
| 19.00 |       | 4817             | 6744    |
| 19.05 | 3/4   | 4817             | 6744    |
| 19.25 |       | 5091             | 7127    |
| 19.45 | 49/64 | 5564             | 7790    |
| 19.50 |       | 5091             | 7127    |
| 19.75 |       | 5091             | 7127    |
| 19.84 | 25/32 | 5091             | 7127    |
| 20.00 |       | 5403             | 7564    |
| 20.24 | 51/64 | 5737             | 8032    |
| 20.25 |       | 5403             | 7564    |
| 20.30 |       | 5403             | 7564    |
| 20.64 | 13/16 | 5403             | 7564    |
| 20.75 |       | 5564             | 7790    |
| 21.00 |       | 5564             | 7790    |
| 21.03 | 53/64 | 6089             | 8525    |
| 21.25 |       | 5737             | 8032    |
| 21.43 | 27/32 | 5737             | 8032    |

# HSS PARALLEL SHANK (LONG SERIES) TWIST DRILLS - IS : 5102 HSN CODE - 8207

| SIZE  |        | PRICE (RS.) EACH |         |
|-------|--------|------------------|---------|
| MM    | INCH   | HSS M2           | HSS M35 |
| 21.50 |        | 6089             | 8525    |
| 21.75 |        | 6089             | 8525    |
| 21.83 | 55/64  | 6512             | 9117    |
| 22.00 |        | 6089             | 8525    |
| 22.15 |        | 6590             | 9226    |
| 22.22 | 7/8    | 6089             | 8525    |
| 22.25 |        | 6590             | 9226    |
| 22.62 | 57/64  | 7040             | 9856    |
| 22.75 |        | 6740             | 9436    |
| 23.00 |        | 6740             | 9436    |
| 23.02 | 29/32  | 6740             | 9436    |
| 23.25 |        | 6829             | 9561    |
| 23.42 | 59/64  | 8051             | 11271   |
| 23.50 |        | 7476             | 10466   |
| 23.75 |        | 7476             | 10466   |
| 23.81 | 15/16  | 7476             | 10466   |
| 24.00 |        | 7793             | 10910   |
| 24.21 | 61/64  | 8505             | 11907   |
| 24.25 |        | 7793             | 10910   |
| 24.50 |        | 7793             | 10910   |
| 24.61 | 31/32  | 7793             | 10910   |
| 24.75 |        | 8354             | 11696   |
| 25.00 | 63/64  | 8354             | 11696   |
| 25.25 |        | 8461             | 11845   |
| 25.40 | 1      | 8461             | 11845   |
| 25.50 |        | 10421            | 14589   |
| 25.75 |        | 10421            | 14589   |
| 25.80 | 1.1/64 | 10642            | 14899   |
| 26.00 |        | 10642            | 14899   |
| 26.19 | 1.1/32 | 10642            | 14899   |
| 26.25 |        | 11476            | 16066   |
| 26.50 |        | 11476            | 16066   |
| 26.59 | 1.3/64 | 11732            | 16425   |
| 26.75 |        | 11732            | 16425   |
| 26.99 | 1.1/16 | 11732            | 16425   |
| 27.00 |        | 11958            | 16741   |
| 27.25 |        | 11958            | 16741   |
| 27.38 | 1.5/64 | 12094            | 16932   |
| 27.50 |        | 12094            | 16932   |
| 27.75 |        | 12094            | 16932   |
| 27.78 | 1.3/32 | 12094            | 16932   |
| 28.00 |        | 13209            | 18493   |
| 28.18 | 1.7/64 | 13385            | 18739   |
| 28.25 |        | 13385            | 18739   |
| 28.50 |        | 13385            | 18739   |
| 28.57 | 1.1/8  | 13385            | 18739   |

| SIZE  |         | PRICE (RS.) EACH |         |
|-------|---------|------------------|---------|
| MM    | INCH    | HSS M2           | HSS M35 |
| 28.75 |         | 13498            | 18897   |
| 28.97 | 1.9/64  | 13777            | 19288   |
| 29.00 |         | 13777            | 19288   |
| 29.25 |         | 13777            | 19288   |
| 29.37 | 1.5/32  | 13777            | 19288   |
| 29.50 |         | 13957            | 19540   |
| 29.75 |         | 13957            | 19540   |
| 29.77 | 1.11/64 | 14226            | 19916   |
| 30.00 |         | 14226            | 19916   |
| 30.16 | 1.3/16  | 14226            | 19916   |
| 30.25 |         | 15121            | 21169   |
| 30.50 |         | 15121            | 21169   |
| 30.56 | 1.13/64 | 15403            | 21564   |
| 30.75 |         | 15403            | 21564   |
| 30.96 | 1.7/32  | 15403            | 21564   |
| 31.00 |         | 17131            | 23983   |
| 31.25 |         | 17131            | 23983   |
| 31.35 | 1.15/64 | 17751            | 24851   |
| 31.50 |         | 17751            | 24851   |

ITEMS MARKED ★ (**ONLY IN RH**) ARE EX-STOCK ITEMS. ALL REMAINING ITEMS (RH) ONLY WILL ATTRACT MINIMUM ORDER VALUE OF RS. 50,000/- NETT MOQ OR 50 NOS. PER SIZE WHICHEVER IS HIGHER.

## IMPORTANT NOTES :

- For non listed intermediate sizes, the higher price of the nearest listed size (INCH or MM) will be applicable.
- Quick Spiral or Slow Spiral Drills :
    - Sizes up to (3.17 mm) 1/8" **50 % extra**
    - Sizes over (3.17 mm) 1/8" **25 % extra**
  - Left Hand Drills to IS : 5362
    - SIZE**
    - 3.00mm to 7.00mm
    - 7.1mm to 12.7mm
    - 12.8mm to 20mm
    - Above 20mm
  - long series Drills with Tenon
    - Sizes 3.00mm to 6.50mm **10 % extra**
    - Sizes over 6.50mm **5 % extra**

Sizes below 1mm are manufactured to our Standrad

## HSS TAPER SHANK TWIST DRILLS - IS : 5103

### HSN CODE - 8207

| SIZE |       | PRICE PER EACH (RS.) |                    |                  |
|------|-------|----------------------|--------------------|------------------|
| MM   | INCH  | HSS M2               | PANTHER<br>HSS M35 | NINJA HSS<br>M42 |
| 3.00 |       | 655                  | -                  | -                |
| 3.17 | 1/8   | 655                  | -                  | -                |
| 3.20 |       | 684                  | -                  | -                |
| 3.50 |       | 655                  | -                  | -                |
| 3.57 | 9/64  | 684                  | -                  | -                |
| 3.80 |       | 684                  | -                  | -                |
| 3.97 | 5/32  | 655                  | -                  | -                |
| 4.00 |       | 655                  | -                  | -                |
| 4.20 |       | 885                  | -                  | -                |
| 4.37 | 11/64 | 885                  | -                  | -                |
| 4.50 |       | 885                  | -                  | -                |
| 4.76 | 3/16  | 885                  | -                  | -                |
| 4.80 |       | 885                  | -                  | -                |
| 5.00 |       | 885                  | -                  | -                |
| 5.16 | 13/64 | 910                  | -                  | -                |
| 5.20 |       | 910                  | -                  | -                |
| 5.50 |       | 885                  | -                  | -                |
| 5.56 | 7/32  | 885                  | -                  | -                |
| 5.80 |       | 910                  | -                  | -                |
| 5.95 | 15/64 | 910                  | -                  | -                |
| 6.00 |       | 885                  | -                  | -                |
| 6.20 |       | 1020                 | -                  | -                |
| 6.35 | 1/4   | 1012                 | -                  | -                |
| 6.50 |       | 1099                 | -                  | -                |
| 6.75 | 17/64 | 1115                 | -                  | -                |
| 6.80 |       | 1115                 | -                  | -                |
| 7.00 |       | 1099                 | -                  | -                |
| 7.14 | 9/32  | 1099                 | -                  | -                |
| 7.20 |       | 1115                 | -                  | -                |
| 7.50 |       | 1099                 | -                  | -                |
| 7.54 | 19/64 | 1115                 | -                  | -                |
| 7.80 |       | 1115                 | -                  | -                |
| 7.94 | 5/16  | 1101                 | -                  | -                |
| 8.00 |       | 1101                 | -                  | -                |
| 8.20 |       | 1343                 | -                  | -                |
| 8.33 | 21/64 | 1415                 | -                  | -                |
| 8.50 |       | 1226                 | -                  | -                |
| 8.73 | 11/32 | 1343                 | -                  | -                |
| 8.80 |       | 1476                 | -                  | -                |
| 9.00 |       | 1343                 | -                  | -                |
| 9.13 | 23/64 | 1476                 | -                  | -                |
| 9.20 |       | 1476                 | -                  | -                |
| 9.50 |       | 1343                 | -                  | -                |
| 9.52 | 3/8   | 1343                 | 1682               | 2419             |
| 9.80 |       | 1586                 | 1981               | 2853             |

| SIZE  |       | PRICE PER EACH (RS.) |                    |                  |
|-------|-------|----------------------|--------------------|------------------|
| MM    | INCH  | HSS M2               | PANTHER<br>HSS M35 | NINJA HSS<br>M42 |
| 9.92  | 25/64 | 1586                 | 1981               | 2853             |
| 10.00 |       | 1435                 | 1794               | 2584             |
| 10.20 |       | 1567                 | 1958               | 2818             |
| 10.32 | 13/32 | 1514                 | 1894               | 2725             |
| 10.50 |       | 1857                 | 2319               | 3342             |
| 10.72 | 27/64 | 1925                 | 2406               | 3463             |
| 10.80 |       | 1925                 | 2406               | 3463             |
| 11.00 |       | 1925                 | 2407               | 3463             |
| 11.11 | 7/16  | 1925                 | 2406               | 3463             |
| 11.20 |       | 1987                 | 2484               | 3577             |
| 11.50 |       | 1987                 | 2484               | 3577             |
| 11.51 | 29/64 | 1987                 | 2484               | 3577             |
| 11.80 |       | 1987                 | 2484               | 3577             |
| 11.91 | 15/32 | 1987                 | 2484               | 3577             |
| 12.00 |       | 2007                 | 2509               | 3613             |
| 12.20 |       | 2007                 | 2509               | 3613             |
| 12.30 | 31/64 | 2007                 | 2509               | 3613             |
| 12.50 |       | 2007                 | 2509               | 3613             |
| 12.70 | 1/2   | 2007                 | 2509               | 3613             |
| 12.80 |       | 2794                 | 3494               | 5030             |
| 13.00 |       | 2794                 | 3494               | 5030             |
| 13.10 | 33/64 | 2915                 | 3643               | 5246             |
| 13.20 |       | 2915                 | 3643               | 5246             |
| 13.49 | 17/32 | 2915                 | 3643               | 5246             |
| 13.50 |       | 3121                 | 3901               | 5618             |
| 13.80 |       | 3121                 | 3901               | 5618             |
| 13.89 | 35/64 | 3121                 | 3901               | 5618             |
| 14.00 |       | 3121                 | 3901               | 5618             |
| 14.25 |       | 3356                 | 4195               | 6040             |
| 14.29 | 9/16  | 3356                 | 4195               | 6040             |
| 14.50 |       | 3485                 | 4355               | 6272             |
| 14.68 | 37/64 | 3485                 | 4355               | 6272             |
| 14.75 |       | 3485                 | 4355               | 6272             |
| 15.00 |       | 3485                 | 4355               | 6272             |
| 15.08 | 19/32 | 3485                 | 4355               | 6272             |
| 15.25 |       | 3535                 | 4419               | 6364             |
| 15.48 | 39/64 | 3535                 | 4419               | 6364             |
| 15.50 |       | 3535                 | 4419               | 6364             |
| 15.75 |       | 3535                 | 4419               | 6364             |
| 15.87 | 5/8   | 3535                 | 4419               | 6363             |
| 16.00 |       | 3638                 | 4548               | 6551             |
| 16.25 |       | 3638                 | 4551               | 6551             |
| 16.27 | 41/64 | 3638                 | 4551               | 6551             |
| 16.50 |       | 3867                 | 4831               | 6961             |
| 16.67 | 21/32 | 3867                 | 4831               | 6961             |

# HSS TAPER SHANK TWIST DRILLS - IS : 5103

## HSN CODE - 8207

| SIZE  |       | PRICE PER EACH (RS.) |                 |               |
|-------|-------|----------------------|-----------------|---------------|
| MM    | INCH  | HSS M2               | PANTHER HSS M35 | NINJA HSS M42 |
| 16.75 |       | 3867                 | 4831            | 6961          |
| 17.00 |       | 3867                 | 4831            | 6961          |
| 17.07 | 43/64 | 3931                 | 4912            | 7074          |
| 17.25 |       | 3931                 | 4912            | 7074          |
| 17.46 | 11/16 | 3931                 | 4912            | 7074          |
| 17.50 |       | 4079                 | 5099            | 7343          |
| 17.75 |       | 4138                 | 5172            | 7448          |
| 17.86 | 45/64 | 4298                 | 5371            | 7735          |
| 18.00 |       | 4298                 | 5371            | 7735          |
| 18.25 |       | 4298                 | 5371            | 7735          |
| 18.26 | 23/32 | 4298                 | 5371            | 7735          |
| 18.50 |       | 4298                 | 5371            | 7735          |
| 18.65 | 47/64 | 4349                 | 5437            | 7829          |
| 18.75 |       | 4349                 | 5437            | 7829          |
| 19.00 |       | 4349                 | 5437            | 7829          |
| 19.05 | 3/4   | 4349                 | 5437            | 7829          |
| 19.25 |       | 4568                 | 5709            | 8221          |
| 19.45 | 49/64 | 4568                 | 5709            | 8221          |
| 19.50 |       | 4568                 | 5709            | 8221          |
| 19.75 |       | 4568                 | 5709            | 8221          |
| 19.84 | 25/32 | 4568                 | 5709            | 8221          |
| 20.00 |       | 4914                 | 6143            | 8845          |
| 20.24 | 51/64 | 4974                 | 6217            | 8953          |
| 20.25 |       | 4974                 | 6217            | 8953          |
| 20.50 |       | 4974                 | 6217            | 8953          |
| 20.64 | 13/16 | 4974                 | 6217            | 8953          |
| 20.75 |       | 5186                 | 6482            | 9334          |
| 21.00 |       | 5186                 | 6482            | 9334          |
| 21.03 | 53/64 | 5311                 | 6640            | 9562          |
| 21.25 |       | 5311                 | 6640            | 9562          |
| 21.43 | 27/32 | 5311                 | 6640            | 9562          |
| 21.50 |       | 5479                 | 6849            | 9861          |
| 21.75 |       | 5479                 | 6849            | 9861          |
| 21.83 | 55/64 | 5580                 | 6976            | 10045         |
| 22.00 |       | 5580                 | 6976            | 10045         |
| 22.22 | 7/8   | 5580                 | 6976            | 10045         |
| 22.25 |       | 6082                 | 7602            | 10947         |
| 22.50 |       | 6082                 | 7602            | 10947         |
| 22.62 | 57/64 | 6200                 | 7750            | 11160         |
| 22.75 |       | 6200                 | 7750            | 11160         |
| 23.00 |       | 6200                 | 7750            | 11160         |
| 23.02 | 29/32 | 6503                 | 8129            | 11706         |
| 23.25 |       | 7199                 | 8999            | 12959         |
| 23.42 | 59/64 | 7380                 | 9225            | 13284         |
| 23.50 |       | 7380                 | 9225            | 13284         |

| SIZE  |         | PRICE PER EACH (RS.) |                 |               |
|-------|---------|----------------------|-----------------|---------------|
| MM    | INCH    | HSS M2               | PANTHER HSS M35 | NINJA HSS M42 |
| 23.75 |         | 7380                 | 9225            | 13284         |
| 23.81 | 15/16   | 7380                 | 9225            | 13284         |
| 24.00 |         | 7598                 | 9498            | 13676         |
| 24.21 | 61/64   | 7727                 | 9658            | 13907         |
| 24.25 |         | 7727                 | 9658            | 13907         |
| 24.50 |         | 7727                 | 9656            | 13907         |
| 24.61 | 31/32   | 7727                 | 9658            | 13907         |
| 24.75 |         | 8074                 | 10091           | 14532         |
| 25.00 | 63/64   | 8074                 | 10091           | 14532         |
| 25.25 |         | 8181                 | 10226           | 14725         |
| 25.40 | 1       | 8181                 | 10226           | 14725         |
| 25.50 |         | 8891                 | -               | -             |
| 25.75 |         | 8891                 | -               | -             |
| 25.80 | 1.1/64  | 8988                 | -               | -             |
| 26.00 |         | 8660                 | -               | -             |
| 26.19 | 1.1/32  | 8646                 | -               | -             |
| 26.25 |         | 9340                 | -               | -             |
| 26.50 |         | 9340                 | -               | -             |
| 26.59 | 1.3/64  | 9554                 | -               | -             |
| 26.75 |         | 9554                 | -               | -             |
| 26.99 | 1.1/16  | 9554                 | -               | -             |
| 27.00 |         | 9870                 | -               | -             |
| 27.25 |         | 9870                 | -               | -             |
| 27.38 | 1.5/64  | 9898                 | -               | -             |
| 27.50 |         | 9898                 | -               | -             |
| 27.75 |         | 9898                 | -               | -             |
| 27.78 | 1.3/32  | 9898                 | -               | -             |
| 28.00 |         | 10823                | -               | -             |
| 28.18 | 1.7/64  | 10854                | -               | -             |
| 28.25 |         | 10854                | -               | -             |
| 28.50 |         | 10854                | -               | -             |
| 28.57 | 1.1/8   | 10854                | -               | -             |
| 28.75 |         | 11183                | -               | -             |
| 28.97 | 1.9/64  | 11365                | -               | -             |
| 29.00 |         | 11365                | -               | -             |
| 29.25 |         | 11365                | -               | -             |
| 29.37 | 1.5/32  | 11365                | -               | -             |
| 29.50 |         | 11409                | -               | -             |
| 29.75 |         | 11409                | -               | -             |
| 29.77 | 1.11/64 | 11649                | -               | -             |
| 30.00 |         | 11649                | -               | -             |
| 30.16 | 1.3/16  | 12299                | -               | -             |
| 30.25 |         | 13247                | -               | -             |
| 30.50 |         | 13247                | -               | -             |
| 30.56 | 1.13/64 | 13460                | -               | -             |

## HSS TAPER SHANK TWIST DRILLS - IS : 5103

### HSN CODE - 8207

| SIZE  |         | PRICE PER EACH (RS.) |                 |               |
|-------|---------|----------------------|-----------------|---------------|
| MM    | INCH    | HSS M2               | PANTHER HSS M35 | NINJA HSS M42 |
| 30.75 |         | 13460                | -               | -             |
| 30.96 | 1.7/32  | 13460                | -               | -             |
| 31.00 |         | 14978                | -               | -             |
| 31.25 |         | 14978                | -               | -             |
| 31.35 | 1.15/64 | 15631                | -               | -             |
| 31.50 |         | 15631                | -               | -             |
| 31.75 | 1.1/4   | 15631                | -               | -             |
| 32.00 |         | 17115                | -               | -             |
| 32.15 | 1.17/64 | 17115                | -               | -             |
| 32.50 |         | 17115                | -               | -             |
| 32.54 | 1.9/32  | 17115                | -               | -             |
| 32.94 | 1.19/64 | 17524                | -               | -             |
| 33.00 |         | 17524                | -               | -             |
| 33.34 | 1.5/16  | 17524                | -               | -             |
| 33.50 |         | 18126                | -               | -             |
| 33.73 | 1.21/64 | 18466                | -               | -             |
| 34.00 |         | 18466                | -               | -             |
| 34.13 | 1.11/32 | 19248                | -               | -             |
| 34.50 |         | 20224                | -               | -             |
| 34.58 | 1.23/64 | 20409                | -               | -             |
| 34.92 | 1.3/8   | 20409                | -               | -             |
| 35.00 |         | 20409                | -               | -             |
| 35.32 | 1.25/64 | 21632                | -               | -             |
| 35.50 |         | 21632                | -               | -             |
| 35.72 | 1.13/32 | 21632                | -               | -             |
| 36.00 |         | 21950                | -               | -             |
| 36.12 | 1.27/64 | 22402                | -               | -             |
| 36.50 |         | 22402                | -               | -             |
| 36.51 | 1.7/16  | 22402                | -               | -             |
| 36.91 | 1.29/64 | 22402                | -               | -             |
| 37.00 |         | 22957                | -               | -             |
| 37.31 | 1.15/32 | 22957                | -               | -             |
| 37.50 |         | 24447                | -               | -             |
| 37.70 | 1.31/64 | 24828                | -               | -             |
| 38.00 |         | 24828                | -               | -             |
| 38.10 | 1.1/2   | 24828                | -               | -             |
| 38.15 | 1.33/64 | 25602                | -               | -             |
| 38.89 | 1.17/32 | 25602                | -               | -             |
| 39.00 |         | 27116                | -               | -             |
| 39.29 | 1.35/64 | 27116                | -               | -             |
| 39.50 |         | 27116                | -               | -             |
| 39.69 | 1.9/16  | 27116                | -               | -             |
| 40.00 |         | 27814                | -               | -             |
| 40.08 | 1.37/64 | 28272                | -               | -             |
| 40.48 | 1.19/32 | 28272                | -               | -             |

| SIZE  |         | PRICE PER EACH (RS.) |                 |               |
|-------|---------|----------------------|-----------------|---------------|
| MM    | INCH    | HSS M2               | PANTHER HSS M35 | NINJA HSS M42 |
| 40.50 |         | 29402                | -               | -             |
| 40.88 | 1.39/64 | 29402                | -               | -             |
| 41.00 |         | 29402                | -               | -             |
| 41.27 | 1.5/8   | 29402                | -               | -             |
| 41.50 |         | 30554                | -               | -             |
| 41.67 | 1.41/64 | 30554                | -               | -             |
| 42.00 |         | 30554                | -               | -             |
| 42.07 | 1.21/32 | 30554                | -               | -             |
| 42.47 | 1.43/64 | 31337                | -               | -             |
| 42.50 |         | 31337                | -               | -             |
| 42.86 | 1.11/16 | 31722                | -               | -             |
| 43.00 |         | 32467                | -               | -             |
| 43.26 | 1.45/64 | 32467                | -               | -             |
| 43.50 |         | 32467                | -               | -             |
| 43.66 | 1.23/32 | 32467                | -               | -             |
| 44.00 |         | 33611                | -               | -             |
| 44.05 | 1.47/64 | 33611                | -               | -             |
| 44.45 | 1.3/4   | 33611                | -               | -             |
| 44.50 |         | 33611                | -               | -             |
| 44.85 | 1.49/64 | 34399                | -               | -             |
| 45.00 |         | 34399                | -               | -             |
| 45.24 | 1.23/32 | 34399                | -               | -             |
| 45.50 |         | 35957                | -               | -             |
| 45.64 | 1.51/64 | 35957                | -               | -             |
| 46.00 |         | 35957                | -               | -             |
| 46.04 | 1.13/16 | 35957                | -               | -             |
| 46.43 | 1.53/64 | 37771                | -               | -             |
| 46.50 |         | 37771                | -               | -             |
| 46.83 | 1.27/32 | 37771                | -               | -             |
| 47.00 |         | 37771                | -               | -             |
| 47.23 | 1.53/64 | 38562                | -               | -             |
| 47.50 |         | 38562                | -               | -             |
| 47.62 | 1.7/8   | 38562                | -               | -             |
| 48.00 |         | 42049                | -               | -             |
| 48.02 | 1.57/64 | 42049                | -               | -             |
| 48.42 | 1.29/32 | 42049                | -               | -             |
| 48.50 |         | 42356                | -               | -             |
| 48.82 | 1.59/64 | 42356                | -               | -             |
| 49.00 |         | 42356                | -               | -             |
| 49.21 | 1.15/16 | 42356                | -               | -             |
| 49.50 |         | 42813                | -               | -             |
| 49.61 | 1.61/64 | 42813                | -               | -             |
| 50.00 |         | 42813                | -               | -             |
| 50.01 | 1.31/32 | 43150                | -               | -             |
| 50.40 | 1.63/64 | 45089                | -               | -             |

# HSS TAPER SHANK TWIST DRILLS - IS : 5103

## HSN CODE - 8207

| SIZE  |         | PRICE PER EACH (RS.) |                 |               |
|-------|---------|----------------------|-----------------|---------------|
| MM    | INCH    | HSS M2               | PANTHER HSS M35 | NINJA HSS M42 |
| 50.50 |         | 45089                | -               | -             |
| 50.80 | 2       | 45089                | -               | -             |
| 51.00 |         | 61218                | -               | -             |
| 51.50 |         | 61218                | -               | -             |
| 51.59 | 2.1/32  | 61218                | -               | -             |
| 52.00 |         | 61218                | -               | -             |
| 52.39 | 2.1/16  | 61218                | -               | -             |
| 52.50 |         | 79675                | -               | -             |
| 53.00 |         | 79675                | -               | -             |
| 53.18 | 2.3/32  | 79675                | -               | -             |
| 53.50 |         | 79675                | -               | -             |
| 53.97 | 2.1/8   | 79675                | -               | -             |
| 54.00 |         | 79675                | -               | -             |
| 54.50 |         | 83697                | -               | -             |
| 54.77 | 2.5/32  | 83697                | -               | -             |
| 55.00 |         | 83579                | -               | -             |
| 55.50 |         | 83697                | -               | -             |
| 55.56 | 2.3/16  | 83697                | -               | -             |
| 56.00 |         | 87215                | -               | -             |
| 56.36 | 2.7/32  | 87215                | -               | -             |
| 56.50 |         | 87215                | -               | -             |
| 57.00 |         | 87215                | -               | -             |
| 57.15 | 2.1/4   | 87215                | -               | -             |
| 57.50 |         | 95180                | -               | -             |
| 57.94 | 2.9/32  | 95180                | -               | -             |
| 58.00 |         | 95180                | -               | -             |
| 58.50 |         | 95180                | -               | -             |
| 58.74 | 2.5/16  | 95180                | -               | -             |
| 59.00 |         | 96998                | -               | -             |
| 59.50 |         | 96998                | -               | -             |
| 59.53 | 2.11/32 | 96998                | -               | -             |
| 60.00 |         | 96998                | -               | -             |
| 60.32 | 2.3/8   | 96998                | -               | -             |
| 60.50 |         | 103101               | -               | -             |
| 61.00 |         | 103101               | -               | -             |
| 61.12 | 2.13/32 | 103101               | -               | -             |
| 61.15 |         | 103101               | -               | -             |
| 61.91 | 2.7/16  | 103101               | -               | -             |
| 62.00 |         | 103101               | -               | -             |
| 62.50 |         | 103101               | -               | -             |
| 62.71 | 2.15/32 | 104837               | -               | -             |
| 63.00 |         | 104837               | -               | -             |
| 63.50 | 2.1/2   | 104837               | -               | -             |
| 64.00 |         | 115871               | -               | -             |
| 64.29 | 2.17/32 | 115871               | -               | -             |

| SIZE  |         | PRICE PER EACH (RS.) |                 |               |
|-------|---------|----------------------|-----------------|---------------|
| MM    | INCH    | HSS M2               | PANTHER HSS M35 | NINJA HSS M42 |
| 65.00 |         | 115871               | -               | -             |
| 65.09 | 2.9/16  | 116733               | -               | -             |
| 65.88 | 2.19/32 | 116733               | -               | -             |
| 66.00 |         | 116733               | -               | -             |
| 66.67 | 2.5/8   | 116733               | -               | -             |
| 67.00 |         | 119582               | -               | -             |
| 67.47 | 2.21/32 | 128363               | -               | -             |
| 68.00 |         | 128363               | -               | -             |
| 68.26 | 2.11/16 | 128363               | -               | -             |
| 69.00 |         | 139136               | -               | -             |
| 69.06 | 2.23/32 | 139136               | -               | -             |
| 69.85 | 2.3/4   | 139136               | -               | -             |
| 70.00 |         | 139136               | -               | -             |
| 70.64 | 2.25/32 | 150062               | -               | -             |
| 71.00 |         | 150062               | -               | -             |
| 71.44 | 2.13/16 | 150062               | -               | -             |
| 71.50 |         | 150062               | -               | -             |
| 72.00 |         | 152959               | -               | -             |
| 72.23 | 2.27/32 | 152959               | -               | -             |
| 73.00 |         | 152959               | -               | -             |
| 73.02 | 2.7/8   | 152959               | -               | -             |
| 73.82 | 2.29/32 | 162790               | -               | -             |
| 74.00 |         | 162790               | -               | -             |
| 74.61 | 2.15/16 | 162790               | -               | -             |
| 75.00 |         | 164814               | -               | -             |
| 75.41 | 2.31/32 | 164814               | -               | -             |
| 76.00 |         | 164814               | -               | -             |
| 76.20 | 3       | 164814               | -               | -             |
| 76.99 | 3.1/32  | 225474               | -               | -             |
| 77.00 |         | 225474               | -               | -             |
| 77.79 | 3.1/16  | 225474               | -               | -             |
| 78.00 |         | 225474               | -               | -             |
| 78.58 | 3.3/32  | 229969               | -               | -             |
| 79.00 |         | 229969               | -               | -             |
| 79.37 | 3.1/8   | 236073               | -               | -             |
| 80.00 |         | 236073               | -               | -             |
| 80.17 | 3.5/32  | 252502               | -               | -             |
| 80.96 | 3.3/16  | 252502               | -               | -             |
| 81.00 |         | 252502               | -               | -             |
| 81.76 | 3.7/32  | 259064               | -               | -             |
| 82.00 |         | 259064               | -               | -             |
| 82.55 | 3.1/4   | 259064               | -               | -             |
| 83.00 |         | 264417               | -               | -             |
| 83.34 | 3.9/32  | 264417               | -               | -             |
| 84.00 |         | 264417               | -               | -             |

## HSS TAPER SHANK TWIST DRILLS - IS : 5103

### HSN CODE - 8207

| SIZE  |         | PRICE PER EACH (RS.) |                 |               |
|-------|---------|----------------------|-----------------|---------------|
| MM    | INCH    | HSS M2               | PANTHER HSS M35 | NINJA HSS M42 |
| 84.14 | 3.5/16  | 268813               | -               | -             |
| 84.99 | 3.11/32 | 268813               | -               | -             |
| 85.00 |         | 257856               | -               | -             |
| 85.72 | 3.3/8   | 306623               | -               | -             |
| 86.00 |         | 306623               | -               | -             |
| 86.52 | 3.13/32 | 306623               | -               | -             |
| 87.00 |         | 306623               | -               | -             |
| 87.31 | 3.7/16  | 313030               | -               | -             |
| 88.00 |         | 313030               | -               | -             |
| 88.11 | 3.15/32 | 313030               | -               | -             |
| 88.90 | 3.1/2   | 313030               | -               | -             |
| 89.00 |         | 313030               | -               | -             |
| 90.00 |         | 319415               | -               | -             |
| 90.49 | 3.9/16  | 331329               | -               | -             |
| 91.00 |         | 331329               | -               | -             |
| 92.00 |         | 331329               | -               | -             |
| 92.07 | 3.5/8   | 342148               | -               | -             |

| SIZE   |         | PRICE PER EACH (RS.) |                 |               |
|--------|---------|----------------------|-----------------|---------------|
| MM     | INCH    | HSS M2               | PANTHER HSS M35 | NINJA HSS M42 |
| 93.00  |         | 342148               | -               | -             |
| 93.66  | 3.11/16 | 355090               | -               | -             |
| 94.00  |         | 355090               | -               | -             |
| 95.00  |         | 355090               | -               | -             |
| 95.25  | 3.3/4   | 355090               | -               | -             |
| 96.00  |         | 366976               | -               | -             |
| 96.84  | 3.13/16 | 366976               | -               | -             |
| 97.00  |         | 366976               | -               | -             |
| 98.00  |         | 373466               | -               | -             |
| 98.42  | 3.7/8   | 378797               | -               | -             |
| 99.00  |         | 378797               | -               | -             |
| 100.00 |         | 378797               | -               | -             |
| 100.01 | 3.15/16 | 385288               | -               | -             |
| 101.00 |         | 385288               | -               | -             |
| 101.60 | 4       | 385288               | -               | -             |
| 102.00 |         | 385288               | -               | -             |

ITEMS MARKED ★ : (ONLY IN RH) ARE EX-STOCK ITMS. ALL REMAINING ITEMS (RH) WILL ATTRACT MINIMUM ORDER VALUE OF RS. 50,000/- NETT MOQ OR 50 NOS. PER SIZE WHICHEVER IS HIGHER.

#### IMPORTANT NOTES :

- For non listed intermediate sizes, the higher price of the nearest listed size (INCH or MM) will be applicable.
- Quick Spiral or Slow Spiral Drills :
- Oversize shank Drills to IS : 5104 in the following range **10% extra**.

| SIZE RANGE    |                 | INSTEAD OF MT NO. |
|---------------|-----------------|-------------------|
| MM            | INCH            |                   |
| 11.8 to 14.0  | 15/32 to 35/64  | 1                 |
| 18.0 to 23.0  | 23/32 to 29/32  | 2                 |
| 26.5 to 31.75 | 1.3/64 to 1.1/4 | 3                 |
| 40.0 to 80.80 | 1.37/64 to 2    | 4                 |
| 63.0 to 76.20 | 2.1/2 to 3      | 5                 |

## MORSE TAPER SHANK TWIST DRILLS (IS : 5103)

### HSN CODE - 8207

| MORESE<br>TAPER<br>SHANK NO. | DRILL SIZES |             |       |             |
|------------------------------|-------------|-------------|-------|-------------|
|                              | MM          |             | INCHE |             |
|                              | OVER        | UPTO & INCL | OVER  | UPTO & INCL |
| 1                            | 3.00        | 14.00       | 1/8   | 35/64       |
| 2                            | 14.00       | 23.00       | 35/64 | 29/32       |
| 3                            | 23.00       | 31.75       | 29/32 | 1.1/4       |
| 4                            | 31.75       | 50.80       | 1.1/4 | 2           |
| 5                            | 50.80       | 76.20       | 2     | 3           |
| 6                            | 76.20       | 100.00      | 3     | 4           |

# HSS TAPER SHANK 03 OR 04 FLUTED CORE DRILLS IS - 5366 HSN CODE - 8207

| SIZE  |        | PRICE (RS.) EACH |
|-------|--------|------------------|
| MM    | INCH   |                  |
| 7.94  | 5/16   | 2162             |
| 8.00  |        | 2165             |
| 9.52  | 3/8    | 2382             |
| 10.00 |        | 2382             |
| 10.32 | 13/32  | 2382             |
| 11.00 |        | 2385             |
| 11.11 | 7/16   | 2385             |
| 11.91 | 15/32  | 2550             |
| 12.00 |        | 2550             |
| 12.70 | 1/2    | 2695             |
| 13.00 |        | 3644             |
| 13.49 | 17/32  | 3987             |
| 14.00 |        | 3987             |
| 14.29 | 9/16   | 4101             |
| 15.00 |        | 4281             |
| 15.08 | 19/32  | 4281             |
| 15.87 | 5/8    | 4378             |
| 16.00 |        | 4378             |
| 16.67 | 21/32  | 4614             |
| 17.00 |        | 4614             |
| 17.46 | 11/16  | 4982             |
| 18.00 |        | 5362             |
| 18.26 | 23/32  | 5362             |
| 19.00 |        | 6122             |
| 19.05 | 3/4    | 6122             |
| 19.84 | 25/32  | 6151             |
| 20.00 |        | 6151             |
| 20.64 | 13/16  | 6579             |
| 21.00 |        | 6531             |
| 21.43 | 27/32  | 6956             |
| 22.00 |        | 6956             |
| 22.22 | 7/8    | 7380             |
| 23.00 |        | 7813             |
| 23.02 | 29/32  | 7813             |
| 23.81 | 15/16  | 8528             |
| 24.00 |        | 8950             |
| 24.61 | 31/32  | 8950             |
| 25.00 |        | 10356            |
| 25.40 | 1      | 10356            |
| 26.00 |        | 11179            |
| 26.19 | 1.1/32 | 11179            |
| 26.99 | 1.1/16 | 12337            |
| 27.00 |        | 12337            |
| 27.78 | 1.3/32 | 12807            |
| 28.00 |        | 13571            |
| 28.57 | 1.1/8  | 13572            |

| SIZE  |         | PRICE (RS.) EACH |
|-------|---------|------------------|
| MM    | INCH    |                  |
| 29.00 |         | 14205            |
| 29.37 | 1.5/32  | 14205            |
| 30.00 |         | 15086            |
| 30.16 | 1.3/16  | 15086            |
| 30.96 | 1.7/32  | 15661            |
| 31.00 |         | 17607            |
| 31.75 | 1.1/4   | 18384            |
| 32.00 |         | 20146            |
| 32.54 | 1.9/32  | 20146            |
| 33.00 |         | 20569            |
| 33.34 | 1.5/16  | 20569            |
| 34.00 |         | 22557            |
| 34.13 | 1.11/32 | 22557            |
| 34.92 | 1.3/8   | 23824            |
| 35.00 |         | 23824            |
| 35.72 | 1.13/32 | 25623            |
| 36.00 |         | 25623            |
| 36.51 | 1.7/16  | 27031            |
| 37.00 |         | 27031            |
| 37.31 | 1.15/32 | 27800            |
| 38.00 |         | 29742            |
| 38.10 | 1.1/2   | 29742            |
| 39.00 |         | 32615            |
| 39.69 | 1.9/16  | 32615            |
| 40.00 |         | 32615            |
| 41.00 |         | 35945            |
| 41.27 | 1.5/8   | 35945            |
| 42.00 |         | 37011            |
| 42.07 | 1.21/32 | 37011            |
| 42.86 | 1.11/16 | 38204            |
| 43.00 |         | 38204            |
| 44.00 |         | 40378            |
| 44.45 | 1.3/4   | 40378            |
| 45.00 |         | 41805            |
| 45.24 | 1.25/32 | 41804            |
| 46.00 |         | 43354            |
| 46.04 | 1.13/16 | 43354            |
| 47.00 |         | 45054            |
| 47.62 | 1.7/8   | 47375            |
| 48.00 |         | 47375            |
| 49.00 |         | 50588            |
| 49.21 | 1.15/16 | 50588            |
| 50.00 |         | 54438            |
| 50.80 | 2       | 60194            |
| 51.00 |         | 60716            |
| 52.00 |         | 66871            |



# HSS TAPER SHANK 03 OR 04 FLUTED CORE DRILLS IS - 5366 HSN CODE - 8207

| SIZE  |        | PRICE (RS.) EACH |
|-------|--------|------------------|
| MM    | INCH   |                  |
| 52.39 | 2.1/16 | 66871            |
| 53.00 |        | 78111            |
| 53.97 | 2.1/8  | 78111            |
| 54.00 |        | 78111            |
| 55.00 |        | 81875            |
| 55.36 | 2.3/16 | 81875            |
| 56.00 |        | 85341            |
| 57.00 |        | 85341            |
| 57.15 | 2.1/4  | 85341            |
| 58.00 |        | 93261            |
| 58.74 | 2.5/16 | 93261            |
| 59.00 |        | 94986            |
| 60.00 |        | 94986            |
| 60.32 | 2.3/8  | 94986            |
| 61.00 |        | 101230           |
| 61.91 | 2.7/16 | 101230           |
| 62.00 |        | 101230           |
| 63.00 |        | 104139           |
| 63.50 | 2.1/2  | 104139           |
| 64.00 |        | 113705           |

| SIZE  |         | PRICE (RS.) EACH |
|-------|---------|------------------|
| MM    | INCH    |                  |
| 65.00 |         | 113705           |
| 65.09 | 2.9/16  | 113705           |
| 66.00 |         | 119219           |
| 66.67 | 2.5/8   | 119219           |
| 67.00 |         | 124195           |
| 68.00 |         | 130225           |
| 68.26 | 2.11/16 | 130225           |
| 69.00 |         | 136589           |
| 69.85 | 2.3/4   | 139148           |
| 70.00 |         | 139148           |
| 71.00 |         | 141902           |
| 71.44 | 2.13/16 | 141902           |
| 72.00 |         | 148387           |
| 73.00 |         | 153889           |
| 73.02 | 2.7/8   | 153889           |
| 74.00 |         | 159707           |
| 74.61 | 2.15/16 | 159707           |
| 75.00 |         | 165592           |
| 76.00 |         | 173545           |
| 76.20 | 3       | 173545           |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF RS. 50,000/- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.

## IMPORTANT NOTES :

1. For non listed intermediate sizes. The higher price of the nearest listed size (INCH or MM) will be applicable.
2. Sizes upto 20mm will be with 3 flutes and above 20mm will be with 4 flutes unless otherwise specifice.
3. Core drills with nostandard number of flutes - **10% extra**
4. For **M35 = 40% & M42 = 80% extra**

## HSS SHELL DRILLS BS : 122 : II : 1964

### HSN CODE - 8207

| NOM DIA INCH | PRICE (RS.) EACH | NOM DIA INCH | PRICE (RS.) EACH |
|--------------|------------------|--------------|------------------|
| 1            | 5406             | 2            | 11950            |
| 1.1/16       | 5708             | 2.1/8        | 13208            |
| 1.1/8        | 6050             | 2.1/4        | 14454            |
| 1.3/16       | 6420             | 2.3/8        | 16172            |
| 1.1/4        | 6705             | 2.1/2        | 19668            |
| 1.5/16       | 7030             | 2.5/8        | 22850            |
| 1.3/8        | 7430             | 2.3/4        | 25138            |
| 1.7/16       | 7757             | 2.7/8        | 27935            |
| 1.1/2        | 8038             | 3            | 30678            |
| 1.9/16       | 8497             | 3.1/8        | 34398            |
| 1.5/8        | 8870             | 3.1/4        | 37725            |
| 1.11/16      | 10068            | 3.3/8        | 40573            |
| 1.3/4        | 10300            | 3.1/2        | 43563            |
| 1.13/16      | 10703            | 3.5/8        | 51468            |
| 1.7/8        | 11025            | 3.3/4        | 53842            |
| 1.15/16      | 11558            | 3.7/8        | 62324            |
|              | -                | 4            | 68875            |

## HSS COMBINED DRILLS & COUNTERSINKS (CENTRE DRILLS) IS : 6708 / TYPE 'A'

### HSN CODE - 8207

| PILOT DIA MM | BODY DIA MM | PRICE (RS.) EACH | PILOT DIA MM | BODY DIA MM | PRICE (RS.) EACH |
|--------------|-------------|------------------|--------------|-------------|------------------|
| 1            | 3.15        | 355              | 4            | 10          | 726              |
| 1.25         | 3.15        | 355              | 5            | 12.5        | 1322             |
| 1.60         | 4           | 355              | 6.3          | 16          | 1564             |
| 2            | 5           | 355              | 8            | 20          | 2414             |
| 2.50         | 6.3         | 411              | 10           | 25          | 3108             |
| 3.15         | 8           | 635              |              |             |                  |

## HSS COMBINED DRILLS & COUNTERSINKS (CENTRE DRILLS) IS : 6710 / TYPE 'R'

### HSN CODE - 8207

| PILOT DIA MM | BODY DIA MM | PRICE (RS.) EACH | PILOT DIA MM | BODY DIA MM | PRICE (RS.) EACH |
|--------------|-------------|------------------|--------------|-------------|------------------|
| 2            | 5           | 354              | 5            | 12.5        | 1322             |
| 2.50         | 6.3         | 411              | 6.3          | 16          | 1564             |
| 3.15         | 8           | 635              | 8            | 20          | 2414             |
| 4            | 10          | 785              | 10           | 25          | 3108             |

## HSS COMBINED DRILLS & COUNTERSINKS (CENTRE DRILLS) IS : 6709 / TYPE 'B' HSN CODE - 8207

| PILOT DIA MM | BODY DIA MM | PRICE (RS.) EACH | PILOT DIA MM | BODY DIA MM | PRICE (RS.) EACH |
|--------------|-------------|------------------|--------------|-------------|------------------|
| 1            | 4           | 584              | 4            | 14          | 2163             |
| 1.25         | 5           | 623              | 5            | 18          | 3339             |
| 1.60         | 6.3         | 727              | 6            | 20          | 3934             |
| 2            | 8           | 1027             | 8            | 25          | 5092             |
| 2.50         | 10          | 1311             | 10           | 31.5        | 6043             |
| 3.15         | 11.2        | 1745             |              |             |                  |

## HSS COMBINED DRILLS & COUNTERSINKS (CENTRE DRILLS) BS : 328 (PART 2) 1950 HSN CODE - 8207

| B.S. NO | PILOT DIA INCH | BODY DIA INCH | OAL INCH | PRICE (RS.) EACH |
|---------|----------------|---------------|----------|------------------|
| BS-1    | 3/64           | 1/8           | 1.1/2    | 355              |
| BS-2    | 1/16           | 3/16          | 1.3/4    | 355              |
| BS-3    | 3/32           | 1/4           | 2        | 411              |
| BS-4    | 1/8            | 5/16          | 2.1/4    | 635              |
| BS-5    | 3/16           | 7/16          | 2.1/2    | 830              |
| BS-6    | 1/4            | 5/8           | 3        | 1564             |
| BS-7    | 5/16           | 3/4           | 3.1/2    | 2414             |

ITEMS MARKED ★ : (ONLY IN RH) ARE EX-STOCK ITEMS. ALL REMAINING ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF RS. 50,000/- NETT OR MOQ OF 5 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR M35 = 40% & M42 = 80% extra.

# HSS TAPER SHANK TWIST DRILL (LONG SERIES)

## IS : 8305 - 1976 (TYPE 'N')

### HSN CODE - 8207

| SIZE  |       | OAL | PRICE (RS.)<br>EACH |
|-------|-------|-----|---------------------|
| MM    | INCH  | MM  |                     |
| 5.00  |       | 155 | 2001                |
|       | 13/64 | 155 | 2001                |
| 5.20  |       | 155 | 2001                |
| 5.50  |       | 161 | 2229                |
|       | 7/32  | 161 | 2229                |
| 5.80  |       | 161 | 2229                |
|       | 15/64 | 161 | 2229                |
| 6.00  |       | 161 | 2229                |
| 6.20  |       | 167 | 2484                |
|       | 1/4   | 167 | 2483                |
| 6.50  |       | 167 | 2484                |
|       | 17/64 | 174 | 2677                |
| 6.80  |       | 174 | 2677                |
| 7.00  |       | 174 | 2677                |
|       | 9/32  | 174 | 2677                |
| 7.20  |       | 174 | 2760                |
| 7.50  |       | 174 | 2760                |
|       | 19/64 | 181 | 2919                |
| 7.80  |       | 181 | 2919                |
|       | 5/16  | 181 | 2919                |
| 8.00  |       | 181 | 2919                |
| 8.20  |       | 181 | 2978                |
|       | 21/64 | 181 | 2978                |
| 8.50  |       | 181 | 2978                |
|       | 11/32 | 188 | 3228                |
| 8.80  |       | 188 | 3230                |
| 9.00  |       | 188 | 3230                |
|       | 23/64 | 188 | 3306                |
| 9.20  |       | 188 | 3306                |
| 9.50  |       | 188 | 3306                |
|       | 3/8   | 197 | 3306                |
| 9.80  |       | 197 | 3755                |
|       | 25/64 | 197 | 3755                |
| 10.00 |       | 197 | 3755                |
| 10.20 |       | 197 | 3859                |
|       | 13/32 | 197 | 3859                |
| 10.50 |       | 197 | 3859                |
|       | 27/64 | 206 | 3944                |
| 10.80 |       | 206 | 3944                |
| 11.00 |       | 206 | 3944                |
|       | 7/16  | 206 | 4091                |
| 11.20 |       | 206 | 4091                |
| 11.50 |       | 206 | 4091                |
|       | 29/64 | 206 | 4091                |
| 11.80 |       | 206 | 4091                |
|       | 15/32 | 215 | 4847                |

| SIZE  |       | OAL | PRICE (RS.)<br>EACH |
|-------|-------|-----|---------------------|
| MM    | INCH  | MM  |                     |
| 12.00 |       | 215 | 4847                |
| 12.20 |       | 215 | 5111                |
|       | 31/64 | 215 | 5111                |
| 12.50 |       | 215 | 5111                |
|       | 1/2   | 215 | 5111                |
| 12.80 |       | 215 | 5111                |
| 13.00 |       | 215 | 5111                |
|       | 33/64 | 215 | 5111                |
| 13.20 |       | 215 | 5112                |
|       | 17/32 | 223 | 5603                |
| 13.50 |       | 223 | 5603                |
| 13.80 |       | 223 | 5828                |
|       | 35/64 | 223 | 5828                |
| 14.00 |       | 223 | 5829                |
| 14.25 |       | 245 | 7274                |
|       | 9/16  | 245 | 7274                |
| 14.50 |       | 245 | 7436                |
|       | 37/64 | 245 | 7436                |
| 14.75 |       | 245 | 7436                |
| 15.00 |       | 245 | 7436                |
|       | 19/32 | 251 | 7602                |
| 15.25 |       | 251 | 7602                |
|       | 39/64 | 251 | 7602                |
| 15.50 |       | 251 | 7602                |
| 15.75 |       | 251 | 7799                |
|       | 5/8   | 251 | 7799                |
| 16.00 |       | 251 | 7799                |
| 16.25 |       | 257 | 7936                |
|       | 41/64 | 257 | 7936                |
| 16.50 |       | 257 | 7936                |
|       | 21/32 | 257 | 8105                |
| 16.75 |       | 257 | 8105                |
| 17.00 |       | 257 | 8105                |
|       | 43/64 | 263 | 8799                |
| 17.25 |       | 263 | 8799                |
|       | 11/16 | 263 | 8799                |
| 17.50 |       | 263 | 8799                |
| 17.75 |       | 263 | 8822                |
|       | 45/64 | 263 | 8822                |
| 18.00 |       | 263 | 8822                |
| 18.25 |       | 269 | 8960                |
|       | 23/32 | 269 | 8960                |
| 18.50 |       | 269 | 8960                |
|       | 47/64 | 269 | 9103                |
| 18.75 |       | 269 | 9103                |
| 19.00 |       | 269 | 9103                |

# HSS TAPER SHANK TWIST DRILL (LONG SERIES)

## IS : 8305 - 1976 (TYPE 'N')

### HSN CODE - 8207

| SIZE  |        | OAL | PRICE (RS.) |
|-------|--------|-----|-------------|
| MM    | INCH   | MM  | EACH        |
|       | 3/4    | 275 | 9103        |
| 19.25 |        | 275 | 9352        |
|       | 49/64  | 275 | 9352        |
| 19.50 |        | 275 | 9352        |
| 19.75 |        | 275 | 9506        |
|       | 25/32  | 275 | 9506        |
| 20.00 |        | 275 | 9506        |
|       | 51/64  | 282 | 9664        |
| 20.25 |        | 282 | 9664        |
| 20.50 |        | 282 | 9664        |
|       | 13/16  | 282 | 9844        |
| 20.75 |        | 282 | 9844        |
| 21.00 |        | 282 | 9844        |
|       | 53/64  | 282 | 11437       |
| 21.25 |        | 289 | 11435       |
|       | 27/32  | 289 | 11437       |
| 21.50 |        | 289 | 11435       |
| 21.75 |        | 289 | 11664       |
|       | 55/64  | 289 | 11664       |
| 22.00 |        | 289 | 11664       |
|       | 7/8    | 289 | 12456       |
| 22.25 |        | 289 | 12456       |
| 22.50 |        | 296 | 12456       |
|       | 57/64  | 296 | 13058       |
| 22.75 |        | 296 | 13058       |
| 23.00 |        | 296 | 13058       |
|       | 29/32  | 296 | 15950       |
| 23.25 |        | 319 | 15950       |
|       | 59/64  | 319 | 15950       |
| 23.50 |        | 319 | 15950       |
| 23.75 |        | 327 | 15950       |
|       | 15/16  | 327 | 15950       |
| 24.00 |        | 327 | 15950       |
|       | 61/64  | 327 | 16647       |
| 24.25 |        | 327 | 16647       |
| 24.50 |        | 327 | 16647       |
|       | 31/32  | 327 | 17255       |
| 24.75 |        | 327 | 17255       |
| 25.00 |        | 327 | 17255       |
| 25.25 |        | 335 | 17255       |
|       | 1      | 335 | 17255       |
| 25.50 |        | 335 | 17255       |
| 25.75 |        | 335 | 17944       |
| 26.00 |        | 335 | 17944       |
|       | 1.1/32 | 335 | 18461       |
| 26.25 |        | 335 | 18461       |

| SIZE  |         | OAL | PRICE (RS.) |
|-------|---------|-----|-------------|
| MM    | INCH    | MM  | EACH        |
| 26.50 |         | 335 | 18461       |
| 26.75 |         | 343 | 21882       |
|       | 1.1/16  | 343 | 21882       |
| 27.00 |         | 343 | 21882       |
| 27.25 |         | 343 | 22579       |
| 27.50 |         | 343 | 22579       |
| 27.75 |         | 343 | 23273       |
|       | 1.3/32  | 343 | 23273       |
| 28.00 |         | 343 | 23995       |
|       | 1.19/32 | 436 | 48490       |
| 28.25 |         | 351 | 24021       |
| 28.50 |         | 351 | 24021       |
|       | 1.1/8   | 351 | 24021       |
| 28.75 |         | 351 | 24697       |
| 29.00 |         | 351 | 24697       |
| 29.25 |         | 351 | 25381       |
|       | 1.5/32  | 351 | 25381       |
| 29.50 |         | 351 | 25381       |
| 29.75 |         | 351 | 26100       |
| 30.00 |         | 351 | 26100       |
|       | 1.3/16  | 360 | 26100       |
| 30.25 |         | 360 | 26793       |
| 30.50 |         | 360 | 26793       |
| 30.75 |         | 360 | 26793       |
|       | 1.7/32  | 360 | 26793       |
| 31.00 |         | 360 | 26793       |
| 31.25 |         | 360 | 26988       |
| 31.50 |         | 360 | 26988       |
| 31.75 | 1.1/4   | 369 | 28030       |
| 32.00 |         | 397 | 32286       |
| 32.50 |         | 397 | 33682       |
|       | 1.9/32  | 397 | 33682       |
| 33.00 |         | 397 | 33682       |
|       | 1.5/16  | 397 | 33682       |
| 33.50 |         | 397 | 35147       |
| 34.00 |         | 406 | 35147       |
|       | 1.11/32 | 406 | 36685       |
| 34.50 |         | 406 | 36685       |
|       | 1.3/8   | 406 | 36685       |
| 35.00 |         | 406 | 36685       |
| 35.50 |         | 406 | 36685       |
|       | 1.13/32 | 416 | 40198       |
| 36.00 |         | 416 | 40198       |
| 36.50 |         | 416 | 41702       |
|       | 1.7/16  | 416 | 41702       |
| 37.00 |         | 416 | 41702       |

# HSS TAPER SHANK TWIST DRILL (LONG SERIES)

## IS : 8305 - 1976 (TYPE 'N')

### HSN CODE - 8207

| SIZE  |         | OAL | PRICE (RS.)<br>EACH |
|-------|---------|-----|---------------------|
| MM    | INCH    | MM  |                     |
|       | 1.15/32 | 416 | 45162               |
| 37.50 |         | 416 | 45162               |
| 38.00 |         | 426 | 45162               |
|       | 1.1/2   | 426 | 45162               |
| 38.50 |         | 426 | 46643               |
|       | 1.17/32 | 426 | 46643               |
| 39.00 |         | 426 | 46643               |
| 39.50 |         | 426 | 48490               |
|       | 1.9/16  | 426 | 48490               |
| 40.00 |         | 426 | 48490               |
| 40.50 |         | 436 | 48490               |
| 41.00 |         | 436 | 48490               |
|       | 1.5/8   | 436 | 48490               |
| 41.50 |         | 436 | 50971               |
| 42.00 |         | 436 | 50971               |
|       | 1.21/32 | 436 | 53927               |
| 42.50 |         | 436 | 53927               |
|       | 1.11/16 | 447 | 57933               |
| 43.00 |         | 447 | 57933               |
| 43.50 |         | 447 | 61070               |
|       | 1.23/32 | 447 | 61070               |

| SIZE  |         | OAL | PRICE (RS.)<br>EACH |
|-------|---------|-----|---------------------|
| MM    | INCH    | MM  |                     |
| 44.00 |         | 447 | 61070               |
|       | 1.3/4   | 447 | 63581               |
| 44.50 |         | 447 | 63581               |
| 45.00 |         | 447 | 63581               |
|       | 1.25/32 |     | 67036               |
| 45.50 |         | 459 | 67036               |
| 46.00 |         |     | 67036               |
|       | 1.13/16 |     | 67036               |
| 46.50 |         | 459 | 69763               |
|       | 1.27/32 |     | 69763               |
| 47.00 |         |     | 69763               |
| 47.50 |         | 459 | 73287               |
|       | 1.7/8   | 470 | 73287               |
| 48.00 |         |     | 73287               |
|       | 1.29/32 |     | 80270               |
| 48.50 |         | 470 | 80270               |
| 49.00 |         |     | 80270               |
|       | 1.15/16 | 470 | 80270               |
| 49.50 |         |     | 80270               |
| 50.00 |         |     | 84403               |

ITEMS MARKED ARE EX-STOCK ITEMS. ALL REMAINING ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF RS. 50,000/- NETT OR MOQ OF 5 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR **M35 = 40% & M42 = 80% extra.**

#### IMPORTANT NOTES :

For non listed intermediate sizes, the higher price of the nearest listed size (INCH or MM) will be applicable.

# HSS TAPER SHANK TWIST DRILLS

## EXTRA LONG IS 7822 - 2005

### HSN CODE - 8207

| SIZE  |       | OVERALL LENGTH IN MILLIMETERS |      |      |      |       |       |       |
|-------|-------|-------------------------------|------|------|------|-------|-------|-------|
| MM    | INCH  | 200                           | 225  | 250  | 275  | 300   | 315   | 325   |
|       |       | PRICE EACH RS.                |      |      |      |       |       |       |
| 3.00  | 1/8   | 2814                          | 3306 | 3663 | 4168 | 4727  | -     | 5458  |
| 3.50  |       | 2890                          | 3306 | 3765 | 4272 | 4846  | -     | 5605  |
| 4.00  | 5/32  | 2890                          | 3306 | 3765 | 4272 | 4846  | -     | 5605  |
| 4.50  |       | 2967                          | 3400 | 3765 | 4374 | 5140  | -     | 5896  |
| 5.00  | 3/16  | 2967                          | 3400 | 3765 | 4374 | 5140  | -     | 5896  |
| 5.50  | 7/32  | 2967                          | 3426 | 3949 | 4632 | 5247  | -     | 6053  |
| 6.00  |       | 2981                          | 3426 | 3987 | 4632 | 5247  | 5737  | 6053  |
| 6.50  | 1/4   | 3026                          | 3533 | 4010 | 4864 | 5458  | 5919  | 6230  |
| 7.00  |       | 3297                          | 3712 | 4167 | 4956 | 5708  | 6279  | 6545  |
| 7.50  |       | 3334                          | 3804 | 4287 | 5046 | 5860  | 6420  | 6668  |
| 8.00  | 5/16  | 3483                          | 3889 | 4458 | 5227 | 6006  | 6521  | 6853  |
| 8.50  |       | 3595                          | 4034 | 4543 | 5322 | 6119  | 6602  | 7045  |
| 9.00  |       | 3653                          | 4095 | 4653 | 5349 | 6164  | 6773  | 7104  |
| 9.50  | 3/8   | 3743                          | 4142 | 4653 | 5495 | 6321  | 6866  | 7135  |
| 10.00 |       | 3755                          | 4248 | 4791 | 5593 | 6443  | 7034  | 7331  |
| 10.50 |       | 3859                          | 4408 | 5111 | 5909 | 6773  | 7334  | 7704  |
| 11.00 |       | 3945                          | 4543 | 5163 | 6006 | 6898  | 7573  | 7902  |
| 11.50 | 7/16  | 4091                          | 4637 | 5293 | 6153 | 7067  | 7704  | 8051  |
| 12.00 |       | -                             | 4847 | 5524 | 6398 | 7331  | 8002  | 8409  |
| 12.50 | 1/2   | -                             | 5111 | 5708 | 6632 | 7558  | 8261  | 8639  |
| 13.00 |       | -                             | -    | 6773 | 7759 | 8809  | 9562  | 10058 |
| 13.50 |       | -                             | -    | 6992 | 7914 | 9046  | 9798  | 10239 |
| 14.00 |       | -                             | -    | 7225 | 8151 | 9210  | 9993  | 10403 |
| 14.50 | 9/16  | -                             | -    | 7274 | 8262 | 9349  | 10047 | 10555 |
| 15.00 |       | -                             | -    | 7436 | 8442 | 9575  | 10260 | 10814 |
| 15.50 |       | -                             | -    | 7604 | 8638 | 9665  | 10463 | 10960 |
| 16.00 | 5/8   | -                             | -    | 7799 | 8784 | 9859  | 10609 | 11156 |
| 16.50 |       | -                             | -    | 7936 | 8901 | 10047 | 10814 | 11332 |
| 17.00 |       | -                             | -    | 8105 | 9117 | 10150 | 10941 | 11486 |
| 17.50 | 11/16 | -                             | -    | -    | -    | 10403 | 11151 | 11707 |
| 18.00 |       | -                             | -    | -    | -    | 10555 | 11402 | 11891 |
| 18.50 |       | -                             | -    | -    | -    | 10724 | 11538 | 12106 |
| 19.00 | 3/4   | -                             | -    | -    | -    | 10913 | 11707 | 12286 |
| 19.50 |       | -                             | -    | -    | -    | 11050 | 11840 | 12408 |
| 20.00 |       | -                             | -    | -    | -    | 11236 | 12034 | 12643 |
| 20.50 |       | -                             | -    | -    | -    | 11445 | 12252 | 12821 |
| 21.00 | 13/16 | -                             | -    | -    | -    | 11649 | 12106 | 13040 |
| 21.50 |       | -                             | -    | -    | -    | 11891 | 12696 | 13256 |
| 22.00 |       | -                             | -    | -    | -    | 12152 | 13035 | 13634 |
| 22.50 | 7/8   | -                             | -    | -    | -    | 12473 | 13308 | 13925 |
| 23.00 |       | -                             | -    | -    | -    | 13057 | 13936 | 14444 |
| 23.50 |       | -                             | -    | -    | -    | 14343 | -     | 15950 |
| 24.00 | 15/16 | -                             | -    | -    | -    | 14343 | -     | 15950 |
| 24.50 |       | -                             | -    | -    | -    | 14794 | -     | 16647 |
| 25.00 |       | -                             | -    | -    | -    | -     | -     | 17253 |

# HSS TAPER SHANK TWIST DRILLS

## EXTRA LONG IS 7822 - 2005

### HSN CODE - 8207

| SIZE  |       | OVERALL LENGTH IN MILLIMETERS |       |       |       |       |       |       |
|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|
| MM    | INCH  | 350                           | 375   | 400   | 425   | 450   | 475   | 500   |
|       |       | PRICE EACH RS.                |       |       |       |       |       |       |
| 3.00  | 1/8   | -                             | -     | -     | -     | -     | -     | -     |
| 3.50  |       | -                             | -     | -     | -     | -     | -     | -     |
| 4.00  | 5/32  | -                             | -     | -     | -     | -     | -     | -     |
| 4.50  |       | -                             | -     | -     | -     | -     | -     | -     |
| 5.00  | 3/16  | -                             | -     | -     | -     | -     | -     | -     |
| 5.50  | 7/32  | -                             | -     | -     | -     | -     | -     | -     |
| 6.00  |       | 6367                          | 8187  | 8732  | 9897  | 10475 | 11753 | 12369 |
| 6.50  | 1/4   | 7118                          | 9149  | 9759  | 11057 | 11712 | 13132 | 13820 |
| 7.00  |       | 7514                          | 8784  | 9363  | 10619 | 11242 | 12601 | 13270 |
| 7.50  |       | 7514                          | 8784  | 9363  | 10619 | 11242 | 12601 | 13270 |
| 8.00  | 5/16  | 7225                          | 8442  | 9006  | 10211 | 10803 | 12121 | 12757 |
| 8.50  |       | 7414                          | 8662  | 9244  | 10473 | 11091 | 12440 | 13092 |
| 9.00  |       | 7818                          | 9134  | 9743  | 11041 | 11695 | 13111 | 13802 |
| 9.50  | 3/8   | 7818                          | 9138  | 9743  | 11041 | 11695 | 13111 | 13802 |
| 10.00 |       | 8207                          | 9254  | 10292 | 11184 | 11837 | 13275 | 13981 |
| 10.50 |       | 8809                          | 9897  | 11151 | 13457 | 14236 | 16581 | 17457 |
| 11.00 |       | 8970                          | 10058 | 11245 | 13406 | 14192 | 16533 | 17399 |
| 11.50 | 7/16  | 9210                          | 10321 | 11538 | 13871 | 14682 | 17104 | 17996 |
| 12.00 |       | 9506                          | 10555 | 11840 | 13454 | 14244 | 16590 | 17465 |
| 12.50 | 1/2   | 9954                          | 11236 | 12696 | 13454 | 14244 | 16590 | 17465 |
| 13.00 |       | 11445                         | 12844 | 14428 | 17851 | 19812 | 21778 | 24283 |
| 13.50 |       | 11663                         | 13165 | 14794 | 18036 | 20132 | 22651 | 25408 |
| 14.00 |       | 11891                         | 13435 | 15075 | 18036 | -     | 22651 | 25408 |
| 14.50 | 9/16  | 12121                         | 13668 | 15340 | 18036 | 20131 | 22655 | 25405 |
| 15.00 |       | 12363                         | 13858 | 15591 | 17955 | 20374 | 22880 | 25666 |
| 15.50 |       | 12550                         | 14123 | 15805 | 18084 | 20571 | 23080 | 25887 |
| 16.00 | 5/8   | 12732                         | 14343 | 16076 | 18460 | 20925 | 23363 | 26171 |
| 16.50 |       | 12967                         | 14607 | 16467 | 18738 | 21146 | 23601 | 26333 |
| 17.00 |       | 13165                         | 14802 | 16647 | 18961 | 21409 | 23828 | 26577 |
| 17.50 | 11/16 | 13418                         | 15056 | 16848 | 19187 | 21655 | 24131 | 26827 |
| 18.00 |       | 13634                         | 15318 | 17154 | 19429 | 21881 | 24380 | 27085 |
| 18.50 |       | 13754                         | 15499 | 17423 | 19675 | 22133 | 24548 | 27349 |
| 19.00 | 3/4   | 13981                         | 15739 | 17654 | 19883 | 22383 | 24789 | 27505 |
| 19.50 |       | 14232                         | 16048 | 18014 | 20131 | 22649 | 25087 | 27772 |
| 20.00 |       | 14397                         | 16264 | 18273 | 20531 | 22880 | 25361 | 28112 |
| 20.50 |       | 14638                         | 16467 | 18544 | 20777 | 23273 | 25752 | 28536 |
| 21.00 | 13/16 | 14954                         | 16807 | 18848 | 21226 | 23670 | 26223 | 28981 |
| 21.50 |       | 15215                         | 17129 | 19208 | 21541 | 24168 | 26698 | 29573 |
| 22.00 |       | 15499                         | 17423 | 19531 | 21881 | 24545 | 27125 | 30042 |
| 22.50 | 7/8   | 15764                         | 17654 | 19739 | 22258 | 24884 | 27590 | 30541 |
| 23.00 |       | 16283                         | 18039 | 20091 | 22579 | 25336 | 27998 | 30986 |
| 23.50 |       | 17481                         | 19215 | 20776 | 23346 | 26059 | 28845 | 31937 |
| 24.00 | 15/16 | 17654                         | 19465 | 21506 | 24080 | 26885 | 29629 | 32789 |
| 24.50 |       | 18459                         | 20131 | 22238 | 24872 | 27650 | 30497 | 33678 |
| 25.00 |       | 19137                         | 20925 | 22923 | 25574 | 28451 | 31343 | 34620 |



# HSS TAPER SHANK TWIST DRILLS

## EXTRA LONG IS 7822 - 2005

### HSN CODE - 8207

| SIZE           |       | OVERALL LENGTH IN MILLIMETERS |       |       |       |       |       |       |        |
|----------------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|--------|
| MM             | INCH  | 350                           | 375   | 400   | 425   | 450   | 475   | 500   | 525    |
| PRICE EACH RS. |       |                               |       |       |       |       |       |       |        |
| 25.50          |       | 19727                         | 21541 | 23606 | 26302 | 29194 | 32188 | 35428 | 46411  |
| 26.00          | 1/4   | 20531                         | 22320 | 24372 | 27085 | 30058 | 33018 | 36375 | 46465  |
| 26.50          |       | 21146                         | 22970 | 25051 | 27840 | 30824 | 33798 | 37262 | 46593  |
| 27.00          |       | 21881                         | 23777 | 25791 | 28576 | 31596 | 34680 | 38133 | 46750  |
| 27.50          | 5/16  | 22579                         | 24380 | 26430 | 29336 | 32392 | 35481 | 38991 | 46848  |
| 28.00          |       | 23273                         | 25087 | 27203 | 30058 | 33176 | 37074 | 39935 | 50056  |
| 28.50          |       | 24024                         | 25828 | 27878 | 30759 | 33980 | 37202 | 40758 | 50164  |
| 29.00          | 3/8   | 24697                         | 26536 | 28640 | 31536 | 34791 | 37988 | 41680 | 50228  |
| 29.50          |       | 25381                         | 27203 | 29316 | 32286 | 35531 | 38848 | 42593 | 50290  |
| 30.00          |       | 26100                         | 27935 | 30042 | 33018 | 36333 | 39663 | 43430 | 50427  |
| 31.00          |       | 26793                         | 28633 | 30770 | 33837 | 37276 | 40698 | 44655 | 50512  |
| 32.00          | 7/16  | 26988                         | 29194 | 32286 | 35481 | 39079 | 42593 | 46728 | 51119  |
| 33.00          |       | -                             | -     | 33678 | 37063 | 40823 | 44499 | 48771 | 52031  |
| 34.00          | 1/2   | -                             | -     | 35149 | 38636 | 42567 | 46426 | 50867 | 54222  |
| 35.00          |       | -                             | -     | 36686 | 40335 | 44321 | 48365 | 52941 | 56419  |
| 36.00          |       | -                             | -     | 38133 | 41863 | 46035 | 50228 | 55016 | 58526  |
| 37.00          |       | -                             | -     | 39585 | 43430 | 47790 | 52117 | 57018 | 60713  |
| 38.00          | 9/16  | -                             | -     | 41095 | 45160 | 49640 | 54068 | 59181 | 63004  |
| 39.00          |       | -                             | -     | 42593 | 47139 | 51217 | 55785 | 60949 | 64874  |
| 40.00          |       | -                             | -     | 44375 | 48490 | 53021 | 57671 | 62949 | 66923  |
| 41.00          | 5/8   | -                             | -     | -     | -     | -     | -     | 65033 | 68995  |
| 42.00          |       | -                             | -     | -     | -     | -     | -     | 67926 | 71697  |
| 43.00          |       | -                             | -     | -     | -     | -     | -     | 70939 | 75116  |
| 44.00          | 11/16 | -                             | -     | -     | -     | -     | -     | 73898 | 77771  |
| 45.00          |       | -                             | -     | -     | -     | -     | -     | 76910 | 83582  |
| 46.00          |       | -                             | -     | -     | -     | -     | -     | 80164 | 82071  |
| 47.00          | 3/4   | -                             | -     | -     | -     | -     | -     | 83407 | 90501  |
| 48.00          |       | -                             | -     | -     | -     | -     | -     | 86656 | 99396  |
| 49.00          |       | -                             | -     | -     | -     | -     | -     | 89843 | 100130 |
| 50.00          |       | -                             | -     | -     | -     | -     | -     | 93462 | 99846  |

| SIZE           |      | OVERALL LENGTH IN MILLIMETERS |       |       |       |       |       |       |
|----------------|------|-------------------------------|-------|-------|-------|-------|-------|-------|
| MM             | INCH | 550                           | 575   | 600   | 625   | 650   | 675   | 700   |
| PRICE EACH RS. |      |                               |       |       |       |       |       |       |
| 25.50          |      | 48620                         | 50827 | 53037 | 59035 | 66440 | 67681 | 71550 |
| 26.00          | 1/4  | 49153                         | 51383 | 53620 | 64580 | 67166 | 68126 | 72334 |
| 26.50          |      | 49492                         | 51735 | 53984 | 64718 | 67291 | 68244 | 72452 |
| 27.00          |      | 49831                         | 52082 | 54348 | 64855 | 67404 | 69995 | 72576 |
| 27.50          | 5/16 | 50170                         | 52422 | 54708 | 64989 | 67528 | 70118 | 72694 |
| 28.00          |      | 50516                         | 52778 | 55924 | 65122 | 67658 | 70245 | 72818 |
| 28.50          |      | 50858                         | 53131 | 57166 | 65261 | 67780 | 70362 | 73398 |
| 29.00          | 3/8  | 51201                         | 54288 | 59524 | 65397 | 66800 | 70972 | 75141 |
| 29.50          |      | 51565                         | 55383 | 60217 | 65537 | 68270 | 72532 | 76783 |

# HSS TAPER SHANK TWIST DRILLS

## EXTRA LONG IS 7822 - 2005 (Contd.)

### HSN CODE - 8207

| SIZE  |       | OVERALL LENGTH IN MILLIMETERS |        |        |        |        |        |        |
|-------|-------|-------------------------------|--------|--------|--------|--------|--------|--------|
| MM    | INCH  | 550                           | 575    | 600    | 625    | 650    | 675    | 700    |
|       |       | PRICE EACH RS.                |        |        |        |        |        |        |
| 30.00 |       | 55353                         | 57791  | 60286  | 70048  | 72694  | 75454  | 78196  |
| 31.00 |       | 55721                         | 58162  | 60678  | 70208  | 72830  | 75583  | 78324  |
| 32.00 | 7/16  | 56175                         | 58589  | 61089  | 70389  | 72981  | 75725  | 78461  |
| 33.00 |       | 56411                         | 58967  | 61536  | 70510  | 73332  | 76148  | 78969  |
| 34.00 | 1/2   | 58594                         | 61256  | 63921  | 73237  | 76170  | 79098  | 82022  |
| 35.00 |       | 61120                         | 67682  | 70621  | 75863  | 79110  | 83551  | 88142  |
| 36.00 |       | 61669                         | 69239  | 72687  | 77370  | 82060  | 86614  | 92722  |
| 37.00 |       | 62798                         | 72406  | 75413  | 80277  | 85139  | 93504  | 96968  |
| 38.00 | 9/16  | 65010                         | 74961  | 78163  | 83209  | 88255  | 96794  | 100379 |
| 39.00 |       | 70991                         | 81854  | 85414  | 88968  | 90970  | 100667 | 104417 |
| 40.00 |       | 72812                         | 83957  | 87603  | 89448  | 93837  | 103571 | 107074 |
| 41.00 | 5/8   | 72812                         | 83957  | 87603  | 90927  | 94317  | 103571 | 107306 |
| 42.00 |       | 73322                         | 84349  | 87857  | 92045  | 95618  | 105359 | 109580 |
| 43.00 |       | 75116                         | 88378  | 88380  | 92695  | 97743  | 105682 | 110715 |
| 44.00 | 11/16 | 77773                         | 91495  | 91492  | 93830  | 100747 | 108506 | 113149 |
| 45.00 |       | 87558                         | 96156  | 100331 | 96550  | 109595 | 124161 | 128757 |
| 46.00 |       | 88068                         | 96156  | 100357 | 98172  | 110552 | 124161 | 128757 |
| 47.00 | 3/4   | 94333                         | 107706 | 114077 | 118833 | 123584 | 134545 | 139430 |
| 48.00 |       | 97210                         | 116072 | 125289 | 130509 | 135727 | 147657 | 153131 |
| 49.00 |       | 100681                        | 117706 | 126214 | 131469 | 136728 | 148748 | 154256 |
| 50.00 |       | 104595                        | 120607 | 125852 | 131469 | 136728 | 148322 | 153822 |

| SIZE  |      | OVERALL LENGTH IN MILLIMETERS |       |       |       |       |       |       |       |
|-------|------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|
| MM    | INCH | 525                           | 550   | 575   | 600   | 625   | 650   | 675   | 700   |
|       |      | PRICE EACH RS.                |       |       |       |       |       |       |       |
| 6.00  |      | 12986                         | 13607 | 15480 | 16155 | 16828 | 17498 | 19155 | 19868 |
| 6.50  | 1/4  | 14512                         | 15200 | 17295 | 18049 | 18804 | 19553 | 21400 | 22193 |
| 7.00  |      | 13930                         | 14597 | 16606 | 17329 | 18049 | 18769 | 20547 | 21310 |
| 7.50  |      | 13930                         | 14597 | 16606 | 17326 | 18049 | 18769 | 20547 | 21310 |
| 8.00  | 5/16 | 13395                         | 14034 | 15965 | 16662 | 17360 | 18049 | 19756 | 20488 |
| 8.50  |      | 13747                         | 14398 | 16383 | 17093 | 17809 | 18521 | 20276 | 21026 |
| 9.00  |      | 14494                         | 15182 | 17273 | 18028 | 18779 | 19530 | 21376 | 22170 |
| 9.50  | 3/8  | 14494                         | 15182 | 17273 | 18028 | 18779 | 19530 | 21376 | 22170 |
| 10.00 |      | 14672                         | 15373 | 17488 | 18250 | 19007 | 19776 | 21645 | 22445 |
| 10.50 |      | 19470                         | 20397 | 21331 | 22257 | 25231 | 26234 | 28718 | 29786 |
| 11.00 |      | 19410                         | 20334 | 21264 | 22180 | 25148 | 26156 | 28624 | 29689 |
| 11.50 | 7/16 | 20081                         | 21037 | 21994 | 22950 | 26013 | 27056 | 29616 | 30713 |
| 12.00 |      | 19484                         | 20409 | 21334 | 22264 | 25239 | 26249 | 28734 | 29796 |
| 12.50 | 1/2  | 19484                         | 20409 | 21334 | 22264 | 25239 | 26249 | 28734 | 29796 |
| 13.00 |      | 27090                         | 28385 | 29671 | 30962 | 35103 | 36504 | 39955 | 41438 |
| 13.50 |      | 29158                         | 30543 | 31925 | 33320 | 37769 | 39280 | 43000 | 44592 |
| 14.00 |      | 29158                         | 30543 | 31925 | 33320 | 37769 | 39280 | 43000 | 44592 |
| 14.50 | 9/16 | 26164                         | 27410 | 30451 | 31770 | 36017 | 37454 | 41001 | 42515 |

# HSS TAPER SHANK TWIST DRILLS

## EXTRA LONG IS 7822 - 2005 (Contd.)

### HSN CODE - 8207

| SIZE  |       | OVERALL LENGTH IN MILLIMETERS |       |       |       |       |       |       |       |
|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|
| MM    | INCH  | 525                           | 550   | 575   | 600   | 625   | 650   | 675   | 700   |
|       |       | PRICE EACH RS.                |       |       |       |       |       |       |       |
| 15.00 |       | 26164                         | 27410 | 30451 | 31770 | 36017 | 37454 | 41001 | 42515 |
| 15.50 |       | 25822                         | 27047 | 30045 | 31353 | 35537 | 36959 | 40457 | 41950 |
| 16.00 | 5/8   | 26558                         | 27829 | 30905 | 32254 | 36555 | 38022 | 41620 | 43159 |
| 16.50 |       | 27684                         | 29002 | 32214 | 33612 | 38107 | 39631 | 43378 | 44988 |
| 17.00 |       | 27684                         | 29002 | 32214 | 33612 | 38107 | 39631 | 43378 | 44988 |
| 17.50 | 11/16 | 28457                         | 29821 | 33120 | 34566 | 39181 | 40748 | 44604 | 46255 |
| 18.00 |       | 29375                         | 30770 | 34179 | 35670 | 40428 | 42045 | 46027 | 47731 |
| 18.50 |       | 29375                         | 30770 | 34179 | 35670 | 40428 | 42045 | 46027 | 47731 |
| 19.00 | 3/4   | 29723                         | 31133 | 34580 | 36090 | 40911 | 42545 | 46566 | 48295 |
| 19.50 |       | 30581                         | 32039 | 35585 | 37130 | 42093 | 43774 | 47914 | 49697 |
| 20.00 |       | 32870                         | 34437 | 38252 | 39915 | 43946 | 47050 | 49768 | 53415 |
| 20.50 |       | 33129                         | 34437 | 37924 | 39571 | 44860 | 47050 | 51067 | 53734 |
| 21.00 | 13/16 | 33982                         | 35601 | 39543 | 41260 | 45298 | 48649 | 51148 | 55223 |
| 21.50 |       | 35168                         | 36844 | 39936 | 42704 | 46211 | 50346 | 52434 | 57156 |
| 22.00 |       | 35826                         | 37368 | 40357 | 43490 | 46774 | 51283 | 53275 | 58213 |
| 22.50 | 7/8   | 36218                         | 37368 | 40747 | 43727 | 48394 | 51283 | 54148 | 58213 |
| 23.00 |       | 36302                         | 37824 | 42729 | 44592 | 49349 | 51329 | 54868 | 58605 |
| 23.50 |       | 39935                         | 41838 | 43739 | 46039 | 54971 | 57167 | 59362 | 61568 |
| 24.00 | 15/16 | 40334                         | 42249 | 44167 | 47314 | 55513 | 57727 | 59956 | 62177 |
| 24.50 |       | 41688                         | 43677 | 45652 | 47582 | 57254 | 59551 | 61841 | 64129 |
| 25.00 |       | 42889                         | 44927 | 46966 | 49014 | 59035 | 61394 | 63757 | 66119 |

# HSS PRALLEL SHANK TWIST DRILLS

## EXTRA LONG TO OUR STANDARD

### HSN CODE - 8207

| SIZE  |       | OVERALL LENGTH IN MILLIMETERS |     |     |      |      |      |      |      |      |       |
|-------|-------|-------------------------------|-----|-----|------|------|------|------|------|------|-------|
| MM    | INCH  | 50                            | 100 | 125 | 150  | 175  | 200  | 225  | 250  | 300  | 350   |
|       |       | PRICE EACH RS.                |     |     |      |      |      |      |      |      |       |
| 0.5   | -     | 1185                          | -   | -   | -    | -    | -    | -    | -    | -    | -     |
| 0.60  | -     | 1108                          | -   | -   | -    | -    | -    | -    | -    | -    | -     |
| 0.80  | -     | 759                           | -   | -   | -    | -    | -    | -    | -    | -    | -     |
| 1.00  | -     | -                             | 733 | 949 | -    | -    | -    | -    | -    | -    | -     |
| 1.20  | 3/64  | -                             | 733 | 949 | -    | -    | -    | -    | -    | -    | -     |
| -     | 1/16  | -                             | -   | 906 | 1081 | -    | -    | -    | -    | -    | -     |
| -     | 5/64  | -                             | -   | 939 | 1130 | -    | -    | -    | -    | -    | -     |
| 3.00  | 1/8   | -                             | -   | -   | 1526 | 1868 | 2116 | 2515 | 2967 | 3699 | -     |
| 3.50  | -     | -                             | -   | -   | 1488 | 1733 | 2229 | 2768 | 3334 | 4252 | 5770  |
| 4.00  | 5/32  | -                             | -   | -   | 1488 | 1733 | 2229 | 2768 | 3334 | 4252 | 5862  |
| 4.50  | -     | -                             | -   | -   | 1525 | 1868 | 2229 | 2768 | 3334 | 4379 | 5862  |
| 5.00  | 3/16  | -                             | -   | -   | 1525 | 1943 | 2414 | 2965 | 3500 | 4637 | 6151  |
| 5.50  | 7/32  | -                             | -   | -   | 1667 | 2078 | 2578 | 3158 | 3726 | 4928 | 6411  |
| 6.00  | -     | -                             | -   | -   | 1667 | 2170 | 2656 | 3214 | 3857 | 5048 | 6653  |
| 6.50  | 1/4   | -                             | -   | -   | -    | -    | 2718 | 3409 | 3926 | 5288 | 6653  |
| 7.00  | -     | -                             | -   | -   | -    | -    | 3014 | -    | 4320 | 5976 | 7471  |
| 7.50  | 9/32  | -                             | -   | -   | -    | -    | 3069 | -    | 4593 | 6089 | 7471  |
| 8.00  | 5/16  | -                             | -   | -   | -    | -    | 3220 | -    | 4784 | 6239 | 7648  |
| 8.50  | 11/32 | -                             | -   | -   | -    | -    | 3324 | -    | 4880 | 6351 | 8167  |
| 9.00  | -     | -                             | -   | -   | -    | -    | 3324 | -    | 4880 | 6351 | 8167  |
| 9.50  | 3/8   | -                             | -   | -   | -    | -    | 3500 | -    | 4912 | 6492 | 8426  |
| 10.00 | -     | -                             | -   | -   | -    | -    | 3646 | -    | 5050 | 6779 | 8804  |
| 10.50 | 13/32 | -                             | -   | -   | -    | -    | 3767 | -    | 5394 | 7034 | 9259  |
| 11.00 | 7/16  | -                             | -   | -   | -    | -    | -    | -    | 5578 | 7249 | 9556  |
| 11.50 | -     | -                             | -   | -   | -    | -    | -    | -    | 5578 | 7249 | 9556  |
| 12.00 | 15/32 | -                             | -   | -   | -    | -    | -    | -    | 5856 | 7685 | 9802  |
| 12.50 | 1/2   | -                             | -   | -   | -    | -    | -    | -    | 6039 | 7936 | 10455 |

## HSS PRALLEL SHANK TWIST DRILLS EXTRA LONG TO OUR STANDARD HSN CODE - 8207

| SIZE  |       | OVERALL LENGTH IN MILIMETERS |       |       |       |       |       |       |       |
|-------|-------|------------------------------|-------|-------|-------|-------|-------|-------|-------|
| MM    | INCH  | 325                          | 375   | 400   | 425   | 450   | 475   | 500   | 525   |
| 6.00  |       | -                            | 6340  | 7217  | 7913  | 8382  | 8846  | 9314  | 10553 |
| 6.50  | 1/4   | 6481                         | 8442  | 9002  | 9880  | 10465 | 11041 | 11627 | 13171 |
| 7.00  |       | 6557                         | 8500  | 9075  | 10005 | 10598 | 11184 | 11772 | 13346 |
| 7.50  | 9/32  | 6625                         | 8560  | 9144  | 10574 | 11198 | 11822 | 12448 | 14107 |
| 8.00  | 5/16  | 6698                         | 8613  | 9210  | 10732 | 11354 | 12005 | 12654 | 14429 |
| 8.50  | 11/32 | 6768                         | 8681  | 9276  | 10895 | 11536 | 12207 | 12864 | 14820 |
| 9.00  |       | 6866                         | 8746  | 9357  | 11163 | 11822 | 12673 | 13132 | 15139 |
| 9.50  | 3/8   | 7133                         | 8831  | 9421  | 11604 | 12286 | 12969 | 13654 | 15742 |
| 10.00 |       | 8091                         | 10533 | 11232 | 13838 | 14650 | 15462 | 16276 | 18767 |
| 10.50 | 13/32 | 8784                         | 11428 | 12195 | 15012 | 15897 | 16786 | 17662 | 20364 |
| 11.00 | 7/16  | 8701                         | 11326 | 12080 | 14881 | 15757 | 16627 | 17503 | 20182 |
| 11.50 |       | 9721                         | 11824 | 12613 | 13404 | 14185 | 15744 | 16573 | 18676 |
| 12.00 | 15/32 | 9753                         | 11864 | 12651 | 13450 | 14234 | 15799 | 16627 | 18738 |
| 12.50 | 1/2   | 10345                        | 12578 | 13414 | 14247 | 15090 | 16752 | 17623 | 19864 |

| SIZE  |       | OVERALL LENGTH IN MILIMETERS |       |       |       |       |       |       |
|-------|-------|------------------------------|-------|-------|-------|-------|-------|-------|
| MM    | INCH  | 550                          | 575   | 600   | 625   | 650   | 675   | 700   |
| 6.00  |       | 11057                        | 11559 | 12066 | -     | -     | -     | -     |
| 6.50  | 1/4   | 13802                        | 14428 | 15060 | -     | -     | -     | -     |
| 7.00  |       | 13981                        | 14610 | 15248 | -     | -     | -     | -     |
| 7.50  | 9/32  | 14141                        | 15443 | 16119 | -     | -     | -     | -     |
| 8.00  | 5/16  | 15144                        | 17051 | 17797 | -     | -     | -     | -     |
| 8.50  | 11/32 | 15542                        | 18500 | 19472 | 21166 | 22321 | 23424 | 24369 |
| 9.00  |       | 15864                        | 19536 | 20394 | 21882 | 22762 | 23635 | 24515 |
| 9.50  | 3/8   | 16486                        | 20320 | 21200 | 22753 | 23658 | 24571 | 25479 |
| 10.00 |       | 19662                        | 24221 | 25276 | 27127 | 28213 | 29301 | 30381 |
| 10.50 | 13/32 | 21332                        | 26288 | 27434 | 29437 | 30616 | 31793 | 32972 |
| 11.00 | 7/16  | 21141                        | 26049 | 27187 | 29171 | 30338 | 31506 | 32675 |
| 11.50 |       | 19564                        | 20456 | 21340 | 24758 | 25749 | 29468 | 30560 |
| 12.00 | 15/32 | 19630                        | 20525 | 21412 | 24839 | 25831 | 29560 | 30656 |
| 12.50 | 1/2   | 20803                        | 21754 | 22700 | 26332 | 27383 | 31340 | 32500 |

### IMPORTANT NOTES :

- Other details will be maintained as per IS : 7823 - 1983.
- For non listed intermediate sizes, the higher price of the nearest listed size (INCH or MM) will be applicable.
- All above items will attract minimum order value of Rs. 50,000/- nett or 15 nos, per size whichever is higher.
- For **M35 = 40 %** & **M42 = 80 % extra**

# REAMERS



# HSS PARALLEL HAND REAMERS, HSS LONG FLUTED MACHINE REAMERS AND HSS PARALLEL / TAPER SHANK CHUCKING REAMERS HSN CODE - 8207

PRICE RS. EACH

| SIZE  |       | HAND REAMERS<br>IS : 5444 | LONG FLUTED<br>MACHINE REAMERS<br>IS : 5445 | CHUCKING REAMERS            |                          |
|-------|-------|---------------------------|---------------------------------------------|-----------------------------|--------------------------|
| MM    | INCH  |                           |                                             | PARALLEL SHANK<br>IS : 5446 | TAPER SHANK<br>IS : 5447 |
| 3.00  |       | 1821                      | 1821                                        | 1821                        | 1821                     |
| 3.17  | 1/8   | 1821                      | 1821                                        | 1821                        | 1821                     |
| 3.50  |       | 1821                      | 1821                                        | 1821                        | 1821                     |
| 3.97  | 5/32  | 1821                      | 1821                                        | 1821                        | 1821                     |
| 4.00  |       | 1821                      | 1821                                        | 1821                        | 1821                     |
| 4.50  |       | 1821                      | 1821                                        | 1821                        | 1821                     |
| 4.76  | 3/16  | 1821                      | 1821                                        | 1821                        | 1821                     |
| 5.00  |       | 1821                      | 1821                                        | 1821                        | 1821                     |
| 5.50  |       | 1821                      | 1821                                        | 1821                        | 1821                     |
| 5.56  | 7/32  | 1821                      | 1821                                        | 1821                        | 1821                     |
| 6.00  |       | 2115                      | 2115                                        | 2115                        | 2115                     |
| 6.35  | 1/4   | 2115                      | 2115                                        | 2115                        | 2115                     |
| 7.00  |       | 2117                      | 2117                                        | 2117                        | 2117                     |
| 7.14  | 9/32  | 2117                      | 2117                                        | 2117                        | 2117                     |
| 7.94  | 5/16  | 2405                      | 2405                                        | 2405                        | 2405                     |
| 8.00  |       | 2405                      | 2405                                        | 2405                        | 2405                     |
| 8.73  | 11/32 | 2507                      | 2507                                        | 2507                        | 2507                     |
| 9.00  |       | 2507                      | 2507                                        | 2507                        | 2507                     |
| 9.12  | 23/64 | 2507                      | 2507                                        | 2507                        | 2507                     |
| 9.52  | 3/8   | 2732                      | 2732                                        | 2732                        | 2732                     |
| 9.92  | 25/64 | 3028                      | 3028                                        | 3028                        | 3028                     |
| 10.00 |       | 3028                      | 3028                                        | 3028                        | 3028                     |
| 10.32 | 13/32 | 3028                      | 3028                                        | 3028                        | 3028                     |
| 11.00 |       | 3399                      | 3399                                        | 3399                        | 3399                     |
| 11.11 | 7/16  | 3399                      | 3399                                        | 3399                        | 3399                     |
| 11.91 | 15/32 | 3536                      | 3536                                        | 3536                        | 3536                     |
| 12.00 |       | 3536                      | 3536                                        | 3536                        | 3536                     |
| 12.70 | 1/2   | 3668                      | 3668                                        | 3668                        | 3668                     |
| 13.00 |       | 4463                      | 4463                                        | 4463                        | 4463                     |
| 13.49 | 17/32 | 4463                      | 4463                                        | 4463                        | 4463                     |
| 14.00 |       | 4463                      | 4463                                        | 4463                        | 4463                     |
| 14.29 | 9/16  | 4463                      | 4463                                        | 4463                        | 4463                     |
| 15.00 |       | 4493                      | 4493                                        | 4493                        | 4493                     |
| 15.08 | 9/32  | 4493                      | 4493                                        | 4493                        | 4493                     |
| 15.87 | 5/8   | 4493                      | 4493                                        | 4493                        | 4493                     |
| 16.00 |       | 4493                      | 4493                                        | 4493                        | 4493                     |
| 16.67 | 21/32 | 5171                      | 5171                                        | -                           | 5171                     |
| 17.00 |       | 5171                      | 5171                                        | -                           | 5171                     |
| 17.46 | 11/16 | 5171                      | 5171                                        | -                           | 5171                     |
| 18.00 |       | 5541                      | 5541                                        | -                           | 5541                     |
| 18.26 | 23/32 | 5887                      | 5887                                        | -                           | 5887                     |
| 19.00 |       | 5887                      | 5887                                        | -                           | 5887                     |
| 19.05 | 3/4   | 5887                      | 5887                                        | -                           | 5887                     |
| 20.00 |       | 6564                      | 6564                                        | -                           | 6564                     |

# HSS PARALLEL HAND REAMERS, HSS LONG FLUTED MACHINE REAMERS AND HSS PARALLEL / TAPER SHANK CHUCKING REAMERS

## HSN CODE - 8207

PRICE RS. EACH

| SIZE  |         | HAND REAMERS<br>IS : 5444 | LONG FLUTED<br>MACHINE REAMERS<br>IS : 5445 | CHUCKING REAMERS            |                          |
|-------|---------|---------------------------|---------------------------------------------|-----------------------------|--------------------------|
| MM    | INCH    |                           |                                             | PARALLEL SHANK<br>IS : 5446 | TAPER SHANK<br>IS : 5447 |
| 20.64 | 13/16   | 6684                      | 6684                                        | -                           | 6684                     |
| 21.00 |         | 7427                      | 7427                                        | -                           | 7427                     |
| 22.00 |         | 7427                      | 7427                                        | -                           | 7427                     |
| 22.22 | 7/8     | 7427                      | 7427                                        | -                           | 7427                     |
| 23.00 |         | 8671                      | 8671                                        | -                           | 8671                     |
| 23.81 | 15/16   | 9605                      | 9605                                        | -                           | 9605                     |
| 24.00 |         | 9605                      | 9605                                        | -                           | 9605                     |
| 25.00 |         | 9628                      | 9628                                        | -                           | 9628                     |
| 25.40 | 1       | 9803                      | 9803                                        | -                           | 9803                     |
| 26.00 |         | 11897                     | 11897                                       | -                           | 11897                    |
| 26.99 | 1.1/16  | 13606                     | 13606                                       | -                           | 13606                    |
| 27.00 |         | 13606                     | 13606                                       | -                           | 13606                    |
| 28.00 |         | 13606                     | 13606                                       | -                           | 13606                    |
| 28.57 | 1.1/8   | 13606                     | 13606                                       | -                           | 13606                    |
| 29.00 |         | 14434                     | 14434                                       | -                           | 14434                    |
| 30.00 |         | 15575                     | 15575                                       | -                           | 15575                    |
| 30.16 | 1.3/16  | 15575                     | 15575                                       | -                           | 15575                    |
| 31.00 |         | 17199                     | 17199                                       | -                           | 17199                    |
| 31.75 | 1.1/4   | 17199                     | 17199                                       | -                           | 17199                    |
| 32.00 |         | 17199                     | 17199                                       | -                           | 17199                    |
| 33.00 |         | 19532                     | 19532                                       | -                           | 19532                    |
| 33.34 | 1.5/16  | 19532                     | 19532                                       | -                           | 19532                    |
| 34.00 |         | 21943                     | 21943                                       | -                           | 21943                    |
| 34.92 | 1.3/8   | 24011                     | 24011                                       | -                           | 24011                    |
| 35.00 |         | 24011                     | 24011                                       | -                           | 24011                    |
| 36.00 |         | 24011                     | 24011                                       | -                           | 24011                    |
| 36.51 | 1.7/16  | 24186                     | 24186                                       | -                           | 24186                    |
| 37.00 |         | 26355                     | 26355                                       | 26355                       |                          |
| 38.00 |         | 26355                     | 26355                                       | 26355                       |                          |
| 38.10 | 1.1/2   | 26355                     | 26355                                       | 26355                       |                          |
| 39.00 |         | 29125                     | 29125                                       | 29125                       |                          |
| 39.69 | 1.9/16  | 31835                     | 31835                                       | 31835                       |                          |
| 40.00 |         | 31835                     | 31835                                       | 31835                       |                          |
| 41.00 |         | 32105                     | 32105                                       | 32105                       |                          |
| 41.27 | 1.5/8   | 37837                     | 37837                                       | 37837                       |                          |
| 42.00 |         | 37837                     | 37837                                       | 37837                       |                          |
| 42.86 | 1.11/16 | 37837                     | 37837                                       | 37837                       |                          |
| 43.00 |         | 37837                     | 37837                                       | 37837                       |                          |
| 44.00 |         | 37837                     | 37837                                       | 37837                       |                          |
| 44.45 | 1.3/4   | 37837                     | 37837                                       | 37837                       |                          |
| 45.00 |         | 44342                     | 44342                                       | 44342                       |                          |
| 46.00 |         | 44342                     | 44342                                       | 44342                       |                          |
| 47.00 |         | 47877                     | 47877                                       | 47877                       |                          |
| 47.62 | 1.7/8   | 51420                     | 51420                                       | 51420                       |                          |



# HSS PARALLEL HAND REAMERS, HSS LONG FLUTED MACHINE REAMERS AND HSS PARALLEL / TAPER SHANK CHUCKING REAMERS HSN CODE - 8207

PRICE RS. EACH

| SIZE  |         | HAND REAMERS<br>IS : 5444 | LONG FLUTED<br>MACHINE REAMERS<br>IS : 5445 | CHUCKING REAMERS            |                          |
|-------|---------|---------------------------|---------------------------------------------|-----------------------------|--------------------------|
| MM    | INCH    |                           |                                             | PARALLEL SHANK<br>IS : 5446 | TAPER SHANK<br>IS : 5447 |
| 48.00 |         | 51420                     | 51420                                       | 51420                       |                          |
| 49.00 |         | 51420                     | 51420                                       | 51420                       |                          |
| 49.21 | 1.15/16 | 51420                     | 51420                                       | 51420                       |                          |
| 50.00 |         | 51420                     | 51420                                       | 51420                       |                          |
| 50.80 | 2       | 51420                     | 51420                                       | 51420                       |                          |
| 51.00 |         | 51420                     | 51420                                       | 51420                       |                          |
| 52.00 |         | 61291                     | 61291                                       | -                           |                          |
| 52.39 | 2.1/16  | 61291                     | 61291                                       | -                           |                          |
| 53.00 |         | 61291                     | 61291                                       | -                           |                          |
| 53.97 | 2.1/8   | 61291                     | 61291                                       | -                           |                          |
| 54.00 |         | 61291                     | 61291                                       | -                           |                          |
| 55.00 |         | 71169                     | 71169                                       | -                           |                          |
| 55.56 | 2.3/16  | 71169                     | 71169                                       | -                           |                          |
| 56.00 |         | 71169                     | 71169                                       | -                           |                          |
| 57.00 |         | 71169                     | 71169                                       | -                           |                          |
| 57.15 | 2.1/4   | 71169                     | 71169                                       | -                           |                          |
| 58.00 |         | 76148                     | 76148                                       | -                           |                          |
| 58.74 | 2.5/16  | 76148                     | 76148                                       | -                           |                          |
| 59.00 |         | 76148                     | 76148                                       | -                           |                          |
| 60.00 |         | 90345                     | 90345                                       | -                           |                          |
| 60.32 | 2.3/8   | 90345                     | 90345                                       | -                           |                          |
| 61.00 |         | 90345                     | 90345                                       | -                           |                          |
| 61.91 | 2.7/16  | 90345                     | 90345                                       | -                           |                          |
| 62.00 |         | 90345                     | 90345                                       | -                           |                          |
| 63.00 |         | 90345                     | 90345                                       | -                           |                          |
| 63.50 | 2.1/2   | 90345                     | 90345                                       | -                           |                          |
| 64.00 |         | 90345                     | 90345                                       | -                           |                          |
| 65.00 |         | -                         | 109082                                      | -                           |                          |
| 65.09 | 2.9/16  | 109082                    | 109082                                      | -                           |                          |
| 66.00 |         | -                         | 112762                                      | -                           |                          |
| 66.67 | 2.5/8   | 112762                    | 112762                                      | -                           |                          |
| 67.00 |         | 112762                    | 112762                                      | -                           |                          |
| 68.00 |         | -                         | 120885                                      | -                           |                          |
| 68.26 | 2.11/16 | 120885                    | 120885                                      | -                           |                          |
| 69.00 |         | -                         | 120885                                      | -                           |                          |
| 69.85 | 2.3/4   | 120885                    | 120885                                      | -                           |                          |
| 70.00 |         | -                         | 120885                                      | -                           |                          |
| 71.00 |         | 120885                    | 120885                                      | -                           |                          |
| 71.44 | 2.13/16 | 127010                    | 127010                                      | -                           |                          |
| 72.00 |         | -                         | 147676                                      | -                           |                          |
| 73.00 |         | -                         | 147676                                      | -                           |                          |
| 73.02 | 2.7/8   | 147676                    | 147676                                      | -                           |                          |
| 74.00 |         | -                         | 147676                                      | -                           |                          |
| 74.61 | 2.15/16 | 147676                    | 147676                                      | -                           |                          |

# HSS PARALLEL HAND REAMERS, HSS LONG FLUTED MACHINE REAMERS AND HSS PARALLEL / TAPER SHANK CHUCKING REAMERS

## HSN CODE - 8207

PRICE RS. EACH

| SIZE  |      | HAND REAMERS<br>IS : 5444 | LONG FLUTED<br>MACHINE REAMERS<br>IS : 5445 | CHUCKING REAMERS            |                          |
|-------|------|---------------------------|---------------------------------------------|-----------------------------|--------------------------|
| MM    | INCH |                           |                                             | PARALLEL SHANK<br>IS : 5446 | TAPER SHANK<br>IS : 5447 |
| 75.00 |      | -                         | 155072                                      | -                           |                          |
| 76.00 |      | -                         | 155072                                      | -                           |                          |
| 76.20 | 3    | 155072                    | 155072                                      | -                           |                          |

ITEMS MARKED ★ : **(ONLY IN RH)** ARE EX-STOCK ITEMS. ALL REMAINING ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000/- NETT OR MOQ OF 5 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR **M35 = 40% & M42 = 80% extra.**

### IMPORTANT NOTES :

For non listed intermediate sizes, the higher price of the nearest listed size (INCH or MM) will be applicable.

# HSS TAPER SHANK EXTRA LONG MACHINE REAMERS HSN CODE - 8207

| SIZE           | PRICE (RS.) EACH |
|----------------|------------------|
| 8 x 125 x 200  | 3479             |
| 8 x 175 x 250  | 3720             |
| 8 x 200 x 300  | 4079             |
| 9 x 125 x 200  | 3396             |
| 9 x 175 x 250  | 3910             |
| 9 x 225 x 300  | 5116             |
| 10 x 125 x 200 | 4371             |
| 10 x 175 x 250 | 4662             |
| 10 x 200 x 300 | 4949             |
| 10 x 300 x 400 | 5290             |
| 12 x 160 x 250 | 5179             |
| 12 x 200 x 300 | 5459             |
| 13 x 200 x 300 | 6243             |
| 14 x 160 x 250 | 5819             |
| 14 x 200 x 300 | 6832             |
| 15 x 200 x 300 | 6938             |
| 15 x 300 x 400 | 7764             |
| 16 x 200 x 300 | 6938             |
| 16 x 300 x 400 | 7764             |
| 17 x 200 x 300 | 7830             |
| 18 x 200 x 300 | 8606             |
| 19 x 200 x 300 | 9141             |
| 20 x 200 x 300 | 10145            |
| 20 x 300 x 400 | 11460            |
| 22 x 200 x 300 | 11519            |
| 25 x 200 x 325 | 14956            |
| 25 x 275 x 400 | 16797            |
| 26 x 275 x 400 | 20769            |
| 28 x 275 x 400 | 23854            |

| SIZE              | PRICE (RS.) EACH |
|-------------------|------------------|
| 5/16 x 125 x 200  | 3479             |
| 5/16 x 175 x 250  | 3720             |
| 5/16 x 200 x 300  | 4079             |
| 3/8 x 125 x 200   | 4371             |
| 3/8 x 175 x 250   | 4662             |
| 3/8 x 200 x 300   | 4949             |
| 7/16 x 160 x 250  | 5179             |
| 7/16 x 200 x 300  | 5459             |
| 1/2 x 175 x 200   | 5844             |
| 1/2 x 200 x 300   | 5904             |
| 9/16 x 200 x 300  | 6938             |
| 9/16 x 250 x 350  | 7353             |
| 5/8 x 200 x 300   | 6938             |
| 5/8 x 250 x 350   | 7424             |
| 5/8 x 300 x 400   | 7764             |
| 11/16 x 200 x 300 | 8613             |
| 3/4 x 200 x 300   | 9141             |
| 3/4 x 300 x 400   | 9730             |
| 13/16 x 200 x 300 | 11519            |
| 7/8 x 200 x 300   | 13646            |
| 7/8 x 300 x 400   | 13940            |
| 1 x 200 x 325     | 14956            |
| 1 x 275 x 400     | 16797            |
| 1.1/8 x 275 x 400 | 25520            |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 / - NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.  
FOR **M35 = 40% & M42 = 80% extra.**

## IMPORTANT NOTES :

For non listed intermediate sizes, the higher price of the nearest listed size (INCH or MM) will be applicable.

## HSS TAPER PIN REAMERS (TAPER 1:50)

### HAND - IS : 5881 - 1984, MACHINE IS : 5918 - 1984

### HSN CODE - 8207

| NOMINAL DIA MM | PRICE (RS.) EACH | NOMINAL DIA MM | PRICE (RS.) EACH |
|----------------|------------------|----------------|------------------|
| 3              | 3906             | 16             | 8848             |
| 4              | 3906             | 20             | 13763            |
| 5              | 3906             | 25             | 14606            |
| 6              | 3906             | 30             | 19652            |
| 8              | 5290             | 32             | 21592            |
| 10             | 5866             | 40             | 38611            |
| 12             | 7082             | 50             | 66918            |
| 14             | 7951             |                |                  |

## HSS TAPER REAMERS (TAPER 1:48)

### HAND / MACHINE - BS : 122 : 12 : 1964 / HSN CODE - 8207

| NOMINAL DIA INCH | PRICE (RS.) EACH | NOMINAL DIA INCH | PRICE (RS.) EACH |
|------------------|------------------|------------------|------------------|
| 3/16             | 3640             | 13/32            | 5693             |
| 7/32             | 3640             | 7/16             | 5861             |
| 1/4              | 3640             | 1/2              | 6626             |
| 9/32             | 3983             | 9/16             | 7659             |
| 5/16             | 4410             | 5/8              | 8523             |
| 11/32            | 4978             | 3/4              | 10740            |
| 3/8              | 5029             | 7/8              | 13253            |

ALL REMAINING ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 35,000/- NETT MOQ OF 15 NOS. PER SIZE WHICHEVER IS HIGHER.

For **M35 = 40% & M42 = 80% extra**

R.H. Cutting with straight flutes will be supplied as standard for hand taper pin Reamer.

R.H. Cutting with L.H. helical flutes will be supplied as standard for Machine Taper Pin Reamer.

## HSS MACHINE JIG REAMERS - IS : 11002 - 1989 / HSN CODE - 8207

| SIZE MM | PRICE (RS.) EACH | SIZE MM | PRICE (RS.) EACH |
|---------|------------------|---------|------------------|
| 10      | 3887             | 33      | 23744            |
| 11      | 3887             | 35      | 27344            |
| 12      | 4453             | 36      | 29334            |
| 13      | 5292             | 39      | 31364            |
| 14      | 5292             | 40      | 36054            |
| 15      | 5820             | 41      | 36054            |
| 16      | 5820             | 43      | 40280            |
| 17      | 6718             | 44      | 44259            |
| 19      | 7526             | 45      | 48061            |
| 20      | 8207             | 46      | 48061            |
| 22      | 9468             | 47      | 52397            |
| 23      | 9468             | 48      | 56985            |
| 24      | 12193            | 49      | 56985            |
| 25      | 13212            | 50      | 63353            |
| 27      | 14768            | -       | -                |
| 28      | 16049            | -       | -                |
| 30      | 17465            | -       | -                |
| 32      | 20220            | -       | -                |

ALL REMAINING ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 35,000/- NETT OR 3 NOS. PER SIZE WHICHEVER IS HIGHER.

For **M35 = 40% & M42 = 80% extra**

#### IMPORTANT NOTES :

For non listed intermediate sizes, the higher price of the nearest listed size (INCH or MM) will be applicable.

**HSS SOCKET REAMERS :**  
**PARALLEL SHANK - IS : 5882 / TAPER SHANK - IS 5807.**  
**TYPE 'A' (ROUGHING), TYPE 'B' (PRE - FINISHING),**  
**TYPE 'C' (FINISHING) / HSN CODE - 8207**

| MORSE TAPER NO | PARALLEL SHANK PRICE (RS.) EACH | TAPER SHANK PRICE (RS.) EACH |
|----------------|---------------------------------|------------------------------|
| 0              | 4177                            | 4959                         |
| 1              | 4598                            | 5229                         |
| 2              | 6403                            | 7763                         |
| 3              | 9302                            | 11637                        |
| 4              | 15390                           | 18331                        |
| 5              | 31364                           | 33691                        |
| 6              | 55346                           | 77170                        |

★ Type required to be specified in order.

**HSS MACHINE BRIDGE REAMERS - IS 5919**  
**HSN CODE - 8207**

| SIZE MM | PRICE (RS.) EACH | SIZE MM | PRICE (RS.) EACH | SIZE MM | PRICE (RS.) EACH |
|---------|------------------|---------|------------------|---------|------------------|
| 11      | 4620             | 20      | 10403            | 31      | 19889            |
| 11.5    | 5399             | 21      | 11558            | 32      | 19889            |
| 12      | 5399             | 21.5    | 11558            | 33      | 21399            |
| 13      | 5887             | 22      | 11558            | 35      | 22955            |
| 13.5    | 5887             | 23      | 12607            | 36      | 24499            |
| 14      | 5887             | 23.5    | 12607            | 37      | 26115            |
| 15      | 6832             | 25.0    | 13711            | 40      | 41523            |
| 17      | 8429             | 27      | 15455            | 43      | 49145            |
| 17.5    | 8429             | 28      | 16726            | 49      | 66842            |
| 19      | 9468             | 30      | 18057            | -       | -                |

**HSS MACHINE BRIDGE REAMERS BS : 122 (PART 2) : 1964**  
**HSN CODE - 8207**

| SIZE INCH | PRICE (RS.) EACH | SIZE INCH | PRICE (RS.) EACH | SIZE INCH | PRICE (RS.) EACH |
|-----------|------------------|-----------|------------------|-----------|------------------|
| 7/16      | 4620             | 13/16     | 10056            | 1.3/16    | 17335            |
| 1/2       | 4996             | 7/8       | 11558            | 1.1/4     | 19337            |
| 9/16      | 5887             | 15/16     | 12607            | 1.5/16    | 20469            |
| 5/8       | 6832             | 1         | 13711            | 1.3/8     | 21943            |
| 11/16     | 8429             | 1.1/16    | 14919            | 1.7/16    | 23454            |
| 3/4       | 9468             | 1.1/8     | 16029            | 1.1/2     | 26115            |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 35,000/-  
NETT OR 3 NOS. PER SIZE WHICHEVER IS HIGHER.

For **M35 = 40% & M42 = 80% extra**

**IMPORTANT NOTES :**

For non listed intermediate sizes, the higher price of the nearest listed size  
(INCH or MM) will be applicable.

## HSS SHELL REAMERS IS : 5926 : 1970 (WITH 1:30 TAPER HOLE) HSN CODE - 8207

| SIZE MM | PRICE (RS.) EACH | SIZE MM | PRICE (RS.) EACH | SIZE MM | PRICE (RS.) EACH |
|---------|------------------|---------|------------------|---------|------------------|
| 21      | 5994             | 42      | 11324            | 66      | 25641            |
| 22      | 5994             | 43      | 11324            | 67      | 28131            |
| 23      | 5994             | 44      | 11487            | 68      | 28131            |
| 24      | 5994             | 45      | 11982            | 70      | 28131            |
| 25      | 5994             | 46      | 11982            | 72      | 31283            |
| 26      | 6353             | 47      | 12550            | 73      | 31283            |
| 27      | 6353             | 49      | 12889            | 76      | 34328            |
| 28      | 6814             | 50      | 13415            | 79      | 38512            |
| 30      | 7173             | 52      | 14857            | 80      | 42214            |
| 32      | 7511             | 54      | 14857            | 82      | 42214            |
| 33      | 7886             | 56      | 16303            | 85      | 45532            |
| 35      | 8297             | 57      | 16303            | 89      | 48771            |
| 36      | 8643             | 58      | 18277            | 91      | 57686            |
| 38      | 9101             | 60      | 18277            | 92      | 57686            |
| 39      | 9555             | 62      | 22084            | 95      | 60300            |
| 40      | 9555             | 63      | 22084            | 98      | 69615            |
| 41      | 9979             | 65      | 25641            | 99      | 77062            |
|         |                  |         |                  | 100     | 77062            |

## HSS COUNTERSINKS WITH TAPER SHANK BS : 122 (PART 2) : 1964 (INCLUDED ANGLE 60 OR 90) / HSN CODE - 8207

| BODY DIA INCH | PRICE (RS.) EACH | BODY DIA INCH | PRICE (RS.) EACH | BODY DIA INCH | PRICE (RS.) EACH |
|---------------|------------------|---------------|------------------|---------------|------------------|
| 1/2           | 3195             | 1.1/8         | 9870             | 2             | 29660            |
| 5/8           | 4243             | 1.1/4         | 12421            | 2.1/4         | 33625            |
| 3/4           | 4806             | 1.3/8         | 14523            | 2.1/2         | 41730            |
| 7/8           | 6069             | 1.1/2         | 17212            | 2.3/4         | 49254            |
| 1             | 7637             | 1.3/4         | 25452            | 3             | 59567            |

## HSS TAPER SHANK COUNTERBORES IS : 5710 - 1988 / HSN CODE - 8207

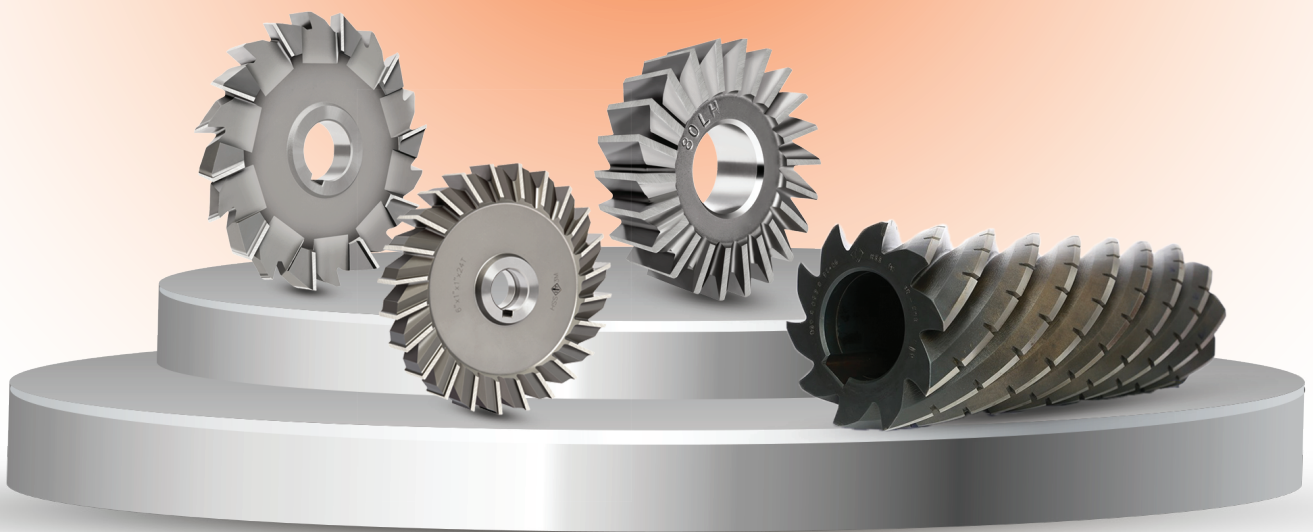
| CUTTER DIA MM | PRICE (RS.) EACH | CUTTER DIA MM | PRICE (RS.) EACH |
|---------------|------------------|---------------|------------------|
| 13.5          | 4824             | 37            | 25942            |
| 14.5          | 5422             | 39            | 28107            |
| 16.5          | 6227             | 41            | 30479            |
| 17.5          | 6698             | 43            | 31513            |
| 19.5          | 7909             | 46            | 35875            |
| 20.0          | 8288             | 48            | 38947            |
| 22.0          | 9489             | 51            | 43961            |
| 23.0          | 10890            | 53            | 47761            |
| 25.0          | 13185            | 55            | 52575            |
| 26.0          | 14610            | 57            | 57761            |
| 28.0          | 16317            | 59            | 64005            |
| 29.0          | 17199            | 61            | 71311            |
| 31.0          | 18750            |               |                  |
| 33.0          | 21483            |               |                  |
| 34            | 22905            |               |                  |
| 36            | 24895            |               |                  |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.  
For M35 = 40% & M42 = 80% extra

#### IMPORTANT NOTES :

- Counterbores will be supplied without pilots and grub screws. Pilot holes and grub screw holes, will however, be provided.
- For non listed intermediate sizes, the higher price of the nearest listed size (INCH or MM) will be applicable.

# MILLING CUTTERS



## HSS TAPER SHANK COUNTER BORES

### BS : 122 (PART 2) : 1964

### HSN CODE - 8207

| COUNTERBORE DIA INCH | PRICE (RS.) EACH | COUNTERBORE DIA INCH | PRICE (RS.) EACH |
|----------------------|------------------|----------------------|------------------|
| 1/2                  | 4257             | 1.1/8                | 16317            |
| 9/16                 | 5292             | 1.1/4                | 18750            |
| 5/8                  | 5908             | 1.3/8                | 22905            |
| 11/16                | 6698             | 1.1/2                | 26607            |
| 3/4                  | 7526             | 1.5/8                | 30496            |
| 13/16                | 8343             | 1.3/4                | 34552            |
| 7/8                  | 9489             | 1.7/8                | 38381            |
| 15/16                | 11150            | 2                    | 42377            |
| 1                    | 13185            | -                    | -                |

#### IMPORTANT NOTES :

- Counterbores upto and including 1/2" dia. are supplied without integrated pilots, the diameter of which should be specified at the time of order.
- Counterbores above 1/2" dia. Will be provided with pilot holes and grub screw holes. The pilots & grub screws will not be supplied by us.
- For non listed intermediate sizes, the higher price of the nearest listed size (INCH or MM) will be applicable.

## HSS CYLINDRICAL CUTTERS IS : 6309

### HSN CODE - 8207

| DIA MM | BORE MM | WIDTH MM | PRICE (RS.) EACH | DIA MM | BORE MM | WIDTH MM | PRICE (RS.) EACH |
|--------|---------|----------|------------------|--------|---------|----------|------------------|
| 40     | 16      | 20       | 4372             | 80     | 32      | 80       | 21208            |
| 40     | 16      | 32       | 5467             | 80     | 32      | 100      | 24416            |
| 40     | 16      | 50       | 6802             | 100    | 40      | 40       | 17626            |
| 40     | 16      | 70       | 9121             | 100    | 40      | 70       | 26695            |
| 50     | 22      | 25       | 5602             | 100    | 40      | 90       | 33074            |
| 50     | 22      | 40       | 6633             | 100    | 40      | 110      | 46465            |
| 50     | 22      | 63       | 8710             | 100    | 40      | 125      | 56600            |
| 50     | 22      | 80       | 11275            | 125    | 50      | 50       | 39786            |
| 63     | 27      | 32       | 7980             | 125    | 50      | 80       | 56436            |
| 63     | 27      | 50       | 10058            | 125    | 50      | 110      | 75951            |
| 63     | 27      | 70       | 13243            | 125    | 50      | 125      | 84965            |
| 63     | 27      | 90       | 15544            | 125    | 50      | 140      | 94505            |
| 80     | 32      | 36       | 11275            | 160    | 60      | 125      | 141374           |
| 80     | 32      | 63       | 17922            | -      | -       | -        | -                |

## HSS HELICAL CYLINDRICAL CUTTERS

### BS : 122 (PART 1) : 1953

### HSN CODE - 8207

PRICE RS. EACH

| LENGTH OF CUTTER INCH | DIAMETER OF CUTTER |       |        |
|-----------------------|--------------------|-------|--------|
|                       | 3"                 | 4"    | 5"     |
| 2                     | 19895              | 29211 | 48718  |
| 3                     | 25185              | 39075 | 65628  |
| 4                     | 33866              | 49763 | 82591  |
| 5                     | 48928              | 71988 | 99291  |
| 6                     | 62043              | 84710 | 116411 |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.  
FOR M35 = 40% & M42 = 80% extra



## HSS HIGH POWER CYLINDRICAL CUTTERS

### BS : 122 (PART 1) : 1953

### HSN CODE - 8207

PRICE RS. EACH

| LENGTH OF CUTTER<br>INCH | DIAMETER OF CUTTER |       |        |       |        |
|--------------------------|--------------------|-------|--------|-------|--------|
|                          | 2.1/2"             | 3"    | 3.1/2" | 4"    | 4.1/2" |
| 1                        | 7128               | 8991  | 9963   | 12596 | 18164  |
| 2                        | 10556              | 13838 | 16615  | 22055 | 30502  |
| 3                        | 14045              | 18793 | 23197  | 31486 | 43085  |
| 4                        | 17497              | 23887 | 29863  | 40128 | 56436  |
| 5                        | 21098              | 33592 | 43920  | 55715 | 69481  |
| 6                        | 24691              | 49914 | 52260  | 65134 | 82573  |
| 7                        | 28169              | 49914 | 60705  | 77653 | 96687  |
| 8                        | 32985              | 57015 | 69153  | 88452 | 108952 |

#### IMPORTANT NOTES :

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.  
 FOR **M35 = 40% & M42 = 80% extra**

## HSS SIDE & FACE CUTTERS

### IS : 6308 - 1982 / HSN CODE - 8207

| DIA MM | BORE MM | WIDTH MM | PRICE RS. EACH             |                             |
|--------|---------|----------|----------------------------|-----------------------------|
|        |         |          | STRAIGHT TEETH<br>TYPE 'B' | STAGGERED TEETH<br>TYPE 'A' |
| 50     | 16      | 5        | 5126                       | 6377                        |
|        |         | 6        | 5326                       | 6633                        |
|        |         | 8        | 5467                       | 6816                        |
|        |         | 10       | 5807                       | 7256                        |
| 63     | 22      | 6        | 6280                       | 8117                        |
|        |         | 8        | 6633                       | 8854                        |
|        |         | 10       | 7218                       | 9121                        |
|        |         | 12       | 7528                       | 9829                        |
|        |         | 14       | 7755                       | 10544                       |
|        |         | 16       | 8134                       | 11374                       |
| 80     | 27      | 18       | 8676                       | 11711                       |
|        |         | 6        | 6875                       | 8632                        |
|        |         | 8        | 7621                       | 9390                        |
|        |         | 10       | 8134                       | 10746                       |
|        |         | 12       | 8676                       | 11374                       |
|        |         | 14       | 9225                       | 12202                       |
|        |         | 16       | 9652                       | 12450                       |
|        |         | 18       | 10746                      | 14100                       |
| 100    | ★★      | 20       | 11211                      | 14789                       |
|        |         | 6        | 9829                       | 11919                       |
| 100    | 32      | 8        | 10508                      | 12757                       |
|        |         | 10       | 11616                      | 13671                       |
|        |         | 12       | 12450                      | 15196                       |
|        |         | 14       | 13190                      | 15544                       |
| 100    | 32      | 16       | 14100                      | 16770                       |

# HSS SIDE & FACE CUTTERS

## IS : 6308 - 1982 / HSN CODE - 8207

| DIA MM | BORE MM | WIDTH MM | PRICE RS. EACH             |                             |
|--------|---------|----------|----------------------------|-----------------------------|
|        |         |          | STRAIGHT TEETH<br>TYPE 'B' | STAGGERED TEETH<br>TYPE 'A' |
| 100    | 32      | 18       | 15038                      | 17240                       |
|        |         | 20       | 16194                      | 18204                       |
|        |         | 22       | 16951                      | 20816                       |
|        |         | 25       | 18420                      | 22697                       |
| 125    | ★ ★     | 6        | 13778                      | 17096                       |
|        |         | 8        | 14789                      | 18418                       |
|        |         | 10       | 15846                      | 21434                       |
| 125    | 32      | 12       | 18058                      | 22255                       |
|        |         | 14       | 19560                      | 23773                       |
|        |         | 16       | 20392                      | 24691                       |
|        |         | 18       | 21867                      | 28161                       |
|        |         | 20       | 22643                      | 30380                       |
|        |         | 22       | 25006                      | 33015                       |
|        |         | 25       | 27344                      | 34331                       |
|        |         | 28       | 30791                      | 39304                       |
| 150    | ★ ★     | 6        | 16770                      | 21564                       |
|        |         | 8        | 18243                      | 23330                       |
|        |         | 10       | 19792                      | 25140                       |
|        |         | 12       | 22923                      | 28955                       |
|        |         | 14       | 24514                      | 30791                       |
|        |         | 16       | 26124                      | 32656                       |
|        |         | 18       | 29333                      | 36223                       |
|        |         | 20       | 29333                      | 36223                       |
|        |         | 22       | 32566                      | 40135                       |
|        |         | 25       | 35702                      | 44203                       |
|        |         | 28       | 38681                      | 48468                       |
|        |         | 32       | 41573                      | 52879                       |
| 160    | ★ ★     | 6        | 22818                      | 25485                       |
|        |         | 8        | 24256                      | 27095                       |
|        |         | 10       | 25694                      | 28698                       |
|        |         | 12       | 27102                      | 30264                       |
| 160    | 40      | 14       | 28530                      | 31884                       |
|        |         | 16       | 30211                      | 33480                       |
|        |         | 18       | 32351                      | 37042                       |
|        |         | 20       | 33968                      | 37042                       |
|        |         | 22       | 35972                      | 41062                       |
|        |         | 25       | 38825                      | 47611                       |
|        |         | 28       | 41573                      | 49580                       |
|        |         | 32       | 45254                      | 54055                       |

# HSS SIDE & FACE CUTTERS

## IS : 6308 - 1982 / HSN CODE - 8207

| DIA MM | BORE MM | WIDTH MM | PRICE RS. EACH             |                             |
|--------|---------|----------|----------------------------|-----------------------------|
|        |         |          | STRAIGHT TEETH<br>TYPE 'B' | STAGGERED TEETH<br>TYPE 'A' |
| 200    | ★ ★     | 6        | 29863                      | 33124                       |
|        |         | 8        | 32224                      | 35672                       |
|        |         | 10       | 34875                      | 39202                       |
|        |         | 12       | 40310                      | 44321                       |
|        |         | 14       | 42935                      | 47423                       |

|     |    |    |       |       |
|-----|----|----|-------|-------|
| 200 | 40 | 16 | 45590 | 50579 |
|     |    | 18 | 50875 | 57350 |
|     |    | 20 | 51430 | 59097 |
|     |    | 22 | 56160 | 64285 |
|     |    | 25 | 61446 | 70593 |
|     |    | 28 | 64692 | 74974 |
|     |    | 32 | 71906 | 84033 |

|     |     |    |       |        |
|-----|-----|----|-------|--------|
| 225 | ★ ★ | 8  | 41991 | 45926  |
|     |     | 10 | 45707 | 49472  |
|     |     | 12 | 53213 | 58070  |
|     |     | 14 | 57044 | 62785  |
|     |     | 16 | 60939 | 67449  |
|     |     | 18 | 68747 | 78170  |
|     |     | 20 | 68747 | 78170  |
|     |     | 22 | 75894 | 86558  |
|     |     | 25 | 83112 | 94669  |
|     |     | 28 | 90495 | 102324 |
|     |     | 32 | 97863 | 109937 |

|     |     |    |        |        |
|-----|-----|----|--------|--------|
| 250 | ★ ★ | 10 | 52850  | 56780  |
|     |     | 12 | 61819  | 67698  |
|     |     | 14 | 66927  | 72948  |
|     |     | 16 | 71859  | 78170  |
|     |     | 18 | 81223  | 90428  |
|     |     | 20 | 81223  | 90428  |
|     |     | 22 | 89886  | 100182 |
|     |     | 25 | 99102  | 109124 |
|     |     | 28 | 107729 | 120743 |
|     |     | 32 | 116264 | 132408 |

### IMPORTANT NOTES :

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 3 NOS. PER SIZE WHICHEVER IS HIGHER.  
FOR **M35 = 40% & M42 = 80% extra**

★ ★ BORE REQUIRED FOR THESE SIZES TO BE SPECIFIED WHILE ORDERING.

## HSS STRAIGHT TEETH SIDE & FACE CUTTERS

### BS : 122 (PART 1) : 1953

### HSN CODE - 8207

| WIDTH OF CUTTER<br>EDGE & BOSS INCH | DIAMETER OF CUTTER |       |        |       |       |
|-------------------------------------|--------------------|-------|--------|-------|-------|
|                                     | PRICE (RS.) EACH   |       |        |       |       |
|                                     | 2.1/2"             | 3"    | 3.1/2" | 4"    | 5"    |
| 1/4                                 | 6280               | 6960  | 8271   | 9803  | 13778 |
| 5/16                                | 6578               | 7313  | 8739   | 10508 | 14789 |
| 3/8                                 | 6875               | 7756  | 9295   | 11211 | 15846 |
| 7/16                                | 7187               | 8117  | 9845   | 11919 | 16951 |
| 1/2                                 | 7495               | 8545  | 10326  | 12450 | 18058 |
| 5/8                                 | 8035               | 9370  | 11446  | 14100 | 20392 |
| 3/4                                 | 8584               | 10058 | 12537  | 15544 | 22643 |
| 7/8                                 | 9159               | 11195 | 13516  | 16951 | 25006 |
| 1                                   | 9803               | 12095 | 14870  | 18418 | 27344 |
| 1.1/4                               | 11019              | 13357 | 16820  | 20936 | 31581 |
| 1.1/2                               | 12276              | 15264 | 18952  | 23058 | 35928 |

## HSS STRAIGHT TEETH SIDE & FACE CUTTERS BS : 122

### (PART 1) : 1953 / HSN CODE - 8207

| WIDTH OF CUTTER<br>EDGE & BOSS INCH | DIAMETER OF CUTTER |       |       |        |        |
|-------------------------------------|--------------------|-------|-------|--------|--------|
|                                     | PRICE (RS.) EACH   |       |       |        |        |
|                                     | 6"                 | 7"    | 8"    | 9"     | 10"    |
| 1/4                                 | 16770              | 24869 | 29863 | 38467  | -      |
| 5/16                                | 18243              | 26910 | 32224 | 41989  | -      |
| 3/8                                 | 19792              | 28952 | 34875 | 45707  | 52850  |
| 7/16                                | 21354              | 30887 | 37585 | 49266  | 56797  |
| 1/2                                 | 22923              | 33360 | 40309 | 53214  | 61816  |
| 5/8                                 | 26112              | 37351 | 45590 | 60939  | 71859  |
| 3/4                                 | 29333              | 41421 | 50876 | 67517  | 81223  |
| 7/8                                 | 32564              | 45539 | 56163 | 75894  | 89888  |
| 1                                   | 35701              | 49609 | 61446 | 83111  | 99103  |
| 1.1/4                               | 41573              | 57713 | 71893 | 97863  | 116264 |
| 1.1/2                               | 47423              | 65925 | 82341 | 112657 | 134816 |
| 1.3/4                               | -                  | -     | -     | 138154 | 163720 |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 3 NOS. PER SIZE WHICHEVER IS HIGHER.  
FOR **M35 = 40% & M42 = 80% extra**

★ ★ BORE REQUIRED FOR THESE SIZES TO BE SPECIFIED WHILE ORDERING.

#### IMPORTANT NOTES :

Cutter of width of 3/4" and above will be supplied with Left hand Helical Flutes.

## HSS STAGGERED TEETH SIDE & FACE CUTTERS

BS : 122 (PART 1) : 1953  
HSN CODE - 8207

| WIDTH OF<br>CUTTER EDGE &<br>BOSS INCH | DIAMETER OF CUTTER |       |       |       |       |       |
|----------------------------------------|--------------------|-------|-------|-------|-------|-------|
|                                        | PRICE (RS.) EACH   |       |       |       |       |       |
|                                        | 3"                 | 4"    | 5"    | 6"    | 7"    | 8"    |
| 1/4                                    | 8739               | 11919 | 17096 | 21564 | 28171 | 33167 |
| 5/16                                   | 9295               | 12757 | 18420 | 23330 | 32333 | 35672 |
| 3/8                                    | 10384              | 13516 | 21434 | 25140 | 34877 | 39202 |
| 7/16                                   | 10556              | 14342 | 21813 | 27016 | 36622 | 41766 |
| 1/2                                    | 10746              | 15194 | 22255 | 28955 | 38279 | 44321 |
| 5/8                                    | 12029              | 16770 | 24691 | 32656 | 44895 | 50579 |
| 3/4                                    | 12780              | 19138 | 28171 | 36223 | 50220 | 57522 |
| 7/8                                    | 13937              | 20816 | 32656 | 40135 | 55253 | 64285 |
| 1                                      | 15038              | 22694 | 34331 | 44173 | 60190 | 70574 |

## HSS STAGGERED TEETH SIDE & FACE CUTTERS

BS : 122 (PART 1) : 1953  
HSN CODE - 8207

| WIDTH OF<br>CUTTER EDGE & BOSS INCH | DIAMETER OF CUTTER |        |
|-------------------------------------|--------------------|--------|
|                                     | PRICE (RS.) EACH   |        |
|                                     | 9"                 | 10"    |
| 5/16                                | 45926              | 52604  |
| 3/8                                 | 49472              | 56780  |
| 7/16                                | 54446              | 59392  |
| 1/2                                 | 58145              | 67698  |
| 5/8                                 | 67449              | 78170  |
| 3/4                                 | 78170              | 90428  |
| 7/8                                 | 86558              | 100210 |
| 1                                   | 89859              | 109124 |
| 1.1/4                               | 109937             | 132408 |
| 1.1/2                               | 125660             | 152139 |
| 1.3/4                               | 153274             | 182824 |

### IMPORTANT NOTES :

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 3 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR M35 = 40% & M42 = 80% extra

Cutter of width of 3/4" and above will be supplied with Left hand Helical Flutes.

★ ★ BORE REQUIRED FOR THESE SIZES TO BE SPECIFIED WHILE ORDERING.

## HSS SINGLE ANGLE CUTTERS

**IS : 6324 - 1971**  
**HSN CODE - 8207**

| DIA MM | BORE MM | WIDTH MM | ANGLE DEGREES           | PRICE (RS.) EACH |
|--------|---------|----------|-------------------------|------------------|
| 50     | 16      | 12       | 60, 65, 70, 75, 80 & 85 | 4842             |
| 63     | 22      | 18       | 60, 65, 70, 75, 80 & 85 | 7218             |
| 63     | 22      | 26       | 70, 75 & 80             | 8583             |
| 80     | 22      | 32       | 70, 75 & 80             | 11275            |
| 100    | 27      | 36       | 70, 75 & 80             | 16916            |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 / - NETT OR 15 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR **M35 = 40% & M42 = 80% extra.**

## HSS SINGLE ANGLE CUTTERS - BS : 122 (PART 1) : 1953

**HSN CODE - 8207**

| WIDTH OF CUTTER INCH | ANGLE DEGREES      | PRICE (RS.) EACH   |      |
|----------------------|--------------------|--------------------|------|
|                      |                    | DIAMETER OF CUTTER |      |
|                      |                    | 2.3/4"             | 3"   |
| 5/16                 | 30                 | 6002               | 6634 |
| 7/16                 | 30, 40             | 6578               | 7505 |
| 1/2                  | 45, 50, 60, 70, 80 | 6960               | 7858 |
| 5/8                  | 50, 60, 70, 80     | 7755               | 8739 |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 / - NETT OR 15 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR **M35 = 40% & M42 = 80% extra.**

## HSS DOUBLE ANGLE CUTTERS - BS : 122 (PART 1) : 1953

**HSN CODE - 8207**

★ Angle in degrees

| DIA INCH | BORE INCH | WIDTH INCH | PRICE (RS.) EACH |
|----------|-----------|------------|------------------|
| 2.3/4    | 1         | 5/8        | 6960             |
| 3        | 1.1/4     | 3/4        | 8739             |

★ Angle required to be specified at the time of order.

## HSS EQUAL ANGLE CUTTERS - BS : 122 (PART 1) : 1953

**HSN CODE - 8207**

| WIDTH OF CUTTER INCH | INCLUDED ANGLE IN DEGREES | PRICE (RS.) EACH   |      |
|----------------------|---------------------------|--------------------|------|
|                      |                           | DIAMETER OF CUTTER |      |
|                      |                           | 2.3/4"             | 3"   |
| 5/16                 | 30, 40                    | 6002               | 6634 |
| 7/16                 | 30, 40                    | 6280               | 6960 |
| 1/2                  | 45, 60, 90                | 6280               | 6960 |
| 5/8                  | 60, 90                    | 6960               | 7620 |

## HSS EQUAL ANGLE CUTTERS IS : 6326 / HSN CODE - 8207

| DIA MM | BORE MM | WIDTH MM | ANGLE DEGREES | PRICE (RS.) EACH |
|--------|---------|----------|---------------|------------------|
| 56     | 16      | 10       | 45            | 5326             |
| 63     | 22      | 12       |               | 6002             |
| 80     | 22      | 16       |               | 7620             |
| 100    | 27      | 18       |               | 11076            |
| 56     | 16      | 12       | 60            | 5571             |
| 63     | 22      | 16       |               | 6634             |
| 80     | 22      | 20       |               | 8272             |
| 100    | 27      | 25       |               | 12960            |
| 56     | 16      | 14       | 90            | 6002             |
| 63     | 22      | 18       |               | 6960             |
| 80     | 22      | 22       |               | 8992             |
| 100    | 27      | 28       |               | 14045            |

## HSS DOUBLE (UNEQUAL) ANGLE CUTTERS - IS 6325 HSN CODE - 8207

| DIA MM | BORE MM | WIDTH MM | ANGLE DEGREES | PRICE (RS.) EACH |
|--------|---------|----------|---------------|------------------|
| 50     | 16      | 12       | 55 X 12       | 5326             |
|        |         |          | 60 X 15       | 5326             |
|        |         |          | 65 X 15       | 5326             |
|        |         |          | 70 X 15       | 5326             |
|        |         |          | 75 X 15       | 5326             |
|        |         |          | 80 X 15       | 5326             |
| 50     | 16      | 14       | 90 X 20       | 5808             |
| 50     | 16      | 16       | 100 X 25      | 6280             |
| 63     | 22      | 18       | 55 X 12       | 7292             |
|        |         |          | 60 X 15       | 7292             |
|        |         |          | 63 X 15       | 7292             |
|        |         |          | 70 X 15       | 7292             |
|        |         |          | 75 X 15       | 7292             |
|        |         |          | 80 X 15       | 7292             |
| 63     | 22      | 20       | 90 X 20       | 7636             |
| 63     | 22      | 22       | 100 X 25      | 8255             |
| 80     | 22      | 32       | 65 X 15       | 11275            |
|        |         |          | 70 X 15       | 11275            |
|        |         |          | 75 X 15       | 11275            |
| 100    | 27      | 36       | 70 X 15       | 16916            |
|        |         |          | 75 X 15       | 16916            |
|        |         |          | 80 X 15       | 16916            |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 20 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR M35 = 40% & M42 = 80% extra.

## HSS CONVEX CUTTERS

**IS : 6323 : 1982**  
**HSN CODE - 8207**

| DIA MM | BORE MM | WIDTH MM | RADIUS MM | PRICE (RS.) EACH |
|--------|---------|----------|-----------|------------------|
| 50     | 22      | 3        | 1.6       | 6396             |
| 50     | 22      | 4        | 2         | 6396             |
| 56     | 22      | 5        | 2.5       | 7569             |
| 56     | 22      | 6        | 3         | 7569             |
| 63     | 22      | 8        | 4         | 8035             |
| 63     | 22      | 10       | 5         | 8854             |
| 70     | 22      | 12       | 6         | 9546             |
| 70     | 22      | 16       | 8         | 10508            |
| 90     | 27      | 18       | 9         | 14045            |
| 90     | 27      | 20       | 10        | 14789            |
| 90     | 27      | 22       | 11        | 16297            |
| 90     | 27      | 24       | 12        | 17465            |
| 100    | 27      | 28       | 14        | 22274            |
| 110    | 32      | 32       | 16        | 28171            |
| 110    | 32      | 36       | 18        | 37190            |
| 125    | 40      | 40       | 20        | 41241            |

## HSS CONCAVE CUTTERS

**IS : 6322 : 1982**  
**HSN CODE - 8207**

| DIA MM | BORE MM | WIDTH MM | RADIUS MM | PRICE (RS.) EACH |
|--------|---------|----------|-----------|------------------|
| 56     | 22      | 8        | 1.6       | 8035             |
| 56     | 22      | 9        | 2         | 8441             |
| 56     | 22      | 10       | 2.5       | 8686             |
| 63     | 22      | 12       | 3         | 9438             |
| 63     | 22      | 16       | 4         | 9709             |
| 63     | 22      | 20       | 5         | 11390            |
| 70     | 22      | 24       | 6         | 13577            |
| 70     | 22      | 28       | 7         | 14247            |
| 80     | 27      | 32       | 8         | 18621            |
| 90     | 27      | 36       | 9         | 22255            |
| 90     | 27      | 40       | 10        | 24691            |
| 100    | 27      | 42       | 11        | 28795            |
| 100    | 27      | 44       | 12        | 29764            |
| 100    | 27      | 46       | 12.5      | 30344            |
| 100    | 27      | 50       | 14        | 33389            |
| 110    | 32      | 56       | 16        | 45962            |
| 125    | 32      | 62       | 18        | 62614            |
| 125    | 32      | 70       | 20        | 65925            |



## HSS CONVEX / CONCAVE CUTTERS

BS : 122 (PART 1) : 1953  
HSN CODE - 8207

| DIA OF CUTTER<br>INCH | DIA OF CIRCLE<br>INCH | DIA OF BORE<br>INCH | CONVEX CUTTER                      |                     | CONCAVE CUTTER                      |                     |
|-----------------------|-----------------------|---------------------|------------------------------------|---------------------|-------------------------------------|---------------------|
|                       |                       |                     | WIDTH OF<br>CONVEX<br>CUTTING INCH | PRICE (RS.)<br>EACH | WIDTH OF<br>CONCAVE<br>CUTTING INCH | PRICE (RS.)<br>EACH |
| 2.1/4                 | 1/8                   | 1                   | 1/8                                | 6802                | 5/16                                | 8035                |
|                       | 3/16                  |                     | 3/16                               | 7256                | 3/8                                 | 8331                |
|                       | 1/4                   |                     | 1/4                                | 7584                | 1/2                                 | 8876                |
| 2.1/2                 | 5/16                  | 1                   | 5/16                               | 8035                | 5/8                                 | 9724                |
|                       | 3/8                   |                     | 3/8                                | 8562                | 3/4                                 | 10544               |
|                       | 7/16                  |                     | 7/16                               | 8871                | 7/8                                 | 11390               |
|                       | 1/2                   |                     | 1/2                                | 9554                | 1                                   | 12148               |
| 2.3/4                 | 9/16                  | 1                   | 9/16                               | 9724                | 1.3/16                              | 14247               |
|                       | 5/8                   |                     | 5/8                                | 10556               | 1.3/16                              | 14609               |
| 3                     | 11/16                 | 1                   | 11/16                              | 10744               | 1.3/8                               | 10744               |
|                       | 3/4                   |                     | 3/4                                | 11262               | 1.3/8                               | 11262               |
| 3.1/4                 | 13/16                 | 1                   | 13/16                              | 13888               | 1.9/16                              | 21208               |
|                       | 7/8                   |                     | 7/8                                | 14789               | 1.9/16                              | 21564               |
| 3.1/2                 | 15/16                 | 1                   | 15/16                              | 16566               | 1.3/4                               | 25233               |
|                       | 1                     |                     | 1                                  | 17325               | 1.3/4                               | 25592               |
| 4                     | 1.1/8                 | 1.1/4               | 1.1/8                              | 22274               | 1.15/16                             | 31288               |
|                       | 1.1/4                 |                     | 1.1/4                              | 24514               | 2.1/8                               | 33389               |
| 4.1/4                 | 1.3/8                 | 1.1/4               | 1.3/8                              | 33743               | 2.5/16                              | 44002               |
|                       | 1.1/2                 |                     | 1.1/2                              | 36502               | 2.1/2                               | 50422               |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR M35 = 40% & M42 = 80% extra.

## HSS SINGLE / DOUBLE CORNER ROUNDING CUTTERS

BS : 122 (PART 1) : 1953  
HSN CODE - 8207

| DIA OF CUTTER<br>INCH | CORNER RADIUS<br>INCH | DIA OF BORE<br>INCH | SINGLE CORNER                      |                     | DOUBLE CORNER                       |                     |
|-----------------------|-----------------------|---------------------|------------------------------------|---------------------|-------------------------------------|---------------------|
|                       |                       |                     | WIDTH OF<br>CONVEX<br>CUTTING INCH | PRICE (RS.)<br>EACH | WIDTH OF<br>CONCAVE<br>CUTTING INCH | PRICE (RS.)<br>EACH |
| 2.1/4                 | 1/16                  | 1                   | 5/16                               | 7128                | 7/16                                | 10076               |
|                       | 3/32                  |                     | 5/16                               | 7128                | 7/16                                | 10076               |
|                       | 1/8                   |                     | 5/16                               | 7128                | 7/16                                | 10076               |
| 2.1/2                 | 5/32                  | 1                   | 7/16                               | 8035                | 5/8                                 | 11336               |
|                       | 3/16                  |                     | 7/16                               | 8035                | 5/8                                 | 11336               |
|                       | 7/32                  |                     | 1/2                                | 8494                | 3/4                                 | 12148               |

## HSS SINGLE / DOUBLE CORNER ROUNDING CUTTERS

### BS : 122 (PART 1) : 1953

### HSN CODE - 8207

| DIA OF CUTTER<br>INCH | CORNER RADIUS<br>INCH | DIA OF BORE<br>INCH | SINGLE CORNER                      |                     | DOUBLE CORNER                       |                     |
|-----------------------|-----------------------|---------------------|------------------------------------|---------------------|-------------------------------------|---------------------|
|                       |                       |                     | WIDTH OF<br>CONVEX<br>CUTTING INCH | PRICE (RS.)<br>EACH | WIDTH OF<br>CONCAVE<br>CUTTING INCH | PRICE (RS.)<br>EACH |
| 2.1/2                 | 1/4                   | 1                   | 1/2                                | 8494                | 3/4                                 | 12148               |
| 2.3/4                 | 9/32                  | 1                   | 5/8                                | 9963                | 15/16                               | 14451               |
|                       | 5/16                  |                     | 5/8                                | 9963                | 15/16                               | 14451               |
| 3                     | 11/32                 | 1                   | 11/16                              | 11808               | 1.1/16                              | 16830               |
|                       | 3/8                   |                     | 11/16                              | 11808               | 1.1/16                              | 16830               |
| 3.1/4                 | 13/32                 | 1                   | 3/4                                | 13370               | 1.3/16                              | 19321               |
|                       | 7/16                  |                     | 3/4                                | 13370               | 1.3/16                              | 19321               |
| 3.1/2                 | 15/32                 | 1                   | 7/8                                | 15892               | 1.3/8                               | 23330               |
|                       | 1/2                   |                     | 7/8                                | 15892               | 1.3/8                               | 23330               |
|                       | 9/16                  |                     | 1                                  | 17497               | 1.5/8                               | 26095               |
|                       | 5/8                   |                     | 1                                  | 17497               | 1.5/8                               | 26095               |
| 3.3/4                 | 11/16                 | 1                   | 1.1/8                              | 25742               | 1.7/8                               | 36868               |
|                       | 3/4                   |                     | 1.1/8                              | 25742               | 1.7/8                               | 36868               |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 35,000 /- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR **M35 = 40% & M42 = 80% extra.**

## HSS SINGLE CORNER ROUNDING CUTTERS

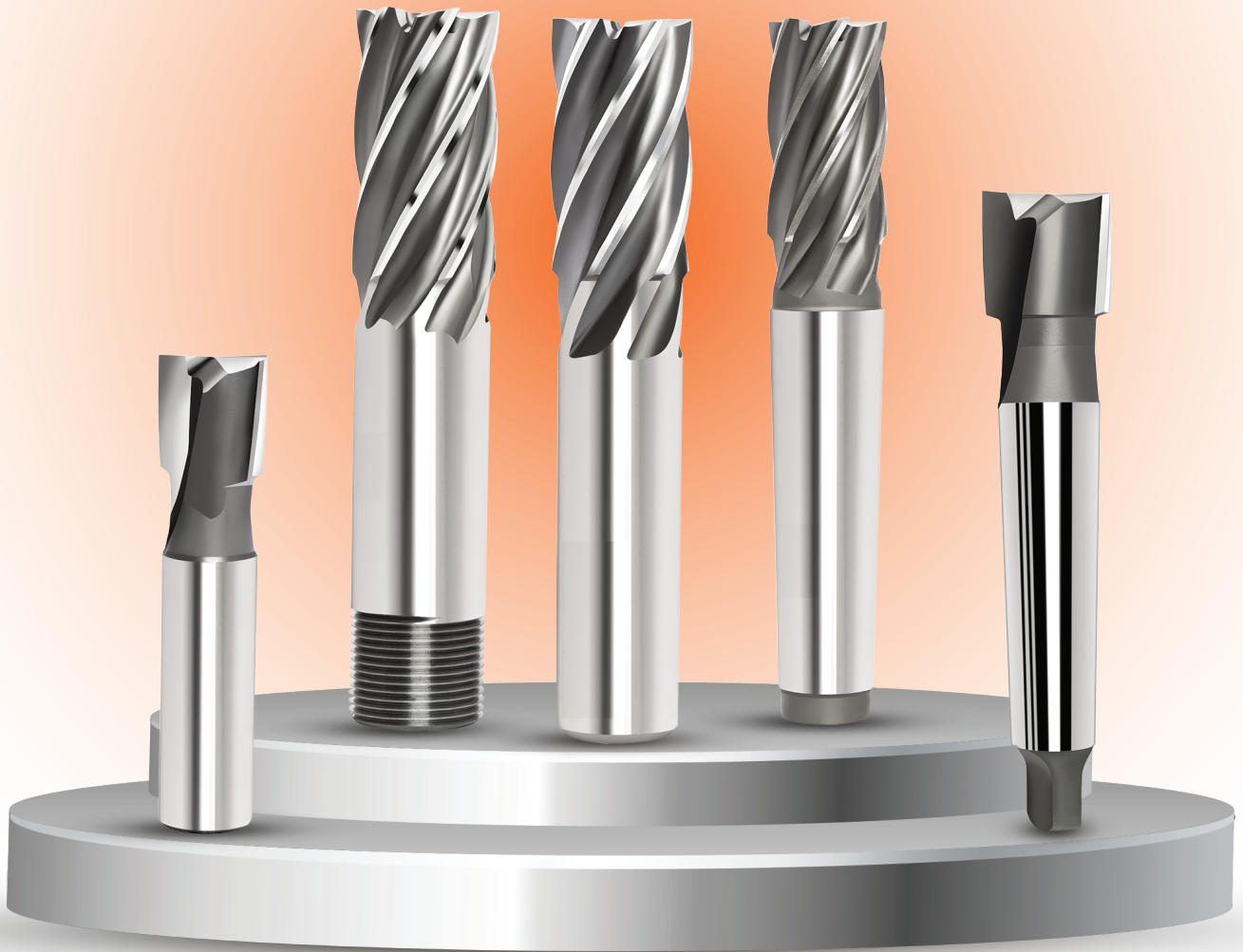
### IS : 6314 - 1982 / HSN CODE - 8207

| DIA MM | BORE MM | WIDTH MM | RADIUS MM | PRICE (RS.) EACH |
|--------|---------|----------|-----------|------------------|
| 56     | 22      | 4        | 1.6       | 6802             |
| 56     | 22      | 5        | 2.5       | 6802             |
| 63     | 22      | 6        | 3         | 7858             |
| 63     | 22      | 8        | 4         | 8222             |
| 63     | 22      | 10       | 5         | 8760             |
| 70     | 22      | 12       | 6         | 9370             |
| 70     | 22      | 14       | 7         | 9845             |
| 80     | 27      | 16       | 8         | 12202            |
| 90     | 27      | 18       | 9         | 14732            |
| 90     | 27      | 20       | 10        | 16005            |
| 100    | 27      | 22       | 12        | 25948            |
| 100    | 27      | 22       | 12.5      | 25948            |
| 100    | 27      | 25       | 14        | 27483            |
| 110    | 32      | 28       | 16        | 29532            |
| 125    | 32      | 31       | 18        | 37763            |
| 125    | 32      | 35       | 20        | 40151            |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs.50,000 / - NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR **M35 = 40% & M42 = 80% extra.**

## END MILLS



## HSS PARALLEL SHANK END MILLS

### IS : 6353 (STANDARD SERIES)

### HSN CODE - 8207

| DIA MM | PRICE (RS.) EACH | IS : 6353 - 1971 |          | IS : 6353 - 1991 |          |
|--------|------------------|------------------|----------|------------------|----------|
|        |                  | CEL (MM)         | OAL (MM) | CEL (MM)         | OAL (MM) |
| 3★     | 1050             | 10               | 42       | 8★               | 40       |
| 3.5    | 1050             | -                | -        | 10               | 42       |
| 4★     | 1050             | 11               | 43       | 11★              | 43       |
| 5★     | 1050             | 13               | 47       | 13★              | 47       |
| 6★     | 1174             | 16               | 52       | 13★              | 57       |
| 7★     | 1320             | -                | -        | 16★              | 60       |
| 8★     | 1320             | -                | -        | 19★              | 63       |
| 9★     | 1320             | -                | -        | 19★              | 69       |
| 10★    | 1320             | 22               | 67       | 22★              | 72       |
| 11★    | 1320             | 22               | 67       | 22★              | 79       |
| 12★    | 1364             | 26               | 76       | 26★              | 83       |
| 13     | 1540             | 26               | 76       | 26               | 83       |
| 14     | 1691             | 26               | 76       | 26★              | 83       |
| 16★    | 1975             | 32               | 88       | 32★              | 92       |
| 17     | 2160             | 32               | 88       | 32               | 92       |
| 18★    | 2401             | 32               | 88       | 32★              | 92       |
| 19     | 2401             | 32               | 88       | 32               | 92       |
| 20★    | 2655             | 38               | 101      | 38★              | 104      |
| 21     | 2979             | 38               | 101      | 38               | 104      |
| 22★    | 3011             | 38               | 101      | 38★              | 104      |
| 24     | 3264             | 38               | 101      | 45               | 121      |
| 25★    | 3511             | 45               | 116      | 45★              | 121      |
| 26     | 3642             | 45               | 116      | 45               | 121      |
| 27     | 4284             | 45               | 116      | 45               | 121      |
| 28     | 4998             | 45               | 116      | 45               | 121      |
| 29     | 4998             | 45               | 116      | 45               | 121      |
| 30★    | 5501             | 45               | 116      | 45★              | 121      |
| 32★    | 6000             | 63               | 140      | 53★              | 133      |
| 33     | 6647             | 63               | 140      | 53               | 133      |
| 35     | 7245             | 70               | 160      | 53               | 133      |
| 36     | 7900             | 70               | 160      | 53               | 133      |
| 37     | 8514             | 70               | 160      | 53               | 133      |
| 38     | 9077             | 70               | 160      | 63               | 155      |
| 39     | 9626             | 70               | 160      | 63               | 155      |
| 40     | 10223            | 70               | 160      | 63               | 155      |
| 41     | 10223            | 70               | 160      | 63               | 155      |
| 43     | 11637            | 80               | 180      | 63               | 155      |
| 45     | 13038            | 80               | 180      | 63               | 155      |
| 46     | 13038            | 90               | 200      | 63               | 155      |
| 49     | 14340            | 90               | 200      | 75               | 177      |
| 50     | 15776            | 90               | 200      | 75               | 177      |
| 51     | 15776            | 90               | 200      | 75               | 177      |
| 53     | 19420            | 90               | 200      | 75               | 177      |
| 54     | 23006            | 100              | 220      | 75               | 177      |
| 56     | 27665            | 100              | 220      | 75               | 177      |

| DIA MM | PRICE (RS.) EACH | IS : 6353 - 1971 |          | IS : 6353 - 1991 |          |
|--------|------------------|------------------|----------|------------------|----------|
|        |                  | CEL (MM)         | OAL (MM) | CEL (MM)         | OAL (MM) |
| 57     | 32176            | 100              | 220      | 75               | 177      |
| 59     | 32176            | 100              | 220      | 75               | 177      |
| 61     | 34353            | 110              | 250      | 90               | 192      |
| 63     | 35762            | 110              | 250      | 90               | 192      |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000/- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR M35 = 40% & M42 = 80% extra.

#### IMPORTANT NOTES :

- For non-listed intermediates sizes, the higher price of the nearest listed size will be applicable.
- LH End Mill Dia 17 mm & above on special request - **25 % extra**
- Long series End Mills, if required, can be supplied at **30 % extra** subject to the order value being minimum Rs. 50,000/- NETT, per size or minimum 5 Nos. per size whichever is higher.

## HSS PARALLEL SHANK END MILLS

### HIGH PERFORMANCE

### IS : 6353 (STANDARD SERIES)

### HSN CODE - 8207

| DIA MM | PANTHER PRICE (RS.) EACH | NINJA PRICE (RS.) EACH | IS : 6353 - 1971 |          |
|--------|--------------------------|------------------------|------------------|----------|
|        |                          |                        | CEL (MM)         | OAL (MM) |
| 3      | 1314                     | 1891                   | 8                | 40       |
| 4      | 1314                     | 1891                   | 11               | 43       |
| 5      | 1314                     | 1891                   | 13               | 47       |
| 6      | 1467                     | 2112                   | 13               | 57       |
| 7      | 1650                     | 2376                   | 16               | 60       |
| 8      | 1650                     | 2376                   | 19               | 63       |
| 9      | 1650                     | 2376                   | 19               | 69       |
| 10     | 1650                     | 2376                   | 22               | 72       |
| 11     | 1650                     | 2376                   | 22               | 79       |
| 12     | 1704                     | 2456                   | 26               | 83       |
| 14     | 2114                     | 3043                   | 26               | 83       |
| 16     | 2468                     | 3554                   | 32               | 92       |
| 18     | 3001                     | 4322                   | 32               | 92       |
| 20     | 3319                     | 4779                   | 38               | 104      |
| 22     | 3764                     | 5422                   | 38               | 104      |
| 25     | 4389                     | 6323                   | 45               | 121      |
| 28     | 6249                     | 8998                   | 45               | 121      |
| 32     | 7499                     | 10801                  | 53               | 133      |
| 36     | 9876                     | 14220                  | 53               | 133      |

# HSS TAPER SHANK END MILLS

## IS : 6354 (STANDARD SERIES)

### HSN CODE - 8207

| DIA MM | PRICE<br>(RS.) EACH | IS : 6354 - 1971<br>TANGED END |          | IS : 6354 - 1991<br>TANPPED END |          | M T No. |
|--------|---------------------|--------------------------------|----------|---------------------------------|----------|---------|
|        |                     | CEL (MM)                       | OAL (MM) | OAL (MM)                        | CEL (MM) |         |
| 6      | 1748                | 16                             | 90       | 13                              | 83       | 1       |
| 7      | 1748                | -                              | -        | 16                              | 86       | 1       |
| 8      | 1748                | 19                             | 93       | 19                              | 89       | 1       |
| 9      | 1892                | -                              | -        | 19                              | 89       | 1       |
| 10     | 1892                | 22                             | 96       | 22                              | 92       | 1       |
| 11     | 2080                | -                              | -        | 22                              | 92       | 1       |
| 12     | 2080                | 26                             | 100      | 26                              | 96       | 1       |
| 12★    | 2716                | 26                             | 118      | 26                              | 111      | 1       |
| 14     | 2872                | 26                             | 100      | 26                              | 96       | 2       |
| 14★    | 3059                | 26                             | 118      | 26                              | 111      | 1       |
| 16     | 3062                | 32                             | 124      | 32                              | 117      | 2       |
| 18     | 3739                | 32                             | 124      | 32                              | 117      | 2       |
| 20     | 4315                | 38                             | 130      | 38                              | 123      | 2       |
| 20★    | 4715                | 38                             | 150      | 38                              | 140      | 2       |
| 22     | 4529                | 38                             | 130      | 38                              | 123      | 3       |
| 22★    | 4943                | -                              | -        | 38                              | 140      | 2       |
| 25     | 5337                | 45                             | 157      | 45                              | 147      | 3       |
| 26     | 6646                | 45                             | 157      | 45                              | 147      | 3       |
| 28     | 7432                | 45                             | 157      | 45                              | 147      | 3       |
| 30     | 8173                | 53                             | 165      | 45                              | 147      | 3       |
| 32     | 8676                | 53                             | 165      | 53                              | 155      | 3       |
| 32★    | 8676                | 53                             | 183      | 53                              | 178      | 4       |
| 33     | 10490               | 53                             | 165      | 53                              | 155      | 3       |
| 33★    | 11506               | -                              | -        | 53                              | 178      | 4       |
| 35     | 11506               | 53                             | 165      | 53                              | 155      | 3       |
| 35★    | 11506               | -                              | -        | 53                              | 178      | 4       |
| 36     | 12501               | 70                             | 210      | 53                              | 155      | 3       |
| 36★    | 13638               | -                              | -        | 53                              | 178      | 4       |
| 38     | 13752               | 63                             | 203      | 63                              | 188      | 4       |
| 38★    | 15988               | -                              | -        | 63                              | 221      | 5       |
| 40     | 15988               | 63                             | 203      | 63                              | 188      | 4       |
| 40★    | 15988               | 63                             | 203      | 63                              | 221      | 5       |
| 41     | 15988               | 63                             | 203      | 63                              | 188      | 4       |
| 41★    | 17580               | -                              | -        | 63                              | 221      | 5       |
| 43     | 17580               | 63                             | 203      | 63                              | 188      | 4       |
| 43★    | 17580               | -                              | -        | 63                              | 221      | 5       |
| 44     | 18366               | 63                             | 203      | 63                              | 188      | 4       |
| 44★    | 18366               | -                              | -        | 63                              | 221      | 5       |
| 45     | 19751               | 63                             | 203      | 63                              | 188      | 4       |
| 45★    | 19751               | -                              | -        | 63                              | 221      | 5       |
| 46     | 20216               | 63                             | 203      | 63                              | 188      | 4       |
| 46★    | 20939               | -                              | -        | 63                              | 221      | 5       |
| 48     | 20939               | 63                             | 203      | 75                              | 200      | 4       |
| 48★    | 23547               | -                              | -        | 75                              | 233      | 5       |

| DIA MM | PRICE<br>(RS.) EACH | IS : 6354 - 1971<br>TANGED END |          | IS : 6354 - 1991<br>TANPPED END |          | M T No. |
|--------|---------------------|--------------------------------|----------|---------------------------------|----------|---------|
|        |                     | CEL (MM)                       | OAL (MM) | OAL (MM)                        | CEL (MM) |         |
| 50     | 23547               | 75                             | 215      | 75                              | 200      | 4       |
| 50★    | 23547               | 75                             | 250      | 75                              | 233      | 5       |
| 51     | 23547               | 75                             | 250      | 75                              | 200      | 4       |
| 51★    | 32993               | -                              | -        | 75                              | 233      | 5       |
| 53     | 32994               | 75                             | 250      | 75                              | 200      | 4       |
| 53★    | 41693               | -                              | -        | 75                              | 233      | 5       |
| 56     | 41690               | 75                             | 250      | 75                              | 200      | 4       |
| 56★    | 41690               | -                              | -        | 75                              | 233      | 5       |
| 60     | 43755               | -                              | -        | 75                              | 200      | 4       |
| 60★    | 43755               | 75                             | 250      | 75                              | 233      | 5       |
| 63     | 52466               | 90                             | 265      | 90                              | 248      | 5       |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.

FOR M35 = 40% & M42 = 80% extra.

- These sizes will be supplied with the smaller MT Shank unless otherwise specified.

IS : 6352 - 1971 1) TYPE 'A' & 'D' - FLATE FACE HELICAL FLUTED  
2) TYPE 'B' & 'F' - FLATE FACE STRIGHT FLUTED

IS : 6352 - 1991 1) TYPE 'D' - FLATE FACE HELICAL FLUTED

#### IMPORTANT NOTES :

1. Type 'A' (IS:6388 - 1971) and Type 'D' (IS:6388 - 1991) will be supplied Unless otherwise specified.
2. Other Type if required can be supplied at the same rate.
3. For non-listed intermediates sizes, the higher price of the nearest listed size will be applicable.
4. Left Hand Cutter at **25 % extra from Dia 14.0 mm & above only.**
5. Standard Series Slot Milling Cutters if required can be supplied at 30 % extra.

## HSS END MILLS

### BS : 122 (PART 1) 1953

### HSN CODE - 8207

| DIA INCH | PARALLEL SHANK PRICE (RS.) EACH | TAPPED SHANK PRICE (RS.) EACH |
|----------|---------------------------------|-------------------------------|
| 1/8      | 1050                            | 1633                          |
| 5/32     | 1050                            | 1633                          |
| 3/16     | 1050                            | 1633                          |
| 7/32     | 1050                            | 1633                          |
| 1/4★     | 1174                            | 1633                          |
| 9/32     | 1320                            | 1672                          |
| 5/16★    | 1320                            | 1672                          |
| 3/8★     | 1320                            | 1817                          |
| 7/16     | 1320                            | 1841                          |
| 1/2★     | 1364                            | 2080                          |
| 9/16     | 1691                            | 2872                          |
| 5/8★     | 1975                            | 3062                          |
| 11/16    | 2209                            | 3451                          |
| 3/4★     | 2401                            | 3644                          |
| 13/16    | 2655                            | 4140                          |
| 7/8      | 3011                            | 4534                          |
| 15/16    | -                               | 4922                          |

| DIA INCH | PARALLEL SHANK PRICE (RS.) EACH | TAPPED SHANK PRICE (RS.) EACH |
|----------|---------------------------------|-------------------------------|
| 1★       | 3511                            | 5294                          |
| 1.1/8    | 4998                            | 7385                          |
| 1.1/4    | 6000                            | 8676                          |
| 1.3/8    | 7245                            | 11506                         |
| 1.1/2    | 8484                            | 13752                         |
| 1.5/8    | 10223                           | 15988                         |
| 1.3/4    | 13038                           | 18366                         |
| 1.7/8    | 14374                           | 20939                         |
| 2        | 15741                           | 23547                         |
| 2.1/16   | 19420                           | -                             |
| 2.1/8    | 23006                           | 32632                         |
| 2.3/16   | 27665                           | -                             |
| 2.1/4    | 29931                           | 41688                         |
| 2.5/16   | 32176                           | -                             |
| 2.3/8    | 34353                           | 45494                         |
| 2.1/2    | 38734                           | 52466                         |

ITEM MARKED ★ ARE EX-STOCK ITEMS ALL REMAINING ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000/- NETT MOQ OR 5 NOS. PER SIZE. WHICHEVER IS HIGHER.

#### IMPORTANT NOTES :

1. Taper Shank End Mills with Tapped End for size 9/16" and over, if required, can be supplied at the same rate as the Tanged End.
2. Intermediate sizes (non-listed) price of the next larger listed size.
3. Left Hand Cutter at **25 % extra**  
in case of Taper Shank End Mill Dia 11/16" & above with MOQ.
4. For **M35 = 40% & M42 = 80% extra**

## HSS PRALLEL SHANK SLOT MILLING CUTTERS

### IS : 6352 (SHORT SERIES) / HSN CODE - 8207

| DIA MM | PRICE (RS.) EACH | IS : 6352 - 1971 |          | IS : 6352 - 1991 |          |
|--------|------------------|------------------|----------|------------------|----------|
|        |                  | CEL (MM)         | OAL (MM) | CEL (MM)         | OAL (MM) |
| 3      | 1274             | 6                | 40       | 5                | 37       |
| 3.5    | 1274             | 6                | 40       | 6                | 38       |
| 4      | 1274             | 6                | 40       | 7                | 39       |
| 5      | 1274             | 8                | 45       | 8                | 42       |
| 6★     | 1364             | 8                | 45       | 8★               | 52       |
| 7      | 1364             | 10               | 50       | 10               | 54       |
| 8★     | 1364             | 10               | 50       | 11★              | 55       |
| 9      | 1364             | 10               | 50       | 11               | 61       |
| 10     | 1415             | 12               | 56       | 13               | 63       |
| 11     | 1415             | 12               | 56       | 13               | 70       |
| 12     | 1544             | 16               | 63       | 16               | 73       |
| 14     | 1975             | 16               | 63       | 16               | 73       |
| 16     | 2223             | 18               | 70       | 19               | 79       |
| 18     | 2736             | 18               | 70       | 19               | 79       |
| 20     | 2736             | 20               | 80       | 22               | 88       |

## HSS PRALLEL SHANK SLOT MILLING CUTTERS IS : 6352 (SHORT SERIES) / HSN CODE - 8207

| DIA MM | PRICE (RS.) EACH | IS : 6352 - 1971 |          | IS : 6352 - 1991 |          |
|--------|------------------|------------------|----------|------------------|----------|
|        |                  | CEL (MM)         | OAL (MM) | CEL (MM)         | OAL (MM) |
| 22     | 3191             | 22               | 90       | 22               | 88       |
| 25     | 3785             | 25               | 100      | 26               | 102      |
| 28     | 6270             | 25               | 100      | 26               | 102      |
| 32     | 6568             | 28               | 110      | 32               | 112      |
| 35     | 7900             | 32               | 118      | 32               | 112      |
| 36     | 8484             | 32               | 118      | 32               | 112      |
| 38     | 9148             | 36               | 125      | 38               | 130      |
| 40     | 9792             | 36               | 125      | 38               | 130      |
| 41     | 11075            | -                | -        | 38               | 130      |
| 42     | 11075            | -                | -        | 38               | 130      |
| 43     | 12312            | -                | -        | 38               | 130      |
| 44     | 12312            | -                | -        | 38               | 130      |
| 45     | 12312            | -                | -        | 38               | 130      |
| 46     | 13671            | -                | -        | 38               | 130      |
| 47     | 13671            | -                | -        | 38               | 130      |
| 48     | 13671            | -                | -        | 45               | 147      |
| 49     | 14991            | -                | -        | 45               | 147      |
| 50     | 14991            | -                | -        | 45               | 147      |

ITEM MARKED ★ ARE EX-STOCK ITEMS ALL REMAINING ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000/- NETT MOQ OR 5 NOS. PER SIZE. WHICHEVER IS HIGHER.

### IMPORTANT NOTES :

IS : 6352 - 1971 1) TYPE 'A' - FLATE FACE HELICAL FLUTED  
IS : 6352 - 1991 1) TYPE 'A' - FLATE FACE HELICAL FLUTED

1. Type 'A' will be supplied unless otherwise specified.
2. Other Type if required can be supplied at the same rate.
3. Left Hand Cutter at **25 % extra**.
4. Standard Series Slot Milling Cutter if required can be supplied at **30 % extra**, subject to the order value being minimum Rs. 50,000/- NETT. Or 5 Nos. per size whichever is higher.
5. For **M35 = 40% & M42 = 80% extra**.

## HSS TAPER SHANK SLOT MILLING CUTTERS IS : 6388 (SHORT SERIES) / HSN CODE - 8207

| DIA MM | PRICE (RS.)<br>EACH | IS : 6388 - 1971 |            |            | IS : 6388 - 1991 |          | MT NO. |
|--------|---------------------|------------------|------------|------------|------------------|----------|--------|
|        |                     | CEL (MM)         | TANGED END | TAPPED END | TAPPED END       |          |        |
|        |                     |                  | OAL (MM)   | OAL (MM)   | CEL (MM)         | OAL (MM) |        |
| 6      | 1946                | -                | -          | -          | 8                | 78       | 1      |
| 7      | 1946                | 16               | 90         | -          | 10               | 80       | 1      |
| 8      | 2141                | 16               | 90         | -          | 11               | 81       | 1      |
| 9      | 2141                | 16               | 90         | -          | 11               | 81       | 1      |
| 10     | 2187                | 16               | 90         | -          | 13               | 83       | 1      |
| 11     | 2187                | 16               | 90         | -          | 13               | 83       | 1      |
| 12     | 2441                | 16               | 90         | -          | 16               | 86       | 1      |
| 12★    | 2855                | -                | -          | -          | 16               | 101      | 2      |
| 14     | 3062                | 16               | 90         | -          | 16               | 86       | 1      |
| 14★    | 3178                | -                | -          | -          | 16               | 101      | 2      |
| 16     | 3178                | 18               | 110        | 100        | 19               | 104      | 2      |
| 18     | 3644                | 18               | 110        | 100        | 19               | 104      | 2      |
| 20     | 3644                | 20               | 114        | 104        | 22               | 107      | 2      |
| 20★    | 4507                | 20               | -          | -          | 22               | 124      | 3      |

# HSS TAPER SHANK SLOT MILLING CUTTERS

## IS : 6388 (SHORT SERIES) / HSN CODE - 8207

| DIA MM | PRICE (RS.)<br>EACH | IS : 6388 - 1971 |            |            | IS : 6388 - 1991 |          | MT NO. |
|--------|---------------------|------------------|------------|------------|------------------|----------|--------|
|        |                     | CEL (MM)         | TANGED END | TAPPED END | TAPPED END       |          |        |
|        |                     |                  | OAL (MM)   | OAL (MM)   | CEL (MM)         | OAL (MM) |        |
| 22     | 4526                | 22               | 118        | 108        | 22               | 107      | 2      |
| 22★    | 5393                | -                | -          | -          | 22               | 124      | 3      |
| 25     | 5391                | 25               | 143        | 130        | 26               | 128      | 3      |
| 26     | 7438                | 25               | 143        | 130        | 26               | 128      | 3      |
| 28     | 7879                | 25               | 143        | 130        | 26               | 128      | 3      |
| 32     | 9445                | 28               | 148        | 135        | 32               | 134      | 3      |
| 32★    | 11387               | -                | -          | -          | 32               | 157      | 4      |
| 35     | 12240               | 32               | 179        | 164        | 32               | 134      | 3      |
| 35★    | 14173               | -                | -          | -          | 32               | 157      | 4      |
| 36     | 14275               | 32               | 179        | 164        | 32               | 134      | 3      |
| 36★    | 14275               | -                | -          | -          | 32               | 157      | 4      |
| 38     | 14275               | 36               | 186        | 171        | 38               | 163      | 4      |
| 38★    | 19649               | -                | -          | -          | 38               | 196      | 5      |
| 40     | 16291               | 36               | 186        | 171        | 38               | 163      | 4      |
| 40★    | 21679               | -                | -          | -          | 38               | 196      | 5      |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.

For **M35 = 40% & M42 = 80% extra**

★ These sizes will be supplied with the smaller MT Shank unless otherwise specified.

IS : 6352 - 1971    1) TYPE 'A' & 'D' - FLATE FACE HELICAL FLUTED  
                           2) TYPE 'B' & 'F' - FLATE FACE STRIGHT FLUTED

IS : 6352 - 1991    1) TYPE 'D' - FLATE FACE HELICAL FLUTED

### IMPORTANT NOTES :

1. Type 'A' (IS : 6388 - 1971) and Type 'D' (IS : 6388 - 1991) will be supplied Unless otherwise specified.
2. Other Type if required can be supplied at the same rate.
3. For non-listed intermediates sizes, the higher price of the nearest listed size will be applicable.
4. Left Hand Cutter at 25 % extra from Dia 14.0mm & above only.
5. Standard Series Slot Milling Cutters if required can be supplied at 30 % extra.



## HSS SLOT DRILLS BS : 122 (PART 1) : 1953

### HSN CODE - 8207

| DIA INCH | PARALLEL SHANK PRICE (RS.) EACH | TAPER SHANK PRICE (RS.) EACH |
|----------|---------------------------------|------------------------------|
| 1/8      | 1274                            | 1752                         |
| 5/32     | 1274                            | 1752                         |
| 3/16     | 1274                            | 1752                         |
| 7/32     | 1360                            | 1917                         |
| 1/4      | 1364                            | 2017                         |
| 5/16     | 1364                            | 2141                         |
| 3/8      | 1364                            | 2141                         |
| 7/16     | 1393                            | 2187                         |
| 1/2      | 1544                            | 2441                         |
| 9/16     | 1975                            | 3062                         |
| 5/8      | 2223                            | 3178                         |
| 11/16    | 2513                            | 3454                         |

1) Straight flute, Flat Faced, will be supplied unless otherwise specified.

2) Spiral Fluted, Flate faced same rate.

| DIA INCH | PARALLEL SHANK PRICE (RS.) EACH | TAPER SHANK PRICE (RS.) EACH |
|----------|---------------------------------|------------------------------|
| 3/4      | 2736                            | 3644                         |
| 13/16    | 3191                            | 4526                         |
| 7/8      | 3191                            | 4526                         |
| 1        | 3785                            | 5391                         |
| 1.1/8    | 5388                            | 7879                         |
| 1.1/4    | 6568                            | 9445                         |
| 1.3/8    | 7900                            | 12240                        |
| 1.1/2    | 9148                            | 14275                        |
| 1.5/8    | 11325                           | -                            |
| 1.3/4    | 12312                           | -                            |
| 1.7/8    | 13671                           | -                            |
| 2        | 14990                           | -                            |

3) Left hand Cutter **25 % extra.**

## HSS TAPER SHANK T-SLOT CUTTERS - BS : 122 (PART 1) : 1953

### HSN CODE - 8207

| NOMINAL SIZE OF BOLT INCH | DIA OF CUTTER INCH | WIDTH OF CUTTER INCH | NO OF MORSE TAPPER SHANK | TAPPED PRICE (RS.) EACH |
|---------------------------|--------------------|----------------------|--------------------------|-------------------------|
| 1/4                       | 37/64              | 1/4                  | 2                        | 6871                    |
| 5/16                      | 45/64              | 5/16                 | 2                        | 7748                    |
| 3/8                       | 53/64              | 23/64                | 2                        | 8471                    |
| 7/16                      | 61/64              | 27/64                | 2                        | 8977                    |
| 1/2                       | 1.5/64             | 15/32                | 2                        | 10844                   |
| 5/8                       | 1.21/64            | 37/64                | 3                        | 17555                   |
| 3/4                       | 1.33/64            | 11/16                | 3                        | 21798                   |
| 7/8                       | 1.45/64            | 51/64                | 3                        | 25708                   |
| 1                         | 1.61/64            | 29/32                | 4                        | 31835                   |
| 1.1/8                     | 2.1/8              | 1.1/16               | 4                        | 41094                   |
| 1.1/4                     | 2.5/16             | 1.3/16               | 4                        | 48884                   |
| 1.3/8                     | 2.1/2              | 1.5/16               | 5                        | 60339                   |
| 1.1/2                     | 2.3/4              | 1.7/16               | 5                        | 77253                   |

## HSS TAPER SHANK T-SLOT CUTTERS (STAGGERED TEETH)

### IS : 2668 : 1992 / HSN CODE - 8207

| NOMINAL SIZE OF T-SLOT MM | DIA OF CUTTER MM | WIDTH MM | PRICE (RS.) EACH |
|---------------------------|------------------|----------|------------------|
| 10 ★                      | 18               | 8        | 8553             |
| 12 ★                      | 21               | 9        | 9346             |
| 14 ★                      | 25               | 11       | 17963            |
| 18 ★                      | 32               | 14       | 22489            |
| 22                        | 40               | 18       | 30128            |
| 28                        | 50               | 22       | 38854            |
| 36                        | 60               | 28       | 70018            |
| 42                        | 72               | 35       | 84970            |

★ These sizes will be supplied with the smaller MT Shank unless otherwise specified. ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.  
For **M35 = 40% & M42 = 80% extra.**

## HSS WOODRUFF KEYSLOT CUTTERS IS 2669 - 1971 (STRAIGHT TEETH TYPE) HSN CODE - 8207

| DIA MM | WIDTH MM | NOM. SIZE OF KEY MM | PRICE (RS.) EACH |
|--------|----------|---------------------|------------------|
| 16.5   | 5        | 5 x 6.5             | 3129             |
| 19.5   | 5        | 5 x 7.5             | 3557             |
|        | 6        | 6 x 7.5             | 3557             |
| 22.5   | 5        | 5 x 9               | 4046             |
|        | 6        | 6 x 9               | 4046             |
|        | 8        | 8 x 9               | 4046             |
| 28.5   | 6        | 6 x 11              | 6564             |
|        | 8        | 8 x 11              | 6564             |
|        | 10       | 10 x 11             | 6564             |
| 32.5   | 7        | 7 x 13              | 7763             |
|        | 8        | 8 x 13              | 7763             |
|        | 10       | 10 x 13             | 7763             |
| 45.5   | 10       | 10 x 16             | 13185            |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 15 NOS. PER SIZE WHICHEVER IS HIGHER.

For **M35 = 40% & M42 = 80% extra.**

## HSS CUTTERS FOR WOODRUFF KEYSEATS - BS : 122 (PART 1) 1953 HSN CODE - 8207

| B. S. CUTTER & KEY NO. | PRICE (RS.) EACH | B. S. CUTTER & KEY NO. | PRICE (RS.) EACH | B. S. CUTTER & KEY NO. | PRICE (RS.) EACH |
|------------------------|------------------|------------------------|------------------|------------------------|------------------|
| 606                    | 3902             | 609                    | 6853             | 1011                   | 9870             |
| 607                    | 4582             | 809                    | 6853             | 1211                   | 9870             |
| 807                    | 4582             | 1009                   | 6903             | 812                    | 11150            |
| 608                    | 5541             | 810                    | 8108             | 1012                   | 11150            |
| 808                    | 5541             | 1010                   | 8108             | 1212                   | 11150            |
| 1008                   | 5541             | 1210                   | 8108             |                        | -                |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 15 NOS. PER SIZE WHICHEVER IS HIGHER.

For **M35 = 40% & M42 = 80% extra.**

## HSS FACE CUTTERS : (AS PER TABLE NO 19 OF BSS : 122 : 1938) HSN CODE - 8207

| DIAMETER OF CUTTER INCH | OVERALL LENGTH OF CUTTER INCH | DIAMETER OF BORE INCH | PRICE (RS.) EACH |
|-------------------------|-------------------------------|-----------------------|------------------|
| 1.3/4                   | 1.1/4                         | 3/4                   | 7129             |
| 2                       | 1.1/4                         | 3/4                   | 8222             |
| 2.1/2                   | 1.1/4                         | 3/4                   | 10384            |
| 3                       | 1.11/16                       | 1.1/8                 | 14870            |
| 4                       | 1.3/4                         | 1.1/8                 | 24869            |
| 5                       | 2                             | 1.1/2                 | 41828            |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 15 NOS. PER SIZE WHICHEVER IS HIGHER.

For **M35 = 40% & M42 = 80% extra.**

# HSS KEYWAY MILLING CUTTERS FORM RELIEVED IS : 6355 (STRAIGHT TEETH TYPE) HSN CODE - 8207

| DIA MM (js16) | BORE MM (H7) | WIDTH MM (D9) | PRICE (RS.) EACH |
|---------------|--------------|---------------|------------------|
| 50            | 16           | 5             | 4649             |
|               |              | 6             | 5027             |
|               |              | 8             | 5336             |
|               |              | 10            | 5571             |

|    |    |    |      |
|----|----|----|------|
| 63 | 22 | 6  | 5460 |
|    |    | 8  | 5710 |
|    |    | 10 | 6280 |
|    |    | 12 | 6817 |
|    |    | 14 | 7218 |
|    |    | 16 | 7755 |
|    |    | 18 | 8335 |

|    |    |    |       |
|----|----|----|-------|
| 80 | 27 | 6  | 7636  |
|    |    | 8  | 8137  |
|    |    | 10 | 8686  |
|    |    | 12 | 9724  |
|    |    | 14 | 10508 |
|    |    | 16 | 11165 |
|    |    | 18 | 11793 |
|    |    | 20 | 12537 |

|     |    |    |       |
|-----|----|----|-------|
| 100 | 32 | 6  | 8992  |
|     |    | 8  | 9651  |
|     |    | 10 | 10508 |
|     |    | 12 | 11443 |
|     |    | 14 | 12311 |
|     |    | 16 | 13248 |
|     |    | 18 | 14020 |
|     |    | 20 | 14326 |
|     |    | 22 | 16005 |
|     |    | 25 | 17096 |

|     |    |    |       |
|-----|----|----|-------|
| 125 | 32 | 8  | 13778 |
|     |    | 10 | 15070 |
|     |    | 12 | 16437 |
|     |    | 14 | 18116 |
|     |    | 16 | 19321 |
|     |    | 18 | 20936 |
|     |    | 20 | 22171 |
|     |    | 22 | 23615 |
|     |    | 25 | 25853 |
|     |    | 32 | 28026 |

|     |    |    |       |
|-----|----|----|-------|
| 160 | 40 | 10 | 24830 |
|     |    | 12 | 26142 |

| DIA MM (js16) | BORE MM (H7) | WIDTH MM (D9) | PRICE (RS.) EACH |
|---------------|--------------|---------------|------------------|
| 160           | 40           | 14            | 27855            |
|               |              | 16            | 29824            |
|               |              | 18            | 31740            |
|               |              | 20            | 33866            |
|               |              | 22            | 36061            |
|               |              | 25            | 39148            |
|               |              | 28            | 41333            |
|               |              | 32            | 46777            |

|     |    |    |       |
|-----|----|----|-------|
| 200 | 40 | 12 | 38446 |
|     |    | 14 | 40616 |
|     |    | 16 | 43194 |
|     |    | 18 | 46238 |
|     |    | 20 | 49497 |
|     |    | 22 | 53185 |
|     |    | 25 | 57335 |
|     |    | 28 | 62135 |
|     |    | 32 | 69162 |
|     |    | 36 | 76182 |
|     |    | 40 | 83416 |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 15 NOS. PER SIZE WHICHEVER IS HIGHER.

For **M35 = 40%** & **M42 = 80%** extra.

## HSS SLOTTING CUTTERS - BS : 122 (PART 1) : 1953 (STRAIGHT TEETH) HSN CODE - 8207

| WIDTH OF<br>CUTTER | DIAMETER OF CUTTER |      |        |       |       |       |
|--------------------|--------------------|------|--------|-------|-------|-------|
|                    | PRICE (RS.) EACH   |      |        |       |       |       |
| INCH               | 2.1/2"             | 3"   | 3.1/2" | 4"    | 5"    | 6"    |
| 1/4                | 3779               | 4320 | 5388   | 6497  | 10384 | 13417 |
| 5/16               | 4097               | 4649 | 5916   | 7256  | 11374 | 14871 |
| 3/8                | 4372               | 5002 | 6396   | 7920  | 12373 | 16307 |
| 7/16               | 4624               | 5467 | 6876   | 9224  | 13417 | 17763 |
| 1/2                | 4885               | 5744 | 7373   | 9295  | 14455 | 19246 |
| 5/8                | 5467               | 6467 | 8395   | 11620 | 16437 | 22164 |
| 3/4                | 5853               | 7046 | 9121   | 11793 | 18058 | 24579 |
| 7/8                | 6264               | 7779 | 9845   | 13577 | 19711 | 27016 |
| 1                  | 6634               | 8583 | 10556  | 13979 | 21354 | 29537 |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 15 NOS. PER SIZE WHICHEVER IS HIGHER.

For **M35 = 40% & M42 = 80% extra.**

## HSS SHELL END MILLS - IS : 6257 - 1982 / HSN CODE - 8207

| DIA MM (js 16) | BORE (H7) | WIDTH (js 16) | PRICE (RS.) EACH |
|----------------|-----------|---------------|------------------|
| 40             | 16        | 32            | 8272             |
| 50             | 22        | 36            | 10058            |
| 63             | 27        | 40            | 13243            |
| 80             | 27        | 45            | 19560            |
| 100            | 32        | 50            | 29863            |
| 125            | 40        | 56            | 50070            |
| 160            | 50        | 63            | 94505            |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.

For **M35 = 40% & M42 = 80% extra.**

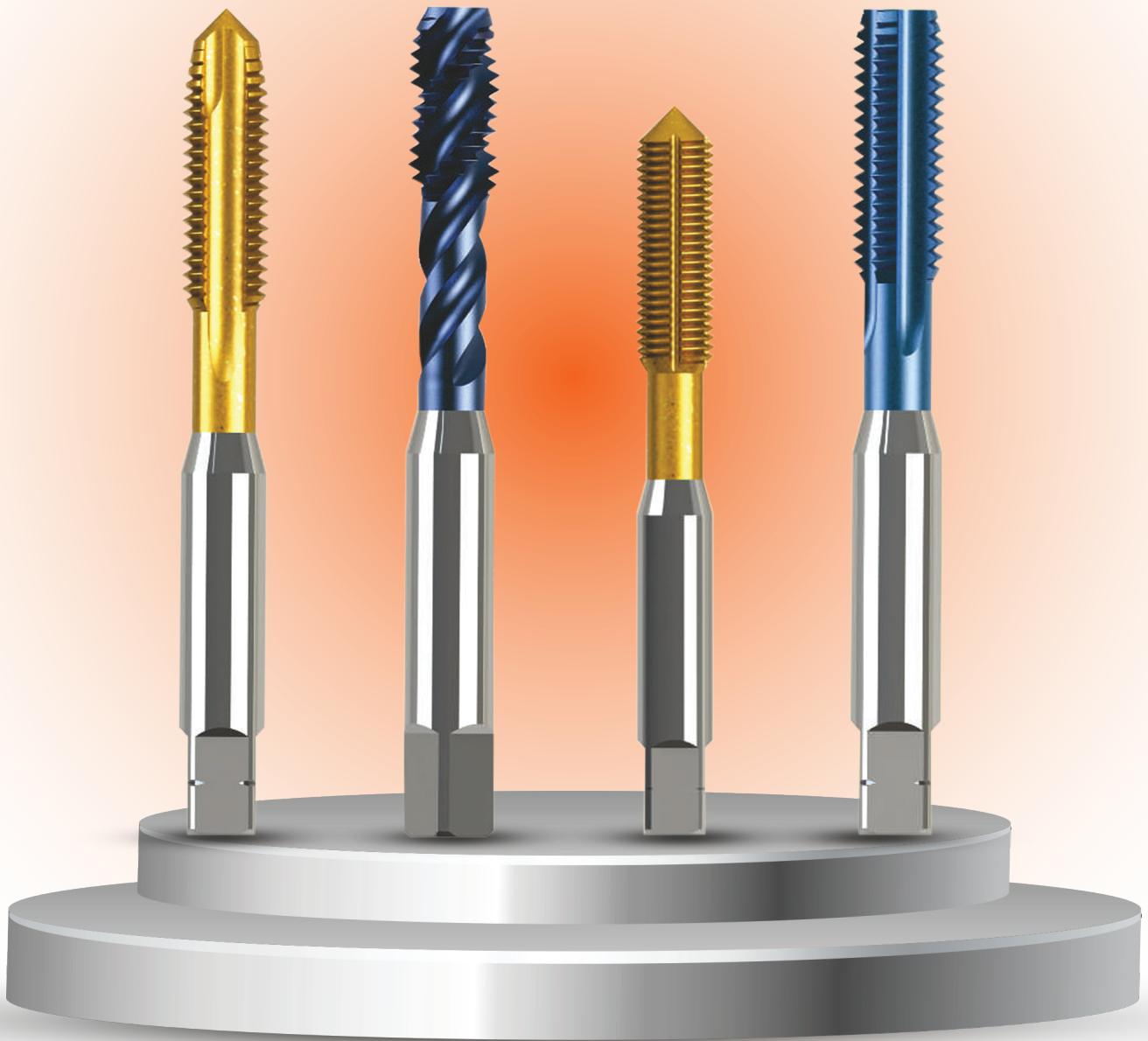
## HSS SHELL END MILLS - BS : 122 (PART 1) : 1953 / HSN CODE - 8207

| DIA OF CUTTER INCH | LENGTH OF CUTTER INCH | DIA OF BORE INCH | PRICE (RS.) EACH |
|--------------------|-----------------------|------------------|------------------|
| 1.1/4              | 1                     | 1/2              | 5690             |
| 1.1/2              | 1.1/8                 | 1/2              | 6960             |
| 1.3/4              | 1.1/4                 | 3/4              | 8271             |
| 2                  | 1.3/8                 | 3/4              | 9403             |
| 2.1/4              | 1.1/2                 | 1                | 11338            |
| 2.1/2              | 1.5/8                 | 1                | 13187            |
| 2.3/4              | 1.5/8                 | 1                | 14991            |
| 3                  | 1.3/4                 | 1.1/4            | 17451            |
| 3.1/2              | 1.7/8                 | 1.1/4            | 21762            |
| 4                  | 2.1/4                 | 1.1/2            | 32003            |
| 4.1/2              | 2.1/4                 | 1.1/2            | 38370            |
| 5                  | 2.1/4                 | 1.1/2            | 50070            |
| 5.1/2              | 2.1/4                 | 2                | 58572            |
| 6                  | 2.1/4                 | 2                | 67554            |

ALL ABOVE ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000 /- NETT OR 5 NOS. PER SIZE WHICHEVER IS HIGHER.

For **M35 = 40% & M42 = 80% extra.**

# TAPS



# HSS HAND AND SHORT MACHINE TAPS (COARSE PITCH) - NON-SERIAL IS 6175 : 1992 : PART I, PART II & PART III AND HSS NUT TAPS IS : 6175 - 1991 (PART V) (6H TOLERANCE) HSN CODE - 8207

PRICE RS. EACH

|                      | NOM DIA x<br>PITCH | PART I        | PART II       |                 |                  | PART III      |                 |                  | NUT TAPS | PANTHER<br>CI TAPS |
|----------------------|--------------------|---------------|---------------|-----------------|------------------|---------------|-----------------|------------------|----------|--------------------|
|                      |                    | STR<br>FLUTES | STR<br>FLUTES | SPIRAL<br>POINT | SPIRAL<br>FLUTES | STR<br>FLUTES | SPIRAL<br>POINT | SPIRAL<br>FLUTES |          |                    |
| <b>BRIGHT FINISH</b> | M2.0 x 0.40        | 766           | -             | -               | -                | -             | -               | -                | -        | -                  |
|                      | M2.2 x 0.45        | 766           | -             | -               | -                | -             | -               | -                | -        | -                  |
|                      | M2.3 x 0.40        | 766           | -             | -               | -                | -             | -               | -                | -        | -                  |
|                      | M2.5 x 0.45        | 766           | -             | -               | -                | -             | -               | -                | -        | -                  |
|                      | M3 x 0.5           | -             | 464           | 586             | 634              | 507           | 638             | 747              | -        | 617                |
|                      | M3.5 x 0.6         | -             | 464           | 586             | 634              | 507           | 638             | 747              | -        | -                  |
|                      | M4 x 0.7           | -             | 464           | 586             | 634              | 507           | 638             | 747              | -        | 617                |
|                      | M4.5 x 0.75        | -             | 500           | 617             | 673              | 538           | 673             | 755              | -        | -                  |
|                      | M5 x 0.8           | -             | 499           | 617             | 673              | 538           | 673             | 755              | -        | 650                |
|                      | M6 x 1.0           | -             | 499           | 617             | 673              | 551           | 694             | 761              | 1061     | 650                |
|                      | M8 x 1.25          | -             | 590           | 716             | 781              | 622           | 791             | 897              | 1197     | 857                |
|                      | M10 x 1.5          | -             | 723           | 891             | 969              | 730           | 975             | 1066             | 1591     | 1332               |
|                      | M12 x 1.75         | -             | -             | -               | -                | 1130          | 1365            | 1529             | 2453     | 1913               |
|                      | M14 x 2.00         | -             | -             | -               | -                | 1604          | 1981            | 2335             | 3411     | 1899               |
|                      | M16 x 2.00         | -             | -             | -               | -                | 1604          | 1981            | 2335             | 3411     | 1899               |
|                      | M18 x 2.5          | -             | -             | -               | -                | 2596          | 3126            | 3553             | 5475     | -                  |
|                      | M20 x 2.5          | -             | -             | -               | -                | 3310          | 3961            | 4770             | 7311     | -                  |
|                      | M22 x 2.5          | -             | -             | -               | -                | 3544          | 4222            | 4957             | 7480     | -                  |
|                      | M24 x 3.0          | -             | -             | -               | -                | 3894          | 4701            | 5380             | 8428     | -                  |
|                      | M25 x 3.0          | -             | -             | -               | -                | 4818          | -               | -                | 10055    | -                  |
|                      | M27 x 3.0          | -             | -             | -               | -                | 5987          | -               | -                | 12921    | -                  |
|                      | M30 x 3.5          | -             | -             | -               | -                | 6704          | -               | -                | 16115    | -                  |
|                      | M33 x 3.5          | -             | -             | -               | -                | 8156          | -               | -                | 17789    | -                  |
|                      | M36 x 4.0          | -             | -             | -               | -                | 11345         | -               | -                | 23010    | -                  |
|                      | M39 x 4.0          | -             | -             | -               | -                | 13316         | -               | -                | 27721    | -                  |
|                      | M42 x 4.5          | -             | -             | -               | -                | 15538         | -               | -                | 32693    | -                  |
|                      | M45 x 4.5          | -             | -             | -               | -                | 20907         | -               | -                | 39425    | -                  |
|                      | M48 x 5.00         | -             | -             | -               | -                | 22290         | -               | -                | 46555    | -                  |
|                      | M52 x 5.0          | -             | -             | -               | -                | 27986         | -               | -                | -        | -                  |
|                      | M56 x 5.5          | -             | -             | -               | -                | 39825         | -               | -                | -        | -                  |
|                      | M60 x 5.5          | -             | -             | -               | -                | 41973         | -               | -                | -        | -                  |
|                      | M64 x 6.0          | -             | -             | -               | -                | 44144         | -               | -                | -        | -                  |
|                      | M68 x 6.0          | -             | -             | -               | -                | 55085         | -               | -                | -        | -                  |

**HSS HAND AND SHORT MACHINE TAPS  
(COARSE PITCH) - NON-SERIAL IS 6175 : 1992 : PART I,  
PART II & PART III AND HSS NUT TAPS  
IS : 6175 - 1991 (PART V) (6H TOLERANCE)  
HSN CODE - 8207**

PRICE RS. EACH

|                    | NOM DIA x PITCH | PART I     | PART II    |              |               | PART III   |              |               | NUT TAPS | PANTHER CI TAPS |
|--------------------|-----------------|------------|------------|--------------|---------------|------------|--------------|---------------|----------|-----------------|
|                    |                 | STR FLUTES | STR FLUTES | SPIRAL POINT | SPIRAL FLUTES | STR FLUTES | SPIRAL POINT | SPIRAL FLUTES |          |                 |
| <b>TIN COATING</b> | M2.0 x 0.40     | 813        | -          | -            | -             | -          | -            | -             | -        | -               |
|                    | M2.2 x 0.45     | 813        | -          | -            | -             | -          | -            | -             | -        | -               |
|                    | M2.3 x 0.40     | 813        | -          | -            | -             | -          | -            | -             | -        | -               |
|                    | M2.5 x 0.45     | 813        | -          | -            | -             | -          | -            | -             | -        | -               |
|                    | M3 x 0.5        | -          | 511        | 632          | 680           | 553        | 686          | 793           | -        | -               |
|                    | M3.5 x 0.6      | -          | 511        | 674          | 680           | 553        | 686          | 793           | -        | -               |
|                    | M4 x 0.7        | -          | 551        | 674          | 721           | 595        | 726          | 834           | -        | -               |
|                    | M4.5 x 0.75     | -          | 588        | 704          | 760           | 625        | 760          | 843           | -        | -               |
|                    | M5 x 0.8        | -          | 586        | 704          | 760           | 625        | 760          | 843           | -        | -               |
|                    | M6 x 1.0        | -          | 586        | 704          | 760           | 637        | 780          | 848           | -        | -               |
|                    | M8 x 1.25       | -          | 733        | 859          | 924           | 765        | 933          | 1041          | -        | -               |
|                    | M10 x 1.5       | -          | 867        | 1034         | 1112          | 873        | 1119         | 1208          | -        | -               |
|                    | M12 x 1.75      | -          | -          | -            | -             | 1273       | 1508         | 1672          | -        | -               |
|                    | M14 x 2.00      | -          | -          | -            | -             | 1781       | 2159         | 2512          | -        | -               |
|                    | M16 x 2.00      | -          | -          | -            | -             | 1899       | 2277         | 2630          | -        | -               |
|                    | M18 x 2.5       | -          | -          | -            | -             | 3069       | 3599         | 4026          | -        | -               |
|                    | M20 x 2.5       | -          | -          | -            | -             | 3783       | 4433         | 5243          | -        | -               |
|                    | M22 x 2.5       | -          | -          | -            | -             | 4132       | 4810         | 5546          | -        | -               |
|                    | M24 x 3.0       | -          | -          | -            | -             | 4483       | 5290         | 5967          | -        | -               |

TiN Coated items are supplied against order only

**NOTES :**

1. Sizes upto M10 will be supplied as per Part II unless otherwise specified.
2. Serial Taps can be supplied at the same price.
3. A Set Consist of Taper, Second & Bottoming.
4. Left Hand Taps at **25% extra**
5. For **M35 = 40% & M42 = 80% extra**

**IMPORTANT NOTES : (NUT TAPS - MOQ)**

UPTO M10 (50 NOS EACH) OVER M10 - M28 (25 NOS EACH)  
OVER M28 - M35 (15 NOS EACH) OVER M35 (10 NOS EACH)

# HSS HAND AND SHORT MACHINE TAPS (FINE PITCH) NON-SERIAL IS 6175 : 1992 : (6H TOL) PART II & PART III AND HSS NUT TAPS - IS : 6175 - 1991 (PART V) HSN CODE - 8207

PRICE RS. EACH

|                      | NOM DIA x<br>PITCH | PART II    |              |               | PART III   |              |               | NUT TAPS | PANTHER<br>CI TAPS |
|----------------------|--------------------|------------|--------------|---------------|------------|--------------|---------------|----------|--------------------|
|                      |                    | STR FLUTES | SPIRAL POINT | SPIRAL FLUTES | STR FLUTES | SPIRAL POINT | SPIRAL FLUTES |          |                    |
| <b>BRIGHT FINISH</b> | M3.0x0.35          | 686        | 923          | -             | -          | -            | -             | -        | -                  |
|                      | M3.5x0.35          | 686        | 923          | -             | -          | -            | -             | -        | -                  |
|                      | M4x0.5             | 686        | 834          | -             | -          | -            | -             | -        | -                  |
|                      | M4.5x0.5           | 673        | 834          | -             | -          | -            | -             | -        | -                  |
|                      | M5x0.5             | 673        | 813          | -             | -          | -            | -             | -        | -                  |
|                      | M6x0.75            | 681        | 923          | 874           | 752        | 819          | 971           | 1198     | 851                |
|                      | M7x0.75            | 787        | 923          | 1038          | 787        | 938          | -             | 1523     | 984                |
|                      | M8x0.75            | -          | -            | -             | -          | -            | -             | -        | -                  |
|                      | M8x1.0             | 713        | 851          | 933           | 787        | 861          | 1035          | 1381     | 891                |
|                      | M9x1.0             | -          | -            | -             | -          | -            | -             | -        | -                  |
|                      | M10x1.0            | 811        | 977          | 1121          | 907        | 981          | 1239          | 1818     | 1434               |
|                      | M10x1.25           | 811        | 977          | 1121          | 907        | 981          | 1239          | 1818     | 1434               |
|                      | M12x1.0            | -          | -            | -             | -          | -            | -             | 2856     | -                  |
|                      | M12x1.25           | -          | -            | -             | 1319       | 1499         | 1770          | 2856     | 1648               |
|                      | M12x1.5            | -          | -            | -             | 1319       | 1499         | 1770          | 2856     | 1648               |
|                      | M14x1.0            | -          | -            | -             | -          | -            | -             | 4257     | -                  |
|                      | M14x1.25           | -          | -            | -             | 1686       | 2017         | 2431          | 4257     | 2107               |
|                      | M14x1.5            | -          | -            | -             | 1627       | 2017         | 2358          | 4257     | 2034               |
|                      | M16x1.0            | -          | -            | -             | -          | -            | -             | 4257     | -                  |
|                      | M16x1.5            | -          | -            | -             | 1627       | 2017         | 2367          | 4257     | 2034               |
|                      | M18x1.0            | -          | -            | -             | -          | -            | -             | 6325     | -                  |
|                      | M18x1.5            | -          | -            | -             | 2951       | 3310         | 3965          | 6325     | -                  |
|                      | M18x2.0            | -          | -            | -             | 2951       | 3310         | 3965          | 6325     | -                  |
|                      | M20x1.5            | -          | -            | -             | 3684       | 4144         | 5067          | 8109     | -                  |
|                      | M20x2.0            | -          | -            | -             | 3684       | 4144         | 5067          | 8109     | -                  |
|                      | M22x1.5            | -          | -            | -             | 3990       | 4539         | 5554          | 8606     | -                  |
|                      | M22x2.0            | -          | -            | -             | 3990       | 4539         | 5554          | 8606     | -                  |
|                      | M24x1.5            | -          | -            | -             | 4457       | 4998         | 6161          | 10237    | -                  |
|                      | M24x2.0            | -          | -            | -             | 4457       | 4998         | 6161          | 10237    | -                  |
|                      | M25x1.5            | -          | -            | -             | 4774       | -            | -             | 11511    | -                  |
|                      | M25x2.0            | -          | -            | -             | 4774       | -            | -             | -        | -                  |
|                      | M26x1.5            | -          | -            | -             | 4977       | -            | -             | -        | -                  |
|                      | M26x2.0            | -          | -            | -             | 4977       | -            | -             | -        | -                  |
|                      | M27x1.5            | -          | -            | -             | 6685       | -            | -             | 14502    | -                  |
|                      | M27x2.0            | -          | -            | -             | 6685       | -            | -             | -        | -                  |
|                      | M28x1.5            | -          | -            | -             | 6685       | -            | -             | 18060    | -                  |
|                      | M28x2.0            | -          | -            | -             | 6685       | -            | -             | -        | -                  |
|                      | M30x1.5            | -          | -            | -             | 7520       | -            | -             | 18060    | -                  |
|                      | M30x2.0            | -          | -            | -             | 7520       | -            | -             | 18060    | -                  |
|                      | M30x3.0            | -          | -            | -             | 7520       | -            | -             | -        | -                  |
|                      | M32x1.5            | -          | -            | -             | 7970       | -            | -             | -        | -                  |
|                      | M32x2.0            | -          | -            | -             | 7970       | -            | -             | -        | -                  |
|                      | M33x1.5            | -          | -            | -             | 9180       | -            | -             | -        | -                  |
|                      | M33x2.0            | -          | -            | -             | 9180       | -            | -             | 20027    | -                  |
|                      | M33x3.0            | -          | -            | -             | 9180       | -            | -             | -        | -                  |



# HSS HAND AND SHORT MACHINE TAPS (FINE PITCH) NON-SERIAL IS 6175 : 1992 : (6H TOL) PART II & PART III AND HSS NUT TAPS - IS : 6175 - 1991 (PART V) HSN CODE - 8207

PRICE RS. EACH

|             | NOM DIA x<br>PITCH | PART II    |              |               | PART III   |              |               | NUT TAPS | PANTHER<br>CI TAPS |
|-------------|--------------------|------------|--------------|---------------|------------|--------------|---------------|----------|--------------------|
|             |                    | STR FLUTES | SPIRAL POINT | SPIRAL FLUTES | STR FLUTES | SPIRAL POINT | SPIRAL FLUTES |          |                    |
| TIN COATING | M3.0x0.35          | 733        | 969          | -             | -          | -            | -             | -        | -                  |
|             | M3.5x0.35          | 733        | 969          | -             | -          | -            | -             | -        | -                  |
|             | M4x0.5             | 773        | 922          | -             | -          | -            | -             | -        | -                  |
|             | M4.5x0.5           | 760        | 922          | -             | -          | -            | -             | -        | -                  |
|             | M5x0.5             | 760        | 900          | -             | -          | -            | -             | -        | -                  |
|             | M6x0.75            | 768        | 1010         | 962           | 839        | 906          | 1058          | -        | -                  |
|             | M7x0.75            | 931        | 1066         | 1182          | 931        | 1081         | -             | -        | -                  |
|             | M8x0.75            | -          | -            | -             | -          | -            | -             | -        | -                  |
|             | M8x1.0             | 856        | 995          | 1076          | 931        | 1004         | 1178          | -        | -                  |
|             | M9x1.0             | -          | -            | -             | -          | -            | -             | -        | -                  |
|             | M10x1.0            | 953        | 1121         | 1265          | 1050       | 1123         | 1382          | -        | -                  |
|             | M10x1.25           | 953        | 1121         | 1265          | 1050       | 1123         | 1382          | -        | -                  |
|             | M12x1.0            | -          | -            | -             | -          | -            | -             | -        | -                  |
|             | M12x1.25           | -          | -            | -             | 1462       | 1641         | 1913          | -        | -                  |
|             | M12x1.5            | -          | -            | -             | 1462       | 1641         | 1913          | -        | -                  |
|             | M14x1.0            | -          | -            | -             | -          | -            | -             | -        | -                  |
|             | M14x1.25           | -          | -            | -             | 1863       | 2194         | 2608          | -        | -                  |
|             | M14x1.5            | -          | -            | -             | 1804       | 2194         | 2535          | -        | -                  |
|             | M16x1.0            | -          | -            | -             | -          | -            | -             | -        | -                  |
|             | M16x1.5            | -          | -            | -             | 1923       | 2312         | 2662          | -        | -                  |
|             | M18x1.0            | -          | -            | -             | -          | -            | -             | -        | -                  |
|             | M18x1.5            | -          | -            | -             | 3424       | 3783         | 4438          | -        | -                  |
|             | M18x2.0            | -          | -            | -             | 3424       | 3783         | 4438          | -        | -                  |
|             | M20x1.5            | -          | -            | -             | 4157       | 4617         | 5540          | -        | -                  |
|             | M20x2.0            | -          | -            | -             | 4157       | 4617         | 5540          | -        | -                  |
|             | M22x1.5            | -          | -            | -             | 4578       | 5127         | 6142          | -        | -                  |
|             | M22x2.0            | -          | -            | -             | 4578       | 5127         | 6142          | -        | -                  |
|             | M24x1.5            | -          | -            | -             | 5045       | 5586         | 6748          | -        | -                  |
|             | M24x2.0            | -          | -            | -             | 5045       | 5586         | 6748          | -        | -                  |

TiN Coated items are supplied against order only

## NOTES :

1. Sizes upto M10 will be supplied as per Part II unless otherwise specified.
2. Serial Taps can be supplied at the same price.
3. A Set Consist of Taper, Second & Bottoming.
4. Left Hand Taps at **25% extra**
5. For **M35 = 40% & M42 = 80% extra**

## IMPORTANT NOTES : (NUT TAPS - MOQ)

UPTO M10 (50 NOS EACH) OVER M10 - M28 (25 NOS EACH)  
OVER M28 - M35 (15 NOS EACH) OVER M35 (10 NOS EACH)

# HSS HAND & SHORT MACHINE TAPS (FINE PITCH) NON-SERIAL - 6175 : 1992 : PART III (6H-TOL) HSN CODE - 8207

PRICE RS. EACH

| NOM. DIA x PITCH | STRAIGHT FLUTES |
|------------------|-----------------|
| M35 x 1.5        | 12729           |
| M36 x 1.5        | 12729           |
| M36 x 2.0        | 12729           |
| M36 x 3.0        | 12729           |
| M39 x 1.5        | 15853           |
| M39 x 2.0        | 15853           |
| M39 x 3.0        | 15853           |
| M42 x 1.5        | 17562           |
| M42 x 2.0        | 17562           |
| M42 x 3.0        | 17562           |
| M42 x 4.0        | 17562           |
| M45 x 1.5        | 24440           |
| M45 x 2.0        | 24440           |
| M45 x 3.0        | 24440           |
| M45 x 4.0        | 24440           |
| M48 x 1.5        | 25383           |
| M48 x 2.0        | 25383           |
| M48 x 3.0        | 25383           |
| M48 x 4.0        | 25383           |
| M50 x 1.5        | 28096           |
| M50 x 2.0        | 28096           |
| M50 x 3.0        | 28096           |
| M52 x 1.5        | 31611           |
| M52 x 2.0        | 31611           |
| M52 x 3.0        | 31611           |

PRICE RS. EACH

| NOM. DIA x PITCH | STRAIGHT FLUTES |
|------------------|-----------------|
| M52 x 4.0        | 31611           |
| M56 x 1.5        | 43354           |
| M56 x 2.0        | 43354           |
| M56 x 3.0        | 43354           |
| M56 x 4.0        | 43354           |
| M60 x 1.5        | 45852           |
| M60 x 2.0        | 45852           |
| M60 x 3.0        | 46688           |
| M60 x 4.0        | 46688           |
| M64 x 1.5        | 49018           |
| M64 x 2.0        | 49018           |
| M64 x 3.0        | 49687           |
| M64 x 4.0        | 49687           |
| M68 x 1.5        | 62028           |
| M68 x 2.0        | 62028           |
| M68 x 3.0        | 62526           |
| M68 x 4.0        | 62526           |
| M72 x 6.0        | 74325           |
| M76 x 6.0        | 90718           |
| M80 x 6.0        | 109797          |
| M85 x 6.0        | 135141          |
| M90 x 6.0        | 168856          |
| M95 x 6.0        | 212529          |
| M100 x 6.0       | 262571          |

ITEM MARKED ★ ARE EX-STOCK ITEMS ALL REMAINING ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF RS. 50,000/- NETT MOQ OR 5 NOS. PER SIZE. WHICHEVER IS HIGHER.

## NOTES :

- Sizes upto M 10 will be supplied as per Part II unless otherwise specified.
- Serial Taps can be supplied at the same price.
- A Set Consist of Taper & Bottoming.

4. Left Hand Taps at **25% extra**

5. For **M35= 40% & M42 = 80% extra**

## NOTES: (NUT TAPS - MOQ)

|                |               |
|----------------|---------------|
| UPTO M10 -     | (50 NOS EACH) |
| OVER M10 - M28 | (25 NOS EACH) |
| OVER M28 - M35 | (15 NOS EACH) |
| OVER M35       | (10 NOS EACH) |

## HSS LONG MACHINE TAPS (COARSE PITCH) IS 6175 : 1991 : PART IV : (6H - TOL) HSN CODE - 8207

PRICE RS. EACH

| NOM. DIA x PITCH | STR FLUTES TYPE 'A', 'C', 'D'. | SPIRAL POINT TYPE 'B'. | SPIRAL FLUTES TYPE 'C' |
|------------------|--------------------------------|------------------------|------------------------|
| M3 x 0.5         | 1017                           | 1174                   | 1192                   |
| M4 x 0.7         | 1017                           | 1174                   | 1192                   |
| M5 x 0.8         | 735                            | 861                    | 897                    |
| M6 x 1.0         | 786                            | 925                    | 972                    |
| M8 x 1.25        | 851                            | 1017                   | 1051                   |
| M10 x 1.5        | 1080                           | 1239                   | 1318                   |
| M12 x 1.75       | 1508                           | 1751                   | 1919                   |
| M14 x 2.0        | 2170                           | 2524                   | 2906                   |
| M16 x 2.0        | 2170                           | 2524                   | 2906                   |
| M18 x 2.5        | 3355                           | 3876                   | 4371                   |
| M20 x 2.5        | 4168                           | 4788                   | 5207                   |
| M22 x 2.5        | 4629                           | 5380                   | 5244                   |
| M24 x 3.0        | 5111                           | 5971                   | 6511                   |

PRICE RS. EACH

| NOM. DIA x PITCH | STR FLUTES TYPE 'A', 'C', 'D'. | SPIRAL POINT TYPE 'B'. | SPIRAL FLUTES TYPE 'C' |
|------------------|--------------------------------|------------------------|------------------------|
| M27 x 3.0        | 7445                           |                        |                        |
| M30 x 3.5        | 8445                           |                        |                        |
| M33 x 3.5        | 9959                           |                        |                        |
| M36 x 4.0        | 13423                          |                        |                        |
| M39 x 4.0        | 15702                          |                        |                        |
| M42 x 4.5        | 18382                          |                        |                        |
| M45 x 4.5        | 24120                          |                        |                        |
| M48 x 5.0        | 27031                          |                        |                        |
| M52 x 5.0        | 31265                          |                        |                        |
| M56 x 5.5        | 41453                          |                        |                        |
| M60 x 5.5        | 47493                          |                        |                        |
| M64 x 6.0        | 53579                          |                        |                        |
| M68 x 6.0        | 74675                          |                        |                        |

ITEM MARKED ★ ARE EX-STOCK ITEMS ALL REMAINING ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000/- NETT MOQ OR 5 NOS. PER SIZE. WHICHEVER IS HIGHER.

FOR M35 = 40% & M42 = 80% extra.

### IMPORTANT NOTES :

#### MACHINE TAPS

Type 'A' - 5 Deg Taper angle with Longer taper lead

Type 'B' - 10 Deg Taper angle with Spiral point

Type 'C' - 20 Deg Taper angle with Shorter taper lead

Type 'D' - 10 Deg Taper angle without Spiral point

## HSS LONG SHANK MACH. TAPS TO DIN - 2183 BSW / UNC / BSF / UN / NF (TYPE A, B & C) HSN CODE - 8207

PRICE RS. EACH

| SIZE INCH | PRICE (RS.) EACH TYPE 'A' & 'C' | PRICE (RS.) EACH TYPE 'B' |
|-----------|---------------------------------|---------------------------|
| 1/8       | 719                             | 840                       |
| 3/16      | 791                             | 902                       |
| 1/4       | 801                             | 953                       |
| 5/16      | 930                             | 1080                      |
| 3/8       | 1119                            | 1408                      |
| 7/16      | 1331                            | 1574                      |
| 1/2       | 1578                            | 1817                      |
| 5/8       | 2313                            | 2673                      |
| 3/4       | 3031                            | 4144                      |
| 7/8       | 4859                            | 5430                      |

PRICE RS. EACH

| SIZE INCH | PRICE (RS.) EACH TYPE 'A' & 'C' | PRICE (RS.) EACH TYPE 'B' |
|-----------|---------------------------------|---------------------------|
| 1         | 6086                            | 6422                      |
| 1.1/8     | 8111                            | 8685                      |
| 1.1/4     | 9781                            | 10565                     |
| 1.1/2     | 15244                           | 15935                     |
| 1.3/8     | 15244                           | 15935                     |
| 1.5/8     | 18212                           | 18927                     |
| 1.3/4     | 21152                           | 21913                     |
| 1.7/8     | 25842                           | 26536                     |
| 2         | 30549                           | 31216                     |

# HSS LONG SHANK MACHINE TAPS (FINE PITCH)

## IS 6175 : 1991 : PART IV : (6H -TOL)

### HSN CODE - 8207

PRICE RS. EACH

| NOM. DIA x PITCH | STRAIGHT FLUTES<br>TYPE 'A', 'C', 'D' | SPIRAL POINT<br>TYPE 'B' |
|------------------|---------------------------------------|--------------------------|
| M3 x 0.35        | 1381                                  | 1482                     |
| M3.5 x 0.35      | 1381                                  | 1482                     |
| M4 x 0.5         | 1381                                  | 1482                     |
| M4.5 x 0.5       | 893                                   | 1049                     |
| M5 x 0.5         | 893                                   | 1049                     |
| M6 x 0.75        | 893                                   | 1049                     |
| M7 x 0.75        | 1022                                  | 1184                     |
| M8 x 1.0         | 939                                   | 1120                     |
| M10 x 1.0        | 1130                                  | 1309                     |
| M10 x 1.25       | 1149                                  | 1331                     |
| M12 x 1.25       | 1638                                  | 1892                     |
| M12 x 1.5        | 1638                                  | 1892                     |
| M14 x 1.25       | 2142                                  | 2533                     |
| M14 x 1.5        | 2142                                  | 2533                     |
| M16 x 1.5        | 2098                                  | 2581                     |
| M18 x 1.5        | 3690                                  | 4478                     |
| M18 x 2.0        | 3690                                  | 4478                     |
| M20 x 1.5        | 4824                                  | 5696                     |
| M20 x 2.0        | 4824                                  | 5696                     |
| M22 x 1.5        | 5002                                  | 5914                     |
| M22 x 2.0        | 5002                                  | 5914                     |
| M24 x 1.5        | 5590                                  | 6594                     |
| M24 x 2.0        | 5590                                  | 6594                     |
| M25 x 1.5        | 7117                                  | 8410                     |
| M25 x 2.0        | 7117                                  | 8410                     |
| M26 x 1.5        | 7275                                  | 8587                     |
| M26 x 2.0        | 7275                                  | 8587                     |
| M27 x 1.5        | 8766                                  | 10021                    |
| M27 x 2.0        | 8766                                  | 10021                    |
| M28 x 1.5        | 9530                                  | 10867                    |
| M28 x 2.0        | 9530                                  | 10867                    |
| M30 x 1.5        | 9865                                  |                          |
| M30 x 2.0        | 9865                                  |                          |
| M30 x 3.0        | 9865                                  |                          |
| M32 x 1.5        | 10835                                 |                          |
| M32 x 2.0        | 10835                                 |                          |
| M33 x 1.5        | 11932                                 |                          |
| M33 x 2.0        | 11932                                 |                          |
| M33 x 3.0        | 11932                                 |                          |
| M35 x 1.5        | 16679                                 |                          |
| M36 x 1.5        | 16679                                 |                          |
| M36 x 2.0        | 16679                                 |                          |
| M36 x 3.0        | 16679                                 |                          |
| M39 x 1.5        | 20507                                 |                          |
| M39 x 2.0        | 20507                                 |                          |

PRICE RS. EACH

| NOM. DIA x PITCH | STRAIGHT FLUTES<br>TYPE 'A', 'C', 'D' | SPIRAL POINT<br>TYPE 'B' |
|------------------|---------------------------------------|--------------------------|
| M39 x 3.0        | 20507                                 |                          |
| M40 x 1.5        | 21926                                 |                          |
| M40 x 2.0        | 21926                                 |                          |
| M40 x 3.0        | 21926                                 |                          |
| M42 x 1.5        | 22579                                 |                          |
| M42 x 2.0        | 22579                                 |                          |
| M42 x 3.0        | 22579                                 |                          |
| M42 x 4.0        | 22579                                 |                          |
| M45 x 1.5        | 31479                                 |                          |
| M45 x 2.0        | 31479                                 |                          |
| M45 x 3.0        | 31479                                 |                          |
| M45 x 4.0        | 31479                                 |                          |
| M48 x 1.5        | 33180                                 |                          |

| NOM. DIA X PITCH | STRAIGHT FLUTES TYPE<br>'A', 'C', 'D'. |
|------------------|----------------------------------------|
| M48 x 2.0        | 33180                                  |
| M48 x 3.0        | 33180                                  |
| M48 x 4.0        | 33180                                  |
| M50 x 1.5        | 38350                                  |
| M50 x 2.0        | 38350                                  |
| M50 x 3.0        | 38350                                  |
| M52 x 1.5        | 41019                                  |
| M52 x 2.0        | 41019                                  |
| M52 x 3.0        | 41019                                  |
| M52 x 4.0        | 41019                                  |

**HSS PIPE TAPS**  
**NPS NPT NPSF - BS : 949 - 1969**  
**BSP BS : 949 - 1957**  
**BSPT BS : 949 PART III - 1982**  
**HSN CODE - 8207**

| TAP SIZE | PRICE (RS.) EACH |       |      |              |        |       |
|----------|------------------|-------|------|--------------|--------|-------|
|          | PARALLEL THREAD  |       |      | TAPER THREAD |        |       |
| INCH     | BSP              | NPS   | NPSF | BSPT         | NPT    | NPTF  |
| 1/16     | -                | -     | -    | -            | 946    | 946   |
| 1/8      | 774              | 879   | 1066 | 989          | 1021   | 1217  |
| 1/4      | 1208             | 1523  | 1879 | 1771         | 1859   | 2294  |
| 3/8      | 1781             | 1873  | 2320 | 2342         | 2453   | 2777  |
| 1/2      | 2595             | 2788  | 3374 | 3367         | 3534   | 4003  |
| 5/8      | 2936             | -     | -    | -            | -      | -     |
| 3/4      | 4181             | 4386  | 5395 | 5470         | 5551   | 6416  |
| 7/8      | 5216             | -     | -    | -            | -      | -     |
| 1        | 6573             | 7323  | 8955 | 8504         | 8730   | 9978  |
| 1.1/4    | 9871             | 11537 | -    | 12467        | 12621  | 14700 |
| 1.1/2    | 12317            | 14257 | -    | 15289        | 16299  | -     |
| 1.3/4    | 18841            | -     | -    | -            | -      | -     |
| 2        | 22110            | 25477 | -    | 26859        | 28228  | -     |
| 2.1/4    | 38243            | -     | -    | -            | -      | -     |
| 2.1/2    | 55177            | -     | -    | 80535        | 81795  | -     |
| 2.3/4    | 61578            | -     | -    | -            | -      | -     |
| 3        | 71489            | -     | -    | 105370       | 106226 | -     |
| 3.1/2    | 93042            | -     | -    | 138892       | 139130 | -     |
| 4        | 116953           | -     | -    | 175075       | 178315 | -     |

**IMPORTANT NOTES :**

**BSP(P), BSP(T), NPS NPT NPSF NPTF**

A set consists of 2 Taps (Taper & Plug) , we can also supply BSP (P) Taps to new BS 949 : Part - III - 1982 (G Series) at the same rate as per order.

**HSS HAND TAPS BA - BS : 949 : 1969 AND HSS NUT TAPS**  
**BA - BA : 949 - 1969**  
**HSN CODE - 8207**

| SIZE BA | PRICE (RS.) EACH |              |          |
|---------|------------------|--------------|----------|
|         | STRAIGHT FLUTES  | SPIRAL POINT | NUT TAPS |
| 0       | 571              | 715          | 1166     |
| 1       | 571              | 715          | 1166     |
| 2       | 485              | 650          | 1012     |
| 3       | 485              | 650          | 1012     |
| 4★      | 485              | 650          | 1012     |
| 5       | 485              | 650          | 1119     |
| 6       | 538              | 699          | 1240     |

ITEM MARKED ★ ARE EX-STOCK ITEMS ALL REMAINING ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF Rs. 50,000/- NETT MOQ OR 50 NOS. PER SIZE. WHICHEVER IS HIGHER.  
For **M35 = 40% & M42 = 80% extra.**

**HSS GROUND THREAD TAPS :  
STANDARD HAND & SHORT MACHINE TAPS :  
B.S.B. (BRITISH STANDARD BRASS) WHITWORTH FORM  
B.S.CY. (BRITISH STANDARD CYCLE) 60° THREAD FORM  
B.S. : 949 - 1969  
HSN CODE - 8207**

| B.S. CY SIZE INCH | TPI | PRICE (RS.) EACH |                |
|-------------------|-----|------------------|----------------|
|                   |     | STR. FLUTES      | SPIRAL POINTED |
| 3/16              | 32  | 545              | 668            |
| 1/4               | 26  | 589              | 681            |
| 5/16              | 26  | 735              | 838            |
| 3/8               | 26  | 893              | 1021           |
| 7/16              | 26  | 1121             | 1348           |
| 1/2               | 26  | 1389             | 1620           |
| 9/16              | 26  | 2223             | 2456           |
| 1                 | 24  | 4630             | -              |
| 1.370             | 24  | 9786             | -              |

| B.S. B SIZE INCH | TPI | PRICE (RS.) EACH |                |
|------------------|-----|------------------|----------------|
|                  |     | STR. FLUTES      | SPIRAL POINTED |
| 1/4              | 26  | 572              | 671            |
| 5/16             | 26  | 758              | 864            |
| 3/8              | 26  | 864              | 991            |
| 7/16             | 26  | 1147             | 1365           |
| 1/2              | 26  | 1414             | 1645           |
| 9/16             | 26  | 2204             | 2427           |
| 5/8              | 26  | 2204             | -              |
| 3/4              | 26  | 2997             | -              |
| 1                | 26  | 4614             | -              |

**HSS GROUND THREAD TAPS :  
STANDARD HAND & SHORT MACHINE TAPS :  
B.S. CON (BRITISH STANDARD CONDUIT) WHITWORTH FORM B.S. : 949 -  
1969 (ZONE - 3)  
HSN CODE - 8207**

| B.S. CON SIZE INCH | TPI | PRICE (RS.) EACH |                |
|--------------------|-----|------------------|----------------|
|                    |     | STR. FLUTES      | SPIRAL POINTED |
| 1/2                | 18  | 1483             | 1483           |
| -                  | -   | -                | -              |
| 5/8                | 18  | 2268             | -              |
| 3/4                | 16  | 3152             | -              |
| 1                  | 16  | 4914             | -              |
| 1.1/4              | 16  | 7135             | -              |
| -                  | -   | -                | -              |
| 1.1/2              | 14  | 11412            | -              |
| 2                  | 14  | 19951            | -              |

| PRICES FOR LPG CYLINDER 3/4 NGT TAPS :                                 | EACH (RS.) |
|------------------------------------------------------------------------|------------|
| 1. 3/4" - 14 NGT tap interrupted 5 flutes to our Drg.No. M22 - 531     | 7084       |
| 2. 3/4" - 14 NGT tap interrupted 5 flutes to our Drg.No. M22 - 574     | 7799       |
| 3. 3/4" - 14 NGT tap interrupted 5 flutes to our Drg.No. M22 - 535     | 6770       |
| 4. 3/4" - 14 NGT tap NON-interrupted 4 flutes to our Drg.No. M22 - 535 | 5414       |

| PRICES FOR LPG CYLINDER BSGT TAPS :                                          | EACH (RS.) |
|------------------------------------------------------------------------------|------------|
| 0.715" x 14 TPI - BSGT Tap Interrupted 5 flutes to our Drg. No. SKT-012      | 7951       |
| 0.715" x 14 TPI - BSGT Tap NON-Interrupted 4 flutes to our Drg. No. SKT- 012 | 6936       |

**IMPORTANT NOTES :**

FOR M35 = 40% & M42 = 80% extra.

ALL NGT & BSGT TAPS ARE SUBJECT TO ORDER VALUE BEING MINIMUM  
ITEM MARKED ★ ARE EX-STOCK ITEMS ALL REMAINING ITEMS WILL ATTRACT  
MINIMUM ORDER VALUE OF Rs. 50,000/- NETT MOQ OR 15 NOS. PER SIZE.  
WHICHEVER IS HIGHER.

Prices for all TiN and TiAlN Taps will be given on specific request.

## HSS HAND TAPS BSW, BSF, UNC, UNF AND HSS NUT TAPS

**B.S. : 949 - 1969**  
**HSN CODE - 8207**

| SIZE INCH        | PRICE (RS.) EACH |              |               |          |
|------------------|------------------|--------------|---------------|----------|
|                  | STRAIGHT FLUTES  | SPIRAL POINT | SPIRAL FLUTES | NUT TAPS |
| 1/8              | 487              | 581          | -             | -        |
| 3/16             | 487              | 598          | -             | 1049     |
| 1/4              | 505              | 607          | 706           | 1189     |
| 5/16             | 571              | 707          | 782           | 1488     |
| 3/8              | 695              | 851          | 970           | 1962     |
| 7/16             | 889              | 1096         | 1274          | 2433     |
| 1/2              | 1125             | 1350         | 1556          | 3380     |
| 9/16             | 1627             | 1985         | 2393          | 3380     |
| 5/8              | 1627             | 1985         | 2393          | 4386     |
| 11/16            | -                | -            | -             | 4606     |
| 3/4              | 2576             | 3085         | 3647          | 5414     |
| 7/8              | 3553             | 4280         | 4983          | 7416     |
| 1                | 4493             | 5192         | 5959          | 9644     |
| 1.1/8            | 6084             | -            | -             | 12987    |
| 1.1/4            | 7314             | -            | -             | 16099    |
| 1.3/8            | 9446             | -            | -             | 19158    |
| 1.1/2            | 11340            | -            | -             | 22957    |
| 1.5/8 (BSF ONLY) | 13361            | -            | -             | 25838    |
| 1.3/4            | 15716            | -            | -             | 32293    |
| 2                | 22288            | -            | -             | 46022    |
| 2.1/4            | 33226            | -            | -             | -        |
| 2.1/2            | 43719            | -            | -             | -        |
| 2.3/4            | 54540            | -            | -             | -        |
| 3                | 73232            | -            | -             | -        |

A set consist of Taper, Second & Bottoming

## HSS NIB TAPS (CORSE PITCH) TO OUR STANDARD HSN CODE - 8207

| NOM DIA x PITCH | STRAIGHT FLUTES<br>PRICE (RS.) EACH |
|-----------------|-------------------------------------|
| M4 x 0.7        | 686                                 |
| M5 x 0.8        | 735                                 |
| M6 x 1.0        | 819                                 |
| M8 x 1.25       | 857                                 |
| M10 x 1.5       | 1079                                |
| M12 x 1.75      | 1263                                |
| M14 x 2.0       | 2192                                |
| M16 x 2.0       | 2192                                |
| M18 x 2.5       | 3611                                |
| M20 x 2.5       | 4827                                |

| NOM DIA x PITCH | STRAIGHT FLUTES<br>PRICE (RS.) EACH |
|-----------------|-------------------------------------|
| 1/8" BSW        | 734                                 |
| 5/32" BSW       | 749                                 |
| 3/16" BSW       | 749                                 |
| 1/4" BSW        | 765                                 |
| 5/16" BSW       | 857                                 |
| 3/8" BSW        | 1079                                |
| 7/16" BSW       | 1513                                |
| 1/2" BSW        | 1513                                |
| 9/16" BSW       | 2192                                |
| 5/8" BSW        | 2192                                |

ITEM MARKED ★ ARE EX-STOCK ITEMS ALL REMAINING ITEMS WILL ATTRACT MINIMUM ORDER VALUE OF RS. 50,000/- NETT MOQ OR 25 NOS. PER SIZE. WHICHEVER IS HIGHER.

FOR **M35 = 40% & M42 = 80% extra.**

## HSS-E PANTHER SERIES TAPS TO IS 6175 - PART - II & PART - IV AND DIN - 371 HSN CODE - 8207

PRICE RS. EACH

|                         | NOM DIA X PITCH | IS : 6175 - PART - II & DIN 371 |        |           |           |                       |
|-------------------------|-----------------|---------------------------------|--------|-----------|-----------|-----------------------|
|                         |                 | SPPT                            | SPIRAL | CAST IRON | FLUTELESS | FLUTELESS OIL GROOVES |
| Bright / Steam Tempered | M3 x 0.5        | 801                             | 897    | 667       |           |                       |
|                         | M4 x 0.7        | 801                             | 897    | 667       | 1402      | 1547                  |
|                         | M5 x 0.8        | 835                             | 946    | 702       | 1402      | 1547                  |
|                         | M6 x 1.0        | 835                             | 946    | 702       | 1402      | 1547                  |
|                         | M8 x 1.0        | 1113                            | 1357   | 925       | 1946      | 2032                  |
|                         | M8 x 1.25       | 937                             | 1070   | 774       | 1620      | 1694                  |
|                         | M10 x 1.25      | 1340                            | 1536   | 1120      | 1981      | 2071                  |
|                         | M10 x 1.50      | 1154                            | 1331   | 962       | 1981      | 2071                  |
|                         | M12 x 1.75      |                                 |        |           |           |                       |
|                         | M14 x 2.0       |                                 |        |           |           |                       |
|                         | M16 x 1.5       |                                 |        |           |           |                       |
|                         | M16 x 2.0       |                                 |        |           |           |                       |



# HSS-E PANTHER SERIES TAPS TO IS 6175 - PART - II & PART - IV AND DIN - 371 HSN CODE - 8207

PRICE RS. EACH

|               | NOM DIA X PITCH | IS : 6175 - PART - II & DIN 371 |        |           |           |                      |
|---------------|-----------------|---------------------------------|--------|-----------|-----------|----------------------|
|               |                 | SPPT                            | SPIRAL | CAST IRON | FLUTELESS | FLUTELESSOIL GROOVES |
| Tin - Coating | M3 x 0.5        | 878                             | 986    | 727       |           |                      |
|               | M4 x 0.7        | 878                             | 986    | 727       | 1512      | 1653                 |
|               | M5 x 0.8        | 917                             | 1040   | 767       | 1512      | 1653                 |
|               | M6 x 1.0        | 917                             | 1040   | 767       | 1512      | 1653                 |
|               | M8 x 1.0        | 1199                            | 1462   | 998       | 2071      | 2159                 |
|               | M8 x 1.25       | 1025                            | 1172   | 851       | 1748      | 1820                 |
|               | M10 x 1.25      | 1470                            | 1686   | 1224      | 2133      | 2224                 |
|               | M10 x 1.50      | 1269                            | 1458   | 1054      | 2085      | 2224                 |
|               | M12 x 1.75      |                                 |        |           |           |                      |
|               | M14 x 2.0       |                                 |        |           |           |                      |
|               | M16 x 1.5       |                                 |        |           |           |                      |
|               | M16 x 2.0       |                                 |        |           |           |                      |

PRICE RS. EACH

|                  | NOM DIA X PITCH | IS : 6175 - PART - II & DIN 371 |        |           |           |                      |
|------------------|-----------------|---------------------------------|--------|-----------|-----------|----------------------|
|                  |                 | SPPT                            | SPIRAL | CAST IRON | FLUTELESS | FLUTELESSOIL GROOVES |
| TiCN / Ti (Al) N | M3 x 0.5        | 953                             | 1074   | 791       |           |                      |
|                  | M4 x 0.7        | 953                             | 1074   | 791       | 1625      | 1766                 |
|                  | M5 x 0.8        | 997                             | 1130   | 833       | 1625      | 1766                 |
|                  | M6 x 1.0        | 997                             | 1130   | 833       | 1625      | 1766                 |
|                  | M8 x 1.0        | 1290                            | 1561   | 1073      | 2198      | 2287                 |
|                  | M8 x 1.25       | 1115                            | 1274   | 923       | 1873      | 1948                 |
|                  | M10 x 1.25      | 1599                            | 1833   | 1333      | 2288      | 2377                 |
|                  | M10 x 1.50      | 1375                            | 1582   | 1146      | 2287      | 2377                 |
|                  | M12 x 1.75      |                                 |        |           |           |                      |
|                  | M14 x 2.0       |                                 |        |           |           |                      |
|                  | M16 x 1.5       |                                 |        |           |           |                      |
|                  | M16 x 2.0       |                                 |        |           |           |                      |

# HSS-E PANTHER SERIES TAPS TO IS 6175 - PART - II & PART - IV AND DIN - 371 HSN CODE - 8207

PRICE RS. EACH

|                         | NOM DIA X PITCH | IS : 6175 - PART - IV |        |           |           |                       |
|-------------------------|-----------------|-----------------------|--------|-----------|-----------|-----------------------|
|                         |                 | SPPT                  | SPIRAL | CAST IRON | FLUTELESS | FLUTELESS OIL GROOVES |
| Bright / Steam Tempered | M6 x 1.0        | 1331                  |        | 1108      |           |                       |
|                         | M8 x 1.0        |                       |        |           |           |                       |
|                         | M8 x 1.25       | 1415                  |        | 1182      |           |                       |
|                         | M10 x 1.25      |                       |        |           |           |                       |
|                         | M10 x 1.5       | 1724                  |        | 1438      |           |                       |
|                         | M12 x 1.75      | 2504                  |        | 2066      |           |                       |
|                         | M14 x 2.0       |                       |        |           |           |                       |
|                         | M16 x 1.5       |                       |        |           |           |                       |
|                         | M16 x 2.0       |                       |        |           |           |                       |

PRICE RS. EACH

|               | NOM DIA X PITCH | IS : 6175 - PART - IV |        |           |           |                       |
|---------------|-----------------|-----------------------|--------|-----------|-----------|-----------------------|
|               |                 | SPPT                  | SPIRAL | CAST IRON | FLUTELESS | FLUTELESS OIL GROOVES |
| Tin - Coating | M6 x 1.0        | 1458                  |        | 1214      |           |                       |
|               | M8 x 1.0        |                       |        |           |           |                       |
|               | M8 x 1.25       | 1548                  |        | 1291      |           |                       |
|               | M10 x 1.25      |                       |        |           |           |                       |
|               | M10 x 1.5       | 1887                  |        | 1578      |           |                       |
|               | M12 x 1.75      | 2740                  |        | 2260      |           |                       |
|               | M14 x 2.0       |                       |        |           |           |                       |
|               | M16 x 1.5       |                       |        |           |           |                       |
|               | M16 x 2.0       |                       |        |           |           |                       |

PRICE RS. EACH

|                  | NOM DIA X PITCH | IS : 6175 - PART - IV |        |           |           |                       |
|------------------|-----------------|-----------------------|--------|-----------|-----------|-----------------------|
|                  |                 | SPPT                  | SPIRAL | CAST IRON | FLUTELESS | FLUTELESS OIL GROOVES |
| TiCN / Ti (Al) N | M6 x 1.0        | 1582                  |        | 1319      |           |                       |
|                  | M8 x 1.0        |                       |        |           |           |                       |
|                  | M8 x 1.25       | 1685                  |        | 1404      |           |                       |
|                  | M10 x 1.25      |                       |        |           |           |                       |
|                  | M10 x 1.5       | 2052                  |        | 1717      |           |                       |
|                  | M12 x 1.75      | 2978                  |        | 2457      |           |                       |
|                  | M14 x 2.0       |                       |        |           |           |                       |
|                  | M16 x 1.5       |                       |        |           |           |                       |
|                  | M16 x 2.0       |                       |        |           |           |                       |

\* MINIMUM ORDER VALUE OF Rs 50,000/- NETT OR MOQ 10 NO'S PER SIZE WHICH EVER IS HIGHER

# HSS-E PANTHER SERIES TAPS TO IS 6175 PART - III & DIN - 374 AND DIN - 376 HSN CODE - 8207

PRICE RS. EACH

|                         | NOM DIA X PITCH | IS : 6175 - PART - III |        |           |           |                      |
|-------------------------|-----------------|------------------------|--------|-----------|-----------|----------------------|
|                         |                 | SPPT                   | SPIRAL | CAST IRON | FLUTELESS | FLUTELESSOIL GROOVES |
| Bright / Steam Tempered | M3 x 0.5        |                        |        |           |           |                      |
|                         | M4 x 0.7        |                        |        |           |           |                      |
|                         | M5 x 0.8        |                        |        |           |           |                      |
|                         | M6 x 1.0        |                        |        |           |           |                      |
|                         | M8 x 1.0        |                        |        |           |           |                      |
|                         | M8 x 1.25       |                        |        |           |           |                      |
|                         | M10 x 1.25      |                        |        |           |           |                      |
|                         | M10 x 1.50      |                        |        |           |           |                      |
|                         | M12 x 1.75      | 1814                   | 2090   | 1534      |           | 3413                 |
|                         | M14 x 2.0       | 2467                   | 2817   | 2051      |           | 4720                 |
|                         | M16 x 1.5       | 2478                   | 2840   | 2066      |           | 5053                 |
|                         | M16 x 2.0       | 2467                   | 2817   | 2051      |           | 5053                 |
|                         | M18 x 2.5       | 3580                   | 4091   | 2976      |           |                      |
|                         | M20 x 1.5       | 5999                   | 7799   | 5386      |           |                      |
|                         | M20 x 2.5       | 4718                   | 5390   | 3921      |           | 9451                 |

PRICE RS. EACH

|               | NOM DIA X PITCH | IS : 6175 - PART - III |        |           |           |                      |
|---------------|-----------------|------------------------|--------|-----------|-----------|----------------------|
|               |                 | SPPT                   | SPIRAL | CAST IRON | FLUTELESS | FLUTELESSOIL GROOVES |
| Tin - Coating | M3 x 0.5        |                        |        |           |           |                      |
|               | M4 x 0.7        |                        |        |           |           |                      |
|               | M5 x 0.8        |                        |        |           |           |                      |
|               | M6 x 1.0        |                        |        |           |           |                      |
|               | M8 x 1.0        |                        |        |           |           |                      |
|               | M8 x 1.25       |                        |        |           |           |                      |
|               | M10 x 1.25      |                        |        |           |           |                      |
|               | M10 x 1.50      |                        |        |           |           |                      |
|               | M12 x 1.75      | 1985                   | 2289   | 1682      |           | 3585                 |
|               | M14 x 2.0       | 2703                   | 3088   | 2249      |           | 5029                 |
|               | M16 x 1.5       | 2714                   | 3436   | 2260      |           | 5363                 |
|               | M16 x 2.0       | 2703                   | 3088   | 2249      |           | 5363                 |
|               | M18 x 2.5       | 3809                   | 4320   | 3204      |           |                      |
|               | M20 x 1.5       | 6799                   | 8654   | 6053      |           |                      |
|               | M20 x 2.5       | 5027                   | 5704   | 4233      |           | 9777                 |

## HSS-E PANTHER SERIES TAPS TO IS 6175 PART - III & DIN - 374 AND DIN - 376 HSN CODE - 8207

PRICE RS. EACH

|                  | NOM DIA X PITCH | IS : 6175 - PART - III |        |           |           |                       |
|------------------|-----------------|------------------------|--------|-----------|-----------|-----------------------|
|                  |                 | SPPT                   | SPIRAL | CAST IRON | FLUTELESS | FLUTELESS OIL GROOVES |
| TiCN / Ti (Al) N | M3 x 0.5        |                        |        |           |           |                       |
|                  | M4 x 0.7        |                        |        |           |           |                       |
|                  | M5 x 0.8        |                        |        |           |           |                       |
|                  | M6 x 1.0        |                        |        |           |           |                       |
|                  | M8 x 1.0        |                        |        |           |           |                       |
|                  | M8 x 1.25       |                        |        |           |           |                       |
|                  | M10 x 1.25      |                        |        |           |           |                       |
|                  | M10 x 1.50      |                        |        |           |           |                       |
|                  | M12 x 1.75      | 2159                   | 2485   | 1827      |           | 3860                  |
|                  | M14 x 2.0       | 2938                   | 3361   | 2444      |           | 5338                  |
|                  | M16 x 1.5       | 2950                   | 3705   | 2457      |           | 5672                  |
|                  | M16 x 2.0       | 2938                   | 3361   | 2444      |           | 5672                  |
|                  | M18 x 2.5       | 4034                   | 4550   | 3430      |           |                       |
|                  | M20 x 1.5       | 7599                   | 9511   | 6719      |           |                       |
|                  | M20 x 2.5       | 5336                   | 6012   | 4542      |           | 10104                 |

PRICE RS. EACH

|                         | NOM DIA X PITCH | DIN - 374 / DIN - 376 |        |           |           |                       |
|-------------------------|-----------------|-----------------------|--------|-----------|-----------|-----------------------|
|                         |                 | SPPT                  | SPIRAL | CAST IRON | FLUTELESS | FLUTELESS OIL GROOVES |
| Bright / Steam Tempered | M6 x 1.0        |                       |        |           |           |                       |
|                         | M8 x 1.0        | 1513                  | 2033   | 1303      | 2405      |                       |
|                         | M8 x 1.25       |                       |        |           |           |                       |
|                         | M10 x 1.25      | 1895                  | 2320   | 1548      | 2942      |                       |
|                         | M10 x 1.5       |                       |        |           |           |                       |
|                         | M12 x 1.75      | 2504                  | 3359   | 2066      |           | 4370                  |
|                         | M14 x 2.0       | 3437                  | 4602   | 2832      |           | 5999                  |
|                         | M16 x 1.5       | 3607                  | 4738   | 2965      |           |                       |
|                         | M16 x 2.0       | 3437                  | 4602   | 2832      |           | 5999                  |
|                         | M18 x 2.5       | 5570                  | 7242   | 4863      |           |                       |
|                         | M20 x 1.5       |                       |        |           |           |                       |
|                         | M20 x 2.5       | 6850                  | 8903   | 5973      |           |                       |

# HSS-E PANTHER SERIES TAPS TO IS 6175 PART - III & DIN - 374 AND DIN - 376 HSN CODE - 8207

PRICE RS. EACH

|               | NOM DIA X PITCH | DIN - 374 / DIN - 376 |        |           |           |                       |
|---------------|-----------------|-----------------------|--------|-----------|-----------|-----------------------|
|               |                 | SPPT                  | SPIRAL | CAST IRON | FLUTELESS | FLUTELESS OIL GROOVES |
| Tin - Coating | M6 x 1.0        |                       |        |           |           |                       |
|               | M8 x 1.0        | 1647                  | 2187   | 1414      | 2577      | 2686                  |
|               | M8 x 1.25       |                       |        |           |           |                       |
|               | M10 x 1.25      | 2064                  | 2510   | 1685      | 3148      | 3285                  |
|               | M10 x 1.5       |                       |        |           |           |                       |
|               | M12 x 1.75      | 2740                  | 3632   | 2260      |           | 4746                  |
|               | M14 x 2.0       | 3634                  | 4801   | 3033      |           | 6217                  |
|               | M16 x 1.5       | 3889                  | 4847   | 3212      |           | 7126                  |
|               | M16 x 2.0       | 3634                  | 4801   | 3033      |           | 6217                  |
|               | M18 x 2.5       | 5799                  | 7468   | 5091      |           |                       |
|               | M20 x 1.5       |                       |        |           |           |                       |
|               | M20 x 2.5       | 7159                  | 9212   | 4691      |           |                       |

PRICE RS. EACH

|                  | NOM DIA X PITCH | DIN - 374 / DIN - 376 |        |           |           |                       |
|------------------|-----------------|-----------------------|--------|-----------|-----------|-----------------------|
|                  |                 | SPPT                  | SPIRAL | CAST IRON | FLUTELESS | FLUTELESS OIL GROOVES |
| TiCN / Ti (Al) N | M6 x 1.0        |                       |        |           |           |                       |
|                  | M8 x 1.0        | 1782                  | 2341   | 1526      | 2751      | 2857                  |
|                  | M8 x 1.25       |                       |        |           |           |                       |
|                  | M10 x 1.25      | 2225                  | 2705   | 1821      | 3356      | 3489                  |
|                  | M10 x 1.5       |                       |        |           |           |                       |
|                  | M12 x 1.75      | 2978                  | 3903   | 2457      |           | 5120                  |
|                  | M14 x 2.0       | 3836                  | 5004   | 3233      |           | 6433                  |
|                  | M16 x 1.5       | 4208                  | 4982   | 3480      |           | 7493                  |
|                  | M16 x 2.0       | 3836                  | 5004   | 3233      |           | 6433                  |
|                  | M18 x 2.5       | 6025                  | 7697   | 5317      |           |                       |
|                  | M20 x 1.5       |                       |        |           |           |                       |
|                  | M20 x 2.5       | 7469                  | 9525   | 6593      |           |                       |

\* MINIMUM ORDER VALUE OF Rs 50,000/- NETT OR MOQ 10 NO'S PER SIZE WHICH EVER IS HIGHER

PRICE RS. EACH

|                         | NOM DIA X PITCH | IS : 6175 - PART - II & PART III |        |           |           |                       |
|-------------------------|-----------------|----------------------------------|--------|-----------|-----------|-----------------------|
|                         |                 | SPPT                             | SPIRAL | CAST IRON | FLUTELESS | FLUTELESS OIL GROOVES |
| Bright / Steam Tempered | M3 x 0.5        | 1071                             | 1201   | 892       |           |                       |
|                         | M4 x 0.7        | 1071                             | 1201   | 892       |           |                       |
|                         | M5 x 0.8        | 1120                             | 1269   | 940       |           |                       |
|                         | M6 x 1.0        | 1120                             | 1269   | 940       |           |                       |
|                         | M8 x 1.0        | 1299                             | 1818   | 1036      |           |                       |
|                         | M8 x 1.25       | -                                | -      | -         |           |                       |
|                         | M10 x 1.25      | 1548                             | 1782   | 1290      |           |                       |
|                         | M10 x 1.5       | 2428                             | 2804   | 2056      |           |                       |
|                         | M12 x 1.75      | 3325                             | 3817   | 2768      |           |                       |
|                         | M14 x 2.0       | 3308                             | 3775   | 2747      |           |                       |
|                         | M16 x 1.5       | 4838                             | 3806   | 2766      |           |                       |
|                         | M16 x 2.0       | 3308                             | 3775   | 2747      |           |                       |

PRICE RS. EACH

|               | NOM DIA X PITCH | IS : 6175 - PART - II & PART III |        |           |           |                       |
|---------------|-----------------|----------------------------------|--------|-----------|-----------|-----------------------|
|               |                 | SPPT                             | SPIRAL | CAST IRON | FLUTELESS | FLUTELESS OIL GROOVES |
| Tin - Coating | M3 x 0.5        | 1176                             | 1322   | 975       |           |                       |
|               | M4 x 0.7        | 1176                             | 1322   | 975       |           |                       |
|               | M5 x 0.8        | 1228                             | 1392   | 1030      |           |                       |
|               | M6 x 1.0        | 1228                             | 1392   | 1030      |           |                       |
|               | M8 x 1.0        | 1374                             | 1571   | 1140      |           |                       |
|               | M8 x 1.25       | -                                | -      | -         |           |                       |
|               | M10 x 1.25      | 1699                             | 1953   | 1412      |           |                       |
|               | M10 x 1.5       | 2660                             | 3068   | 2253      |           |                       |
|               | M12 x 1.75      | 3644                             | 4344   | 3034      |           |                       |
|               | M14 x 2.0       | 3623                             | 4139   | 3014      |           |                       |
|               | M16 x 1.5       | 3637                             | 4602   | 3029      |           |                       |
|               | M16 x 2.0       | 3623                             | 4139   | 3014      |           |                       |

## HSS (M42) NINJA SERIES TAPS

### HSN CODE - 8207

PRICE RS. EACH

|                  | NOM DIA X PITCH | IS : 6175 - PART - II & PART III |        |           |           |                       |
|------------------|-----------------|----------------------------------|--------|-----------|-----------|-----------------------|
|                  |                 | SPPT                             | SPIRAL | CAST IRON | FLUTELESS | FLUTELESS OIL GROOVES |
| TiCN / Ti (Al) N | M3 x 0.5        | 1279                             | 1440   | 1058      |           |                       |
|                  | M4 x 0.7        | 1279                             | 1440   | 1058      |           |                       |
|                  | M5 x 0.8        | 1336                             | 1514   | 1117      |           |                       |
|                  | M6 x 1.0        | 1336                             | 1514   | 1117      |           |                       |
|                  | M8 x 1.0        | 1494                             | 1710   | 1238      |           |                       |
|                  | M8 x 1.25       | -                                | -      | -         |           |                       |
|                  | M10 x 1.25      | 1843                             | 2122   | 1535      |           |                       |
|                  | M10 x 1.50      | 2895                             | 3332   | 2449      |           |                       |
|                  | M12 x 1.75      | 3958                             | 4706   | 3295      |           |                       |
|                  | M14 x 2.0       | 3938                             | 4504   | 3272      |           |                       |
|                  | M16 x 1.5       | 3953                             | 4965   | 3292      |           |                       |
|                  | M16 x 2.0       | 3938                             | 4504   | 3272      |           |                       |

## MASONARY DRILLS - CARBIDE TIPPED (GROUND FLUTED & BRIGHT PLATED) TO OUR STANDARD / HSN CODE - 8207

| SIZE |        | FLUTE LENGTH | OVER ALL LENGTH | PRICE (RS.) EACH |        |
|------|--------|--------------|-----------------|------------------|--------|
| MM   | INCH   |              |                 | STANDARD         | DELUXE |
| 3    | 1/8 ★  | 40           | 76              | 83               | 98     |
| 4    | 5/32   | 45           | 85              | 99               | 117    |
| 5    | 3/16 ★ | 45           | 87              | 134              | 162    |
| 5.5  | 7/32 ★ | 45           | 87              | 152              | 181    |
| 6    | 15/64  | 60           | 107             | 187              | 225    |
| 6.5  | 1/4    | 60           | 107             | 196              | 233    |
| 7    | 9/32   | 60           | 107             | 284              | 340    |
| 8    | 5/16   | 80           | 120             | 331              | 398    |
| 9    | 11/32  | 80           | 120             | 478              | 658    |
| 10   | 3/8    | 80           | 120             | 488              | 583    |
| 11   | 7/16   | 115          | 160             | 643              | 773    |
| 12   | 15/32  | 115          | 160             | 875              | 1049   |
| 13   | 1/2    | 115          | 160             | 875              | 1049   |

ITEMS MARKED ★ ARE EX-STOCK.

## HSS HATHYAR TOOL BITS (BLANKS) HSN CODE - 7228

| SIZE      |          | PRICE (RS.) EACH |             |              |
|-----------|----------|------------------|-------------|--------------|
| MM        | INCH     | HATHYAR 600      | HATHYAR 900 | HATHYAR 1000 |
| 5 x 75    | 3/16 x 3 | 212              | 545         | -            |
| 5 x 100   | 3/16 x 4 | 278              | 798         | -            |
| 5 x 150   | 3/16 x 6 | 431              | 1692        | -            |
| 6 x 75    | 1/4 x 3  | 242              | 729         | 984          |
| 6 x 100   | 1/4 x 4  | 281              | 974         | 984          |
| 6 x 150   | 1/4 x 6  | 407              | 1583        | 1596         |
| 6 x 200   | 1/4 x 8  | 584              | 2702        | -            |
| 8 x 75    | 5/16 x 3 | 269              | 941         | -            |
| 8 x 100   | 5/16 x 4 | 342              | 1287        | -            |
| 8 x 150   | 5/16 x 6 | 575              | 2073        | 2093         |
| 8 x 200   | 5/16 x 8 | 731              | 2949        | -            |
|           | 3/8 x 3  | 336              | 1106        | 1176         |
|           | 3/8 x 4  | 407              | 1466        | 1583         |
|           | 3/8 x 6  | 632              | 2361        | 2498         |
|           | 3/8 x 8  | 866              | 3375        | 3576         |
|           | 3/8 x 10 | 1115             | 4461        | -            |
| 10 x 75   |          | 372              | 1220        | -            |
| 10 x 100  |          | 444              | 1641        | -            |
| 100 x 150 |          | 687              | 2568        | -            |
| 10 x 200  |          | 957              | 3611        | -            |
| 10 x 250  |          | 1214             | 4767        | -            |
| 12 x 75   | 1/2 x 3  | 504              | 1811        | -            |
| 12 x 100  | 1/2 x 4  | 632              | 2366        | 2513         |
| 12 x 150  | 1/2 x 6  | 969              | 3726        | 3885         |
| 12 x 200  | 1/2 x 8  | 1277             | 5202        | 5415         |



## HSS HATHYAR TOOL BITS (BLANKS)

### HSN CODE - 7228

| SIZE     |          | PRICE (RS.) EACH |             |              |
|----------|----------|------------------|-------------|--------------|
| MM       | INCH     | HATHYAR 600      | HATHYAR 900 | HATHYAR 1000 |
| 12 x 250 | 1/2 x 10 | 1940             | 7167        | -            |
| 16 x 100 | 5/8 x 4  | 1004             | 3794        | -            |
| 16 x 150 | 5/8 x 6  | 1484             | 5853        | 6179         |
| 16 x 200 | 5/8 x 8  | 2007             | 8217        | -            |
|          | 3/4 x 4  | 1392             | 5486        | 8580         |
|          | 3/4 x 6  | 2034             | 8066        | -            |
|          | 3/4 x 8  | 2780             | 11058       | -            |
| 20 x 100 |          | 1518             | 6008        | -            |
| 20 x 150 |          | 2214             | 8999        | -            |
| 20 x 200 |          | 3029             | 11987       | -            |
| 25 x 150 | 1 x 6    | 3428             | 13532       | -            |
| 25 x 200 | 1 x 8    | 4658             | 17996       | -            |

Prices HSS M35 (5% Cobalt) and HSS M42 (8% Cobalt) will be given on only request.

1. Item marked ★ are Ex-Stock, other sizes against specific orders.
2. Quantity to be ordered in multiple of 10 only for sizes upto and including 1/2" square.
3. Minimum order value of Rs. 50,000/- Nett or MOQ 20 Nos. per size whichever is higher.

## FRACTIONS OF AN INCH EXPRESSED AS MILLIMETERS

| FRACTIONAL INCH | MM      | FRACTIONAL INCH | MM     | FRACTIONAL INCH | MM     | FRACTIONAL INCH | MM     |
|-----------------|---------|-----------------|--------|-----------------|--------|-----------------|--------|
| 1/64            | 0.3969  | 1 1/64          | 25.797 | 2 1/64          | 51.197 | 3 1/64          | 76.597 |
| 1/32            | 0.7938  | 1 1/32          | 26.194 | 2 1/32          | 51.594 | 3 1/32          | 76.994 |
| 3/64            | 1.1906  | 1 3/64          | 26.591 | 2 3/64          | 51.991 | 3 3/64          | 77.391 |
| 1/16            | 1.5875  | 1 1/16          | 26.988 | 2 1/16          | 52.388 | 3 1/16          | 77.788 |
| 5/64            | 1.9844  | 1 5/64          | 27.384 | 2 5/64          | 52.784 | 3 5/64          | 78.184 |
| 3/32            | 2.3813  | 1 3/32          | 27.781 | 2 3/32          | 53.181 | 3 3/32          | 78.581 |
| 7/64            | 2.7781  | 1 7/64          | 28.178 | 2 7/64          | 53.578 | 3 7/64          | 78.978 |
| 1/8             | 3.1750  | 1 1/8           | 28.575 | 2 1/8           | 53.975 | 3 1/8           | 79.375 |
| 9/64            | 3.5719  | 1 9/64          | 28.972 | 2 9/64          | 54.372 | 3 9/64          | 79.772 |
| 5/32            | 3.9688  | 1 5/32          | 29.369 | 2 5/32          | 54.769 | 3 5/32          | 80.169 |
| 11/64           | 4.3656  | 1 11/64         | 29.766 | 2 11/64         | 55.166 | 3 11/64         | 80.566 |
| 3/16            | 4.7625  | 1 3/16          | 30.163 | 2 3/16          | 55.563 | 3 3/16          | 80.963 |
| 13/64           | 5.1594  | 1 13/64         | 30.559 | 2 13/64         | 55.959 | 3 13/64         | 81.359 |
| 7/32            | 5.5563  | 1 7/32          | 30.956 | 2 7/32          | 56.356 | 3 7/32          | 81.756 |
| 15/64           | 5.9531  | 1 15/64         | 31.353 | 2 15/64         | 56.753 | 3 15/64         | 82.153 |
| 1/4             | 6.3500  | 1 1/4           | 31.750 | 2 1/4           | 57.150 | 3 1/4           | 82.550 |
| 17/64           | 6.7469  | 1 17/64         | 32.147 | 2 17/64         | 57.547 | 3 17/64         | 82.947 |
| 9/32            | 7.1438  | 1 9/32          | 32.544 | 2 9/32          | 57.944 | 3 9/32          | 83.344 |
| 19/64           | 7.5406  | 1 19/64         | 32.941 | 2 19/64         | 58.341 | 3 19/64         | 83.741 |
| 5/16            | 7.9375  | 1 5/16          | 33.338 | 2 5/16          | 58.738 | 3 5/16          | 84.138 |
| 21/64           | 8.3344  | 1 21/64         | 33.734 | 2 21/64         | 59.134 | 3 21/64         | 84.534 |
| 11/32           | 8.7313  | 1 11/32         | 34.131 | 2 11/32         | 59.531 | 3 11/32         | 84.931 |
| 23/64           | 9.1281  | 1 23/64         | 34.528 | 2 23/64         | 59.928 | 3 23/64         | 85.328 |
| 3/8             | 9.5250  | 1 3/8           | 34.925 | 2 3/8           | 60.325 | 3 3/8           | 85.725 |
| 25/64           | 9.9219  | 1 25/64         | 35.322 | 2 25/64         | 60.722 | 3 25/64         | 86.122 |
| 13/32           | 10.3188 | 1 13/32         | 35.719 | 2 13/32         | 61.119 | 3 13/32         | 86.519 |
| 27/64           | 10.7156 | 1 27/64         | 36.116 | 2 27/64         | 61.516 | 3 27/64         | 86.916 |
| 7/16            | 11.1125 | 1 7/16          | 36.513 | 2 7/16          | 61.913 | 3 7/16          | 87.313 |
| 19/64           | 7.5406  | 1 19/64         | 32.941 | 2 19/64         | 58.341 | 3 19/64         | 83.741 |
| 15/32           | 11.9063 | 1 15/32         | 37.306 | 2 15/32         | 62.706 | 3 15/32         | 88.106 |
| 31/64           | 12.3031 | 1 31/64         | 37.703 | 2 31/64         | 63.103 | 3 31/64         | 88.503 |
| 1/2             | 12.7000 | 1 1/2           | 38.100 | 2 1/2           | 63.500 | 3 1/2           | 88.900 |
| 33/64           | 13.0969 | 1 33/64         | 38.497 | 2 33/64         | 63.897 | 3 33/64         | 89.297 |
| 17/32           | 13.4938 | 1 17/32         | 38.894 | 2 17/32         | 64.294 | 3 17/32         | 89.694 |
| 35/64           | 13.8906 | 1 35/64         | 39.291 | 2 35/64         | 64.691 | 3 35/64         | 90.091 |
| 9/16            | 14.2875 | 1 9/16          | 39.688 | 2 9/16          | 65.088 | 3 9/16          | 90.488 |
| 37/64           | 14.6844 | 1 37/64         | 40.084 | 2 37/64         | 65.484 | 3 37/64         | 90.884 |
| 19/32           | 15.0813 | 1 19/32         | 40.481 | 2 19/32         | 65.881 | 3 19/32         | 91.281 |
| 39/64           | 15.4781 | 1 39/64         | 40.878 | 2 39/64         | 66.278 | 3 39/64         | 91.678 |
| 5/8             | 15.8750 | 1 5/8           | 41.275 | 2 5/8           | 66.675 | 3 5/8           | 92.075 |
| 41/64           | 16.2719 | 1 41/64         | 41.672 | 2 41/64         | 67.072 | 3 41/64         | 92.472 |
| 21/32           | 16.6688 | 1 21/32         | 42.069 | 2 21/32         | 67.469 | 3 21/32         | 92.869 |
| 43/64           | 17.0656 | 1 43/64         | 42.466 | 2 43/64         | 67.866 | 3 43/64         | 93.266 |
| 11/16           | 17.4625 | 1 11/16         | 42.863 | 2 11/16         | 68.263 | 3 11/16         | 93.663 |
| 45/64           | 17.8594 | 1 45/64         | 43.259 | 2 45/64         | 68.659 | 3 45/64         | 94.059 |
| 23/32           | 18.2563 | 1 23/32         | 43.656 | 2 23/32         | 69.056 | 3 23/32         | 94.456 |

## FRACTIONS OF AN INCH EXPRESSED AS MILLIMETERS

| FRACTIONAL INCH | MM      | FRACTIONAL INCH | MM     | FRACTIONAL INCH | MM     | FRACTIONAL INCH | MM      |
|-----------------|---------|-----------------|--------|-----------------|--------|-----------------|---------|
| 47/64           | 18.6531 | 1 47/64         | 44.053 | 2 47/64         | 69.453 | 3 47/64         | 94.853  |
| 3/4             | 19.0500 | 1 3/4           | 44.450 | 2 3/4           | 69.850 | 3 3/4           | 95.250  |
| 49/64           | 19.4469 | 1 49/64         | 44.847 | 2 49/64         | 70.247 | 3 49/64         | 95.647  |
| 25/32           | 19.8438 | 1 25/32         | 45.244 | 2 25/32         | 70.644 | 3 25/32         | 96.044  |
| 51/64           | 20.2406 | 1 51/64         | 45.641 | 2 51/64         | 71.041 | 3 51/64         | 96.441  |
| 13/16           | 20.6375 | 1 13/16         | 46.038 | 2 13/16         | 71.438 | 3 13/16         | 96.838  |
| 53/64           | 21.0344 | 1 53/64         | 46.434 | 2 53/64         | 71.834 | 3 53/64         | 97.234  |
| 27/32           | 21.4313 | 1 27/32         | 46.831 | 2 27/32         | 72.231 | 3 27/32         | 97.631  |
| 55/64           | 21.8281 | 1 55/64         | 47.228 | 2 55/64         | 72.628 | 3 55/64         | 98.028  |
| 7/8             | 22.2250 | 1 7/8           | 47.625 | 2 7/8           | 73.025 | 3 7/8           | 98.425  |
| 57/64           | 22.6219 | 1 57/64         | 48.022 | 2 57/64         | 73.422 | 3 57/64         | 98.822  |
| 23/32           | 18.2563 | 1 23/32         | 43.656 | 2 23/32         | 69.056 | 3 23/32         | 94.456  |
| 59/64           | 23.4156 | 1 59/64         | 48.816 | 2 59/64         | 74.216 | 3 59/64         | 99.616  |
| 15/16           | 23.8125 | 1 15/16         | 49.213 | 2 15/16         | 74.613 | 3 15/16         | 100.013 |
| 61/64           | 24.2094 | 1 61/64         | 49.609 | 2 61/64         | 75.009 | 3 61/64         | 100.409 |
| 31/32           | 24.6063 | 1 31/32         | 50.006 | 2 31/32         | 75.406 | 3 31/32         | 100.806 |
| 63/64           | 25.0031 | 1 63/64         | 50.403 | 2 63/64         | 75.803 | 3 63/64         | 101.203 |
| 1               | 25.4000 | 2               | 50.800 | 3               | 76.200 | 4               | 101.600 |

## DRILLS FOR USE PRIOR TO TAPPING

| METRIC 60° INC ANGLE |       |           |         |       |           |         |       |           |         |       |           |
|----------------------|-------|-----------|---------|-------|-----------|---------|-------|-----------|---------|-------|-----------|
| NOM DIA              | PITCH | DRILL DIA | NOM DIA | PITCH | DRILL DIA | NOM DIA | PITCH | DRILL DIA | NOM DIA | PITCH | DRILL DIA |
| 2.00                 | 0.40  | 1.60      | 9.00    | 0.75  | 8.20      | 16.00   | 2.00  | 14.00     | 25.00   | 2.00  | 23.00     |
| 2.20                 | 0.45  | 1.75      | 9.00    | 1.00  | 8.00      | 17.00   | 1.00  | 16.00     | 26.00   | 1.50  | 24.50     |
| 2.50                 | 0.35  | 2.15      | 9.00    | 1.25  | 7.80      | 17.00   | 1.50  | 15.50     | 27.00   | 1.00  | 26.00     |
| 2.50                 | 0.45  | 2.05      | 10.00   | 0.75  | 9.20      | 18.00   | 1.00  | 17.00     | 27.00   | 1.50  | 25.50     |
| 3.00                 | 0.35  | 2.65      | 10.00   | 1.00  | 9.00      | 18.00   | 1.50  | 16.50     | 27.00   | 2.00  | 25.00     |
| 3.00                 | 0.50  | 2.50      | 10.00   | 1.25  | 8.80      | 18.00   | 2.00  | 16.00     | 27.00   | 3.00  | 24.00     |
| 3.50                 | 0.35  | 3.15      | 10.00   | 1.50  | 8.50      | 18.00   | 2.50  | 15.50     | 28.00   | 1.00  | 27.00     |
| 3.50                 | 0.60  | 2.90      | 11.00   | 0.75  | 10.20     | 20.00   | 1.00  | 19.00     | 28.00   | 1.50  | 26.50     |
| 4.00                 | 0.50  | 3.50      | 11.00   | 1.00  | 10.00     | 20.00   | 1.50  | 18.50     | 28.00   | 2.00  | 26.00     |
| 4.00                 | 0.70  | 3.30      | 11.00   | 1.50  | 9.50      | 20.00   | 2.00  | 18.00     | 30.00   | 1.00  | 29.00     |
| 4.50                 | 0.50  | 4.00      | 12.00   | 1.00  | 11.00     | 20.00   | 2.50  | 17.50     | 30.00   | 1.50  | 28.50     |
| 4.50                 | 0.75  | 3.70      | 12.00   | 1.25  | 10.80     | 22.00   | 1.00  | 21.00     | 30.00   | 2.00  | 28.00     |
| 5.00                 | 0.50  | 4.50      | 12.00   | 1.50  | 10.50     | 22.00   | 1.50  | 20.50     | 30.00   | 3.00  | 27.00     |
| 5.00                 | 0.80  | 4.20      | 12.00   | 1.75  | 10.20     | 2.00    | 2.00  | 20.00     | 30.00   | 3.50  | 26.50     |
| 5.50                 | 0.50  | 5.00      | 14.00   | 1.00  | 13.00     | 22.00   | 2.50  | 19.50     | 32.00   | 1.50  | 30.50     |
| 6.00                 | 0.75  | 5.20      | 14.00   | 1.25  | 12.80     | 24.00   | 1.00  | 23.00     | 32.00   | 2.00  | 30.00     |
| 6.00                 | 1.00  | 5.00      | 14.00   | 1.50  | 12.50     | 24.00   | 1.50  | 22.50     | 33.00   | 1.50  | 31.50     |
| 7.00                 | 0.75  | 6.20      | 14.00   | 2.00  | 12.00     | -       | -     | -         | 33.00   | 2.00  | 31.00     |
| 7.00                 | 1.00  | 6.00      | 15.00   | 1.00  | 14.00     | 24.00   | 2.00  | 22.00     | 33.00   | 3.00  | 30.00     |
| 8.00                 | 0.75  | 7.20      | 15.00   | 1.50  | 13.50     | 24.00   | 3.00  | 21.00     | 33.00   | 3.50  | 29.50     |
| 8.00                 | 1.00  | 7.00      | 16.00   | 1.00  | 15.00     | 25.00   | 1.00  | 24.00     | 35.00   | 1.50  | 33.50     |
| 8.00                 | 1.25  | 6.80      | 16.00   | 1.50  | 14.50     | 25.00   | 1.50  | 23.50     | 36.00   | 1.50  | 34.50     |

## DRILLS FOR USE PRIOR TO TAPPING

| METRIC 60° INC ANGLE |       |           |         |       |           |         |       |           |         |       |           |
|----------------------|-------|-----------|---------|-------|-----------|---------|-------|-----------|---------|-------|-----------|
| NOM DIA              | PITCH | DRILL DIA | NOM DIA | PITCH | DRILL DIA | NOM DIA | PITCH | DRILL DIA | NOM DIA | PITCH | DRILL DIA |
| 36.00                | 2.00  | 34.00     | 40.00   | 2.00  | 38.00     | 45.00   | 3.00  | 42.00     | 50.00   | 2.00  | 48.00     |
| 36.00                | 3.00  | 33.00     | 40.00   | 3.00  | 37.00     | 45.00   | 4.00  | 41.00     | 50.00   | 3.00  | 47.00     |
| 36.00                | 4.00  | 32.00     | 42.00   | 1.50  | 40.50     | 45.00   | 4.50  | 40.50     | 52.00   | 1.50  | 50.50     |
| 38.00                | 1.50  | 36.50     | 42.00   | 2.00  | 40.00     | 48.00   | 1.50  | 46.50     | 52.00   | 2.00  | 50.00     |
| 39.00                | 1.50  | 37.50     | 42.00   | 3.00  | 39.00     | 48.00   | 2.00  | 46.00     | 52.00   | 3.00  | 49.00     |
| 39.00                | 2.00  | 37.00     | 42.00   | 4.00  | 38.00     | 48.00   | 3.00  | 45.00     | 52.00   | 4.00  | 48.00     |
| 39.00                | 3.00  | 36.00     | 42.00   | 4.50  | 37.50     | 48.00   | 4.00  | 44.00     | 52.00   | 5.00  | 47.00     |
| 39.00                | 4.00  | 35.00     | 45.00   | 1.50  | 43.50     | 48.00   | 5.00  | 43.00     | 56.00   | 5.50  | 50.50     |
| 40.00                | 1.50  | 35.80     | 45.00   | 2.00  | 43.00     | 50.00   | 1.50  | 48.00     | -       | -     | -         |

## AMERICAN NATIONAL THREADS

| 60° INC ANGLE |     |                  |     |                  |       |                  |       |                  |
|---------------|-----|------------------|-----|------------------|-------|------------------|-------|------------------|
| SIZE NO.      | N.C |                  | N.F |                  | U.N.C |                  | U.N.F |                  |
|               | TPI | DRILL SIZE IN MM | TPI | DRILL SIZE IN MM | TPI   | DRILL SIZE IN MM | TPI   | DRILL SIZE IN MM |
| 0             | -   | -                | 80  | 1.25             | -     | -                | -     | -                |
| 2             | 56  | 1.85             | 64  | 1.90             | -     | -                | -     | -                |
| 4             | 40  | 2.35             | 48  | 2.40             | 40    | 2.35             | -     | -                |
| 6             | 32  | 2.85             | 40  | 2.95             | 32    | 2.85             | -     | -                |
| 8             | 32  | 3.50             | 36  | 3.50             | 32    | 3.50             | -     | -                |
| 10            | 24  | 3.90             | 32  | 4.10             | 24    | 3.90             | 32    | 4.10             |
| 12            | 24  | 4.50             | 28  | 4.70             | -     | -                | -     | -                |

## BRITISH ASSOCIATION

| 47 ½° INC ANGLE |      |       |            |
|-----------------|------|-------|------------|
| SIZE MM         | DIA  | PITCH | DRILL SIZE |
| 0               | 6.00 | 1.00  | 5.10       |
| 1               | 5.30 | 0.90  | 4.50       |
| 2               | 4.70 | 0.81  | 4.00       |
| 3               | 4.10 | 0.73  | 3.40       |
| 4               | 3.60 | 0.66  | 3.00       |
| 5               | 3.20 | 0.59  | 2.65       |
| 6               | 2.80 | 0.53  | 2.30       |

## DRILLS FOR USE PRIOR TO TAPPING

### BRITISH STANDARD WHITWORTH FORM THREADS

| 55° INC ANGLE |       |            |       |            |                  |            |               |            |
|---------------|-------|------------|-------|------------|------------------|------------|---------------|------------|
| NOM DIA INCH  | B.S.W |            | B.S.F |            | B.S.P (PARALLEL) |            | B.S.P (TAPER) |            |
|               | TPI   | DRILL SIZE | TPI   | DRILL SIZE | TPI              | DRILL SIZE | TPI           | DRILL SIZE |
| 1/8           | 40    | 2.55       | -     | -          | 28               | 8.80       | 28            | 8.40       |
| 3/16          | 24    | 3.70       | 32    | 5/32       | -                | -          | -             | -          |
| 7/32          | -     | -          | 28    | 4.60       | -                | -          | -             | -          |
| 1/4           | 20    | 5.10       | 26    | 5.30       | 19               | 11.80      | 19            | 11.20      |
| 9/32          | -     | -          | 26    | 6.11       | -                | -          | -             | -          |
| 5/16          | 18    | 6.50       | 22    | 6.80       | -                | -          | -             | -          |
| 3/8           | 16    | 5/16       | 20    | 8.30       | 19               | 15.25      | 19            | 14.75      |
| 7/16          | 14    | 9.30       | 18    | 9.70       | -                | -          | -             | -          |
| 1/2           | 12    | 10.50      | 16    | 7/16       | 14               | 3/4        | 14            | 23/32      |
| 9/16          | 12    | 12.10      | 16    | 1/2        | -                | -          | -             | -          |
| 5/8           | 11    | 13.50      | 14    | 14.00      | 14               | 53/64      | -             | -          |

# DRILLS FOR USE PRIOR TO TAPPING

## BRITISH STANDARD WHITWORTH FORM THREADS

| 55° INC ANGLE   |       |            |       |            |                  |            |               |            |
|-----------------|-------|------------|-------|------------|------------------|------------|---------------|------------|
| NOM<br>DIA INCH | B.S.W |            | B.S.F |            | B.S.P (PARALLEL) |            | B.S.P (TAPER) |            |
|                 | TPI   | DRILL SIZE | TPI   | DRILL SIZE | TPI              | DRILL SIZE | TPI           | DRILL SIZE |
| 11/16           | 11    | 15.00      | 14    | 15.50      | -                | -          | -             | -          |
| 3/4             | 10    | 41/64      | 12    | 16.75      | 14               | 24.50      | 14            | 15/16      |
| 7/8             | 9     | 19.25      | 11    | 25/32      | 14               | 28.25      |               |            |
| 1               | 8     | 22.00      | 10    | 22.75      | 11               | 30.75      | 11            | 30.0       |
| 1 1/8           | 7     | 24.75      | 9     | 25.50      | -                | -          | -             | -          |
| 1 1/4           | 7     | 1 3/32     | 9     | 1 1/8      | 11               | 39.50      | 11            | 44.50      |
| 1 3/8           | -     | -          | 8     | 31.50      | -                | -          | -             | -          |
| 1 1/2           | 6     | 33.50      | 8     | 1 23/64    | 11               | 1 25/32    | 11            | 56.0       |
| 1 5/8           | -     | -          | 8     | 37.90      | -                | -          | -             | -          |
| 1 3/4           | 5     | 39.00      | 7     | 41.00      | 11               | 51.00      | -             | -          |
| 2               | 4.5   | 44.50      | 7     | 47.00      | 11               | 2 1/4      | 11            | 2 13/16    |
| 2 1/4           | 4     | 51.00      | 6     | 53.00      | 11               | 63.26      | -             | -          |
| 2 1/2           | 4     | 57.00      | 6     | 58.00      | 11               | 72.73      | -             | -          |
| 2 3/4           | 3.5   | 62.14      | 6     | 63.35      | 11               | 79.08      | -             | -          |
| 3               | 3.5   | 68.30      | 5     | 69.50      | 11               | 85.43      | 11            | (84.35)    |
| 3 1/2           | -     | -          | -     | -          | 11               | 97.88      | 11            | (109.42)   |
| 4               | -     | -          | -     | -          | 11               | 110.58     | -             | -          |

## AMERICAN NATIONAL FORM THREADS

| 60° INC ANGLE      |            |                     |            |                     |               |                        |                              |
|--------------------|------------|---------------------|------------|---------------------|---------------|------------------------|------------------------------|
| NOM<br>DIA INCH    | NC & U.N.C |                     | NE & U.N.F |                     | N.P.T & N.P.S |                        |                              |
|                    | TPI        | DRILL SIZE<br>IN MM | TPI        | DRILL SIZE<br>IN MM | TPI           | DRILL SIZE IN MM       |                              |
| FRACTIONAL<br>INCH |            |                     |            |                     |               | TAPPING WITH<br>REAMER | TAPPING<br>WITHOUT<br>REAMER |
| 1/4                | 20         | 5.10                | 28         | 5.50                | 18            | 10.70                  | 11.10                        |
| 5/16               | 18         | 6.60                | 24         | 6.90                | -             | -                      | -                            |
| 3/8                | 16         | 8.00                | 24         | 8.50                | 18            | 14.25                  | 14.50                        |
| 7/16               | 14         | 9.40                | 20         | 9.90                | -             | -                      | -                            |
| 1/2                | 13         | 10.80               | 20         | 11.50               | 14            | 17.50                  | 18.00                        |
| 9/16               | 12         | 12.20               | 18         | 12.90               | -             | -                      | -                            |
| 5/8                | 11         | 13.50               | 18         | 14.50               | -             | -                      | -                            |
| 3/4                | 10         | 16.50               | 16         | 17.50               | 14            | 22.75                  | 23.25                        |
| 7/8                | 9          | 19.50               | 14         | 20.40               | -             | -                      | -                            |
| 1                  | 8          | 22.25               | 12         | 23.25               | 11.5          | 28.50                  | 29.00                        |
| 1 1/4              | 7          | 28.00               | 12         | 29.50               | 11.5          | 37.50                  | 38.00                        |
| 1 1/2              | 6          | 34.00               | 12         | 36.00               | 11.5          | 43.50                  | 44.00                        |

# HARDNESS CONVERSION CHART

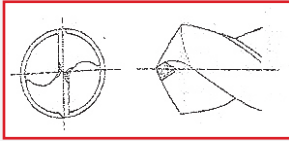
| VHN | BHN  | HRA  | HRB  | HRC  |
|-----|------|------|------|------|
| 940 |      | 85.6 |      | 68   |
| 920 |      | 85.3 |      | 67.5 |
| 900 |      | 85   |      | 67   |
| 880 | *767 | 84.7 |      | 66.4 |
| 860 | *757 | 84.4 |      | 65.9 |
| 840 | *745 | 84.1 |      | 65.3 |
| 820 | *733 | 83.8 |      | 64.7 |
| 800 | *722 | 83.4 |      | 64   |
| 780 | *710 | 83   |      | 63.3 |
| 760 | *698 | 82.6 |      | 62.5 |
| 740 | *684 | 82.2 |      | 61.8 |
| 720 | *670 | 81.6 |      | 61   |
| 700 | *656 | 81.3 |      | 60.1 |
| 690 | *647 | 81.1 |      | 59.7 |
| 680 | *638 | 80.8 |      | 59.2 |
| 670 | *630 | 80.6 |      | 58.8 |
| 660 | 620  | 80.3 |      | 58.3 |
| 650 | 611  | 80   |      | 57.8 |
| 640 | 601  | 79.8 |      | 57.3 |
| 630 | 591  | 79.5 |      | 56.8 |
| 620 | 582  | 79.2 |      | 56.3 |
| 610 | 573  | 78.9 |      | 55.7 |
| 600 | 564  | 78.6 |      | 55.2 |
| 590 | 554  | 78.4 |      | 54.7 |
| 580 | 545  | 78   |      | 54.1 |
| 570 | 535  | 77.8 |      | 53.6 |
| 560 | 525  | 77.4 |      | 53   |
| 550 | 517  | 77   |      | 52.3 |
| 540 | 507  | 76.7 |      | 51.7 |
| 530 | 497  | 76.4 |      | 51.1 |
| 520 | 488  | 76.1 |      | 50.5 |
| 510 | 479  | 75.7 |      | 49.8 |
| 500 | 471  | 75.3 |      | 49.1 |
| 490 | 460  | 74.9 |      | 48.4 |
| 480 | 452  | 74.5 |      | 47.7 |
| 470 | 442  | 74.1 |      | 46.9 |
| 460 | 433  | 73.6 |      | 46.1 |
| 450 | 425  | 73.3 |      | 45.3 |
| 440 | 415  | 72.8 |      | 44.5 |
| 430 | 405  | 72.3 |      | 43.6 |
| 420 | 397  | 71.8 |      | 42.7 |
| 410 | 388  | 71.4 |      | 41.8 |
| 400 | 379  | 70.8 |      | 40.8 |
| 390 | 369  | 70.3 |      | 39.8 |
| 380 | 360  | 69.8 | *110 | 38.8 |
| 370 | 350  | 69.2 |      | 37.7 |
| 360 | 341  | 68.7 | *109 | 36.6 |

| VHN | BHN | HRA  | HRB    | HRC  |
|-----|-----|------|--------|------|
| 350 | 331 | 68.1 |        | 35.5 |
| 340 | 322 | 67.8 | *108   | 34.4 |
| 330 | 313 | 67   |        | 33.3 |
| 320 | 303 | 66.4 | *107   | 32.2 |
| 310 | 294 | 65.8 |        | 31   |
| 300 | 284 | 65.2 | *105.5 | 29.8 |
| 295 | 280 | 64.8 |        | 29.2 |
| 290 | 275 | 64.5 | *104.5 | 28.5 |
| 285 | 270 | 64.2 |        | 27.8 |
| 280 | 265 | 63.8 | *103.5 | 27.1 |
| 275 | 261 | 63.5 |        | 26.4 |
| 270 | 256 | 63.1 | *102   | 25.6 |
| 265 | 252 | 62.7 |        | 24.8 |
| 260 | 247 | 62.4 | *101   | 24   |
| 255 | 243 | 62   |        | 23.1 |
| 250 | 238 | 61.6 | 99.5   | 22.2 |
| 245 | 233 | 61.2 |        | 21.3 |
| 240 | 228 | 60.7 | 98.1   | 20.3 |
| 230 | 219 |      | 96.7   | 18   |
| 220 | 209 |      | 95     | 15.7 |
| 210 | 200 |      | 93.4   | 13.4 |
| 200 | 190 |      | 91.5   | 11   |
| 190 | 181 |      | 89.5   | 8.5  |
| 180 | 171 |      | 87.1   | 6    |
| 170 | 162 |      | 85     | 3    |
| 160 | 152 |      | 81.7   | 0    |
| 150 | 143 |      | 78.7   |      |
| 140 | 133 |      | 75     |      |
| 130 | 124 |      | 71.2   |      |
| 120 | 114 |      | 66.7   |      |
| 110 | 105 |      | 62.3   |      |
| 100 | 95  |      | 56.2   |      |

\*Values beyond range only for information

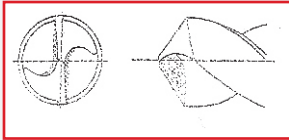
|            |                                                  |
|------------|--------------------------------------------------|
| <b>VHN</b> | Vicker's Hardness Number / Diamond Pyramid       |
| <b>BHN</b> | Brinell Hardnesss Number (w-ball) 10mm / 3000Kgs |
| <b>HRA</b> | Rockwell A Scale - Diamond Cone / 60Kgs          |
| <b>HRB</b> | Rockwell B Scale - 1/16" dia. Ball / 100Kgs      |
| <b>HRC</b> | Rockwell C Scale - Diamond Cone / 150Kgs         |

## POINT ENHANCEMENT



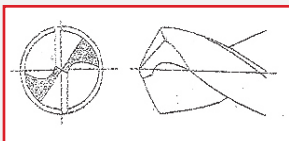
### FORM A

Web thinning (Thinned chisel)  
Improves penetration  
Ideal for Long series.



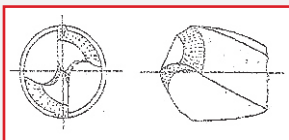
### FORM B

Web thinned + Lips corrected  
Optimized to heavy duty.  
Ideal for Deep Hole drilling.



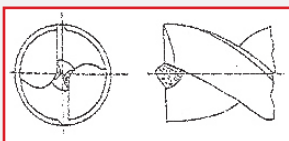
### FORM C

Split Point  
Eases chip removal & penetration  
Ideal for Crank Shaft Drilling.



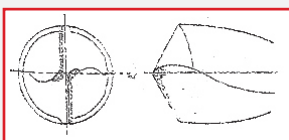
### FORM D

Cast Iron Point  
90 peripheral point + web thinning  
Ideal for Cast iron and abrasive plastics.



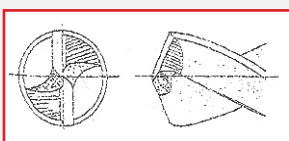
### FORM E

Brad point  
flat point + central drill  
Ideal for sheet metal drilling.



### FORM 4F

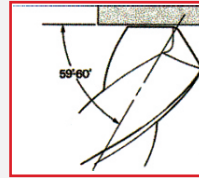
Fusion of form A & B (Four Faces)  
A high performing point for long chips Ideal  
for stainless & high nickel steels.



### FORM R

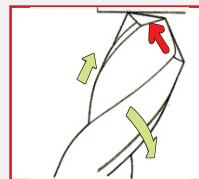
Helical thinning  
curls and breaks the chips.  
Ideal for long chip type.

## POINT GRINDING TECHNIQUES



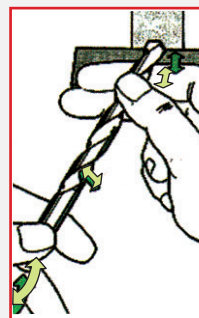
### STEP 1

Keep the cutting lip parallel to the grinding face with an angle of 59° to the axis of drill body.



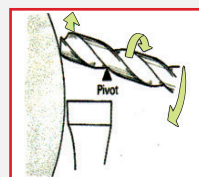
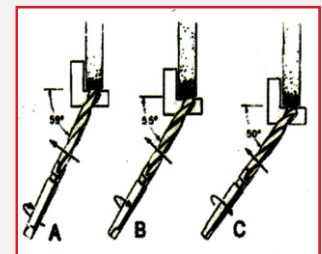
### STEP 2

Start grinding from the lip down to heel side. Simultaneously rotate the drill clockwise.



### STEP 3

Gradually co-ordinate these three movements :  
- Clockwise rotation of the drill point.  
- Downward movement of shank-end of drill.  
- Left swing movement of the shank-end.  
59° to 55° and 50° by the end of grinding.



← **SIDE VIEW** of the point grinding

# ITM QUICK GUIDELINES FOR DRILLING ON DIFFERENT MATERIALS

| MATERIAL                                 | CHARACTER         | POINT<br>ANGLE | HELIX/<br>FLUTE | MODIFICATION | COOLANT            | SPEED    | FEED        | REMARKS/<br>RECOMMENDATIONS                                  |
|------------------------------------------|-------------------|----------------|-----------------|--------------|--------------------|----------|-------------|--------------------------------------------------------------|
|                                          |                   |                |                 |              |                    | M/MIN    | MM/REV.     |                                                              |
| Carbon & Alloy Steels                    | Normalised        | 118°           | Standard        | None         | Soluble Oil        | 18 to 24 | 0.1 to 0.5  | Feed range for 5mm to 25mm dia.                              |
|                                          | Forged            | 125°           |                 |              |                    | 15 to 21 |             |                                                              |
|                                          | Cast              | 118°           |                 |              |                    | 15 to 21 |             |                                                              |
| Cast Iron                                | Grey/SG Iron      | 90°/118°       | Standard        | Web thinned  | Com-pressed Air    | 24 to 30 | 0.1 to 0.5  | Double point Angle                                           |
|                                          | Malleable         | 90°/118°       |                 |              |                    | 15 to 21 |             |                                                              |
|                                          | Martensitic       |                |                 |              |                    |          |             | Only Carbide Drills works on this                            |
| Manganese Steels                         | Tough             | 130°           | Slow            | Web Thinned  | Dry                | 3 to 3.5 | 0.04 to 0.1 | Apply feed before contact<br>No use of Punch/no interruption |
| Stainless Steel                          | Austentic         | 135°           | Quick           | Split        | Sulf/ CI Sol. Oil  | 6 to 12  | 0.15 to 0.6 | Blued rigid / donot use punch                                |
|                                          | Martensitic       | 118°           | Standard        | Web Thin     | Soluble Oil        | 12 to 18 | 0.1 to 0.5  | Feed range for 5mm to 25mm dia.                              |
| Monel Steel                              | Work Hardening    | 110° to 115°   | Standard        | Split        | Soluble Oil        | 6 to 15  | 0.15 to 0.6 | Use thick web /short/rigid drill                             |
| High Nickel/ Nimonic                     | Work Hardening    | 110° to 115°   | Standard        | Split        | Soluble Oil        | 3 to 6   | 0.15 to 0.6 | Use thick web /short/rigid drill                             |
| (Rotary Drill) Copper (Stationary Drill) | Soft              | 100°           | Quick/Wide      | None         | Soluble Oil        | 30 to 46 | 0.1 to 0.5  | Point Angle as per chip Behaviour                            |
|                                          | Hard              | 130°           | Quick/Wide      |              |                    | 21 to 30 |             |                                                              |
|                                          |                   | As above       | Standard        |              |                    | 30 to 46 |             |                                                              |
| Bronze / Brass                           | Cast & neval      | 118°           | Slow/Wide       | Ground lip   | Soluble Oil        | 30 to 60 | 0.1 to 0.5  | Short chips / Lip grd. For large size                        |
|                                          | yellow brass      | 118°           | Standard        | None         |                    | 30 to 60 |             | Continous long chips type                                    |
|                                          | Hard type         | 130°           | Standard        |              |                    | 21 to 30 |             |                                                              |
| Magnesium & Alloys                       | Freecutting       | 118°           | Standard        | None         | Soluble oil        | 60 to 90 | 0.1 to 0.5  | Dia cast alloys                                              |
| Aluminium                                | Long chip         | 130°           | Quick           | None         | Paraffin           | 30 to 60 | 0.1 to 0.5  | Pure Aluminium                                               |
|                                          | Short chip        | 130°           | Standard        |              | Hard Oil/ Kerosene |          |             | Alloys and high silicon grades, M35                          |
| Titanium                                 | Poor Conductivity | 118° to 140°   |                 | Web thinned  | Copius Sol. Oil    | 4.5 to 9 | 0.05 to 0.3 | Thick Web/Obtuse angle to larger                             |
| Plastics                                 | Thermoplastics    | 130° to 140°   | Quick           | None         | Soap Soln          | 6 to 45  | 0.2 to 0.5  | Speed/Feed by material (PVC/CA)                              |
|                                          | Thermosetting     | 60° to 90°     | Slow            | None         | Dry                | 27 to 45 | 0.1 to 0.5  | Powdery abrasive matl. (Bakelite)                            |
| Granite/Concrete                         | Masonry           | Standard       | Standard        | None         | Dry                | 21 to 30 | 0.2 to 0.5  | Use Masonary Drills / Carbide Tip                            |

\*\*\* Only popular material addressed in this chart, others may be related according to characteristics



## SPEED & FEEDS FOR H.S.S DRILLS

| WORK-PIECES MATERIAL    | CUTTING SPEED IN M/MIN | DRILL DIAMETER MM |       |       |      |      |      |      |      |      |     |
|-------------------------|------------------------|-------------------|-------|-------|------|------|------|------|------|------|-----|
|                         |                        |                   | 1     | 2     | 5    | 8    | 12   | 16   | 25   | 40   | 63  |
| Steel                   | 30 - 35                | f                 | HAND  | 0.05  | 0.12 | 0.2  | 0.25 | 0.3  | 0.4  | 0.4  | 0.5 |
| *45 Kg mm2              |                        | n                 | 12000 | 6000  | 2400 | 1500 | 1000 | 750  | 480  | 300  | 190 |
| Steel                   | 15 - 25                | f                 | HAND  | 0.05  | 0.12 | 0.2  | 0.25 | 0.3  | 0.4  | 0.4  | 0.5 |
| *45-70 Kg mm2           |                        | n                 | 10000 | 5000  | 2100 | 1300 | 850  | 640  | 410  | 260  | 165 |
| Steel                   | 8 - 15                 | f                 | HAND  | 0.04  | 0.1  | 0.15 | 0.2  | 0.25 | 0.3  | 0.3  | 0.4 |
| *above 70 Kg mm2        |                        | n                 | 8000  | 4000  | 1600 | 995  | 680  | 500  | 318  | 200  | 125 |
| Alloy Steel             | 20 - 30                | f                 | HAND  | HAND  | 0.06 | 0.1  | 0.15 | 0.2  | 0.3  | 0.3  | 0.3 |
| *above 100 Kg mm2       |                        | n                 | 3650  | 1840  | 735  | 455  | 305  | 230  | 145  | 90   | 60  |
| Cast Iron               | 5 - 15                 | f                 | HAND  | 0.07  | 0.12 | 0.2  | 0.3  | 0.4  | 0.5  | 0.6  | 0.6 |
| *above 18 Kg mm2        |                        | n                 | 8000  | 4000  | 1600 | 1000 | 660  | 500  | 320  | 200  | 127 |
| Cast Iron               | 3 - 5                  | f                 | HAND  | HAND  | 0.1  | 0.2  | 0.3  | 0.4  | 0.5  | 0.6  | 0.6 |
| *above 18-30 Kg mm2     |                        | n                 | 3180  | 1600  | 635  | 400  | 265  | 200  | 130  | 80   | 50  |
| Mang Steel              | 6 - 12                 | f                 | HAND  | HAND  | 0.05 | 0.08 | 0.1  | 0.1  | 0.15 | 0.2  | 0.2 |
| *above 15%              |                        | n                 | 1300  | 650   | 255  | 160  | 110  | 80   | 50   | 32   | 20  |
| Stainless Steel         | 80 - 100               | f                 | HAND  | HAND  | 0.05 | 0.1  | 0.12 | 0.15 | 2    | 0.2  | 0.3 |
|                         |                        | n                 | 2800  | 1400  | 570  | 360  | 240  | 180  | 110  | 70   | 45  |
| Brass-Brittle           | 50 - 60                | f                 | HAND  | 0.08  | 0.02 | 0.25 | 0.3  | 0.4  | 0.5  | 0.6  | 0.7 |
|                         |                        | n                 | 28000 | 14000 | 5700 | 3600 | 2400 | 1800 | 1100 | 700  | 450 |
| Brass - Ductile         | 50 - 70                | f                 | HAND  | 0.05  | 0.15 | 0.25 | 0.3  | 0.4  | 0.5  | 0.6  | 0.7 |
|                         |                        | n                 | 17500 | 8700  | 3500 | 2200 | 1500 | 1100 | 700  | 440  | 280 |
| Copper & Zinc Alloy     | 80 - 120               | f                 | HAND  | 0.04  | 0.14 | 0.18 | 0.22 | 0.25 | 0.3  | 0.45 | 0.5 |
|                         |                        | n                 | 16000 | 8000  | 3200 | 2000 | 1325 | 1000 | 650  | 400  | 250 |
| Aluminium Long Chipped  |                        | f                 | HAND  | 0.05  | 0.14 | 0.2  | 0.25 | 0.3  | 0.4  | 0.45 | 0.5 |
|                         | 120 - 160              | n                 | 32000 | 16000 | 6350 | 4000 | 2650 | 2000 | 1280 | 800  | 500 |
| Aluminium Short Chipped |                        | f                 | HAND  | 0.06  | 0.16 | 0.25 | 0.35 | 0.4  | 0.5  | 0.65 | 0.7 |
|                         |                        | n                 | 38000 | 19000 | 7600 | 4800 | 3200 | 2400 | 1520 | 1000 | 600 |

## TROUBLE SHOOTING (DRILLS)

|   | PROBLEM                 | CAUSES                                                                                    | REMEDIES                                                                                         |
|---|-------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 1 | Oversize hole           | 1. Unequal lip angles<br>2. Unequal lip lengths                                           | Regrind drill point to correct angle with proper relief                                          |
| 2 | Irregular & poor finish | 1. Loose hold<br>2. Chocking of chips<br>3. Excessive feed rate                           | Check the holder and run-out<br>Increase the force & volume of Coolant<br>decrease the feed rate |
| 3 | Bucking of the drill    | Axial deflection of drill                                                                 | Use correct guide bushes                                                                         |
| 4 | Chattering of Drill     | 1. Hard/Tough workpiece<br>2. Torsional deflection                                        | Use a shorter drill with thick web to improve stiffness                                          |
| 5 | Breaking of the drill   | 1. poor rigidity of fixture<br>2. Improper speed and feed<br>3. Insufficient chip removal | Use rigid fixture and chucks<br>Select speed and feed as per job.<br>Remove the chips frequently |

|    | PROBLEM               | CAUSES                                    | REMEDIES                                                     |
|----|-----------------------|-------------------------------------------|--------------------------------------------------------------|
| 5  | Breaking of the drill | 4. Excessive web thickness                | Web thinning & proper point grinding.                        |
| 6  | Breakage in deep hole | 1. Blockage of chips                      | Try wood-pecking system.                                     |
|    |                       | 2. Non- uniform back taper                | Check back taper uniformity                                  |
|    |                       | 3. Run out on OD                          | Check concentricity                                          |
| 7  | Rubbing               | 1. Improper Point Relief                  | Regrind drill-point with proper relief.                      |
|    |                       | 2. Non-uniform back taper                 | Check for negative back-taper on body.                       |
| 8  | Burning               | 1. Insufficient coolant flow              | Ensure proper coolant flow                                   |
|    | Land Washes off       | 2. Inappropriate coolant                  | Use proper coolant recommended.                              |
|    |                       | 3. hard work-piece                        | Select the right drill suitable for job.                     |
| 9  | Splitting of drills   | 1. Axial play in spindle                  | Correct the spindle play.                                    |
|    |                       | 2. Springy clamping of job                | Ensure rigid clamping.                                       |
|    |                       | 3. Excessive feed                         | Reduce the feed.                                             |
| 10 | Tang breakage         | 1. Slipping Chuck                         | Modify the inner surface of the holder or change the holder. |
|    |                       | 2. Defect in inner surface of morse taper |                                                              |

## TROUBLE SHOOTING (TAPS)

|   | PROBLEM                          | CAUSES                              | REMEDIES                                |
|---|----------------------------------|-------------------------------------|-----------------------------------------|
| 1 | Tap Breakage                     | 1. Incorrect tap                    | – Choose Suitable type tap              |
|   |                                  | 2. Incorrect chamfer symmetry       | – Ensure proper centre align            |
|   |                                  | 3. Small hole                       | – Select proper hole size               |
|   |                                  | 4. hits at bottom of hole           | – Use slipping clutch/shorten           |
|   |                                  | 5. Tool hardness, geometry          | – Check the hardness of job             |
|   |                                  | 6. blunt tap                        | – Regrind the tap                       |
| 2 | Poor Tap life Chipping/ wear     | 1. Surface hardening of hole        | – Work hardening material, Lower Speed  |
|   |                                  | 2. Chip Congestion                  | – Check Speed. Use alternate type       |
|   |                                  | 3. Thread Surface                   | – Ensure proper geometry                |
|   |                                  | 4. Ineffective coolant supply       | – Improper efficiency of coolant        |
|   |                                  | 5. High Cutting Speed               | – Lower existing speed                  |
|   |                                  | 6. Smaller hole size                | – Refer the chart for correct hole size |
|   |                                  | 7. Cold welding/irregular job micro | – Improper lubrication & speed          |
| 3 | Larger Thread (Oversize Cutting) | 1. Incorrect type of tap            | – Use specified tap for application     |
|   |                                  | 2. Smaller hole size                | – Use the recommended hole size         |
|   |                                  | 3. Improper Alignment               | – Check the alignment and eccentricity  |
|   |                                  | 4. Spindle restriction              | – Check the spindle condition / runout  |
|   |                                  | 5. Build up edges                   | – Improper lubrication                  |
|   |                                  | 6. High Speed                       | – Lower the Speed                       |

|   | PROBLEM                                | CAUSES                          | REMEDIES                              |
|---|----------------------------------------|---------------------------------|---------------------------------------|
| 4 | Smaller Thread<br>(Undersize Cutting)  | 1. Incorrect tap selection      | – Check the corecteness of tap used   |
|   |                                        | 2. Inaccurate setup             | – Recheck the alignemen               |
|   |                                        | 5. Rigid Spindle                | – Ensure spindle movement smooth      |
|   |                                        | 6. Tolerance                    | – Ensuregeometrical Tolerances        |
| 5 | Bell Mouth hole                        | 1. Incorrect Starting pressure  | – Use a spindle with axial float      |
| 6 | Unsatisfactory finish<br>(Poor finish) | 1. Blunt Tap                    | – Resharpen the tap                   |
|   |                                        | 2. Badly Reground               | – Grind properly                      |
|   |                                        | 6. Coolant improper quality/qty | – Use ample supply of right lubricant |

## ENHANCEMENT (METALLURGICAL)

### SURFACE TREATMENTS :

**STEAM TEMPERING :** Gives a strongly adhering blue oxide surface that acts to retain cutting fluid and prevent chips welding to cutting edges. More effective on drills and taps.

**NITRIDING :** This process can increase the surface wear resistance. Particularly useful on taps and drills used on abrasive material like Cast iron and Bakelite.

### SURFACE COATING

#### TiN - TITANIUM NITRIDE : (GOLDEN COLOUR) :

Ceramic coating applied by physical vapor deposition (PVD) gives high hardness and low friction properties, improve the performance and considerably longer life to HSS tools. Mainly for drills and taps. Hardness : 2300 HV.

#### Ti(Al)N - TITANIUM ALUMINIUM NITRIDE : (VIOLET COLOUR)

Multi-layer PVD coating improves tool life substantially. Higher toughness and oxidation stability permits dry machining. Ideal for drills and taps used at higher speeds and feeds. (Hardness : 3300 HV)

#### TiCN - TITANIUM CARBO-NITRIDE : (BLUISH GREY)

This coating is harder than TiN with lower coefficient of friction. Ideal for milling cutters. (Hardness : 3000 HV) (other coatings: Titanium Diboride-TiB<sub>2</sub>, Chromium nitride-CrN, Zirconium nitride-ZrN, Diamond like coat-DLC, Tungsten carbide - WC/C, Aluminum chromium nitride- AlCrN, Diamond coating - crystalline & multi layers)

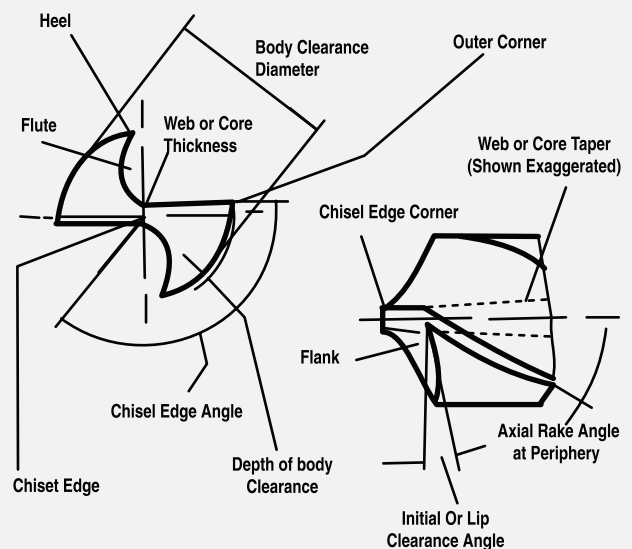
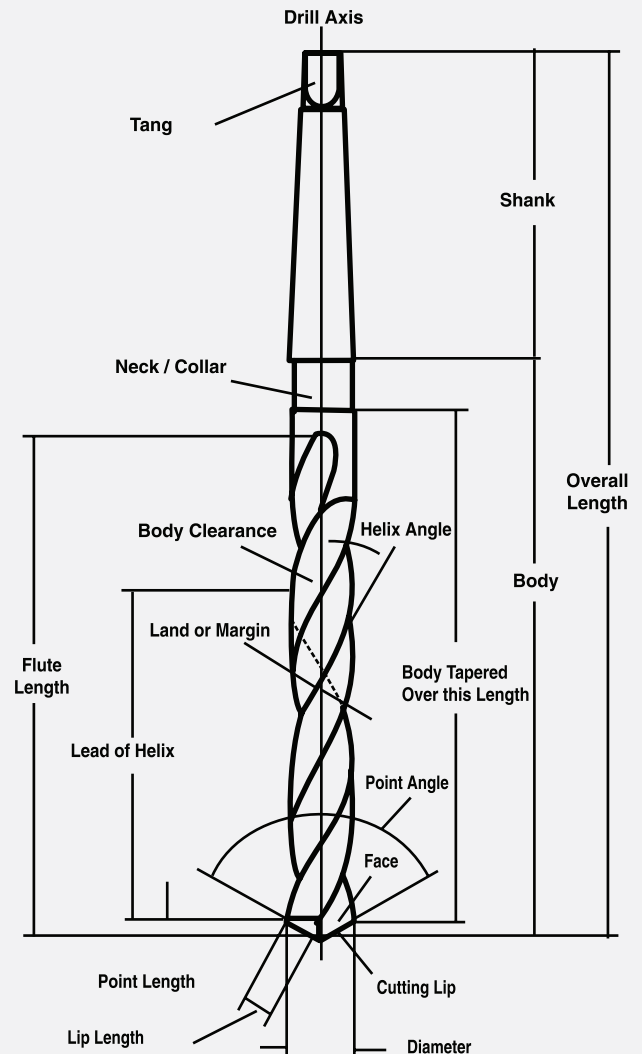
### THERMAL TREATMENTS :

**CRYOGENIC TEMPERING :** Subzero treatment of tools at very low temperatures (-190°C) using liquid nitrogen, enhances the properties in micro levels. This considerably improves the endurance and performance of tool

### CHOICE OF HSS GRADES:

- |            |                    |                                                                            |
|------------|--------------------|----------------------------------------------------------------------------|
| <b>M2</b>  | - Molybdenum grade | - Popular for all general purpose -%6W:5Mo:2V (6:5:2)                      |
| <b>M35</b> | - 5% Cobalt Grade  | - For Tougher application & RED Hardness - % 6W : 5Mo : 2V : 5Co (6:5:2:5) |
| <b>M42</b> | - 8% Cobalt Grade  | - Better than M35 -%2W:10Mo : 1V : 8Co (2:10:1:8)                          |
| <b>T42</b> | - 10% Cobalt Grade | - For Tool Bits -%10W : 4Mo : 3V : 10Co (10:4:3:10)                        |

(\*Only popular grades addressed here)



### NOMENCLATURE OF TAPER SHANK DRILL

## ANNULAR CUTTER



## HSS M2 ANNULAR CUTTER (DEPTH OF CUT - 35MM)

### HSN CODE - 8207

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAH00M12.0035 | 12 x 35MM        | 2924                  |
| CAH00M13.0035 | 13 x 35MM        | 2924                  |
| CAH00M14.0035 | 14 x 35MM        | 3332                  |
| CAH00M15.0035 | 15 x 35MM        | 3332                  |
| CAH00M16.0035 | 16 x 35MM        | 3705                  |
| CAH00M17.0035 | 17 x 35MM        | 3705                  |
| CAH00M18.0035 | 18 x 35MM        | 3981                  |
| CAH00M19.0035 | 19 x 35MM        | 3981                  |
| CAH00M20.0035 | 20 x 35MM        | 4406                  |
| CAH00M21.0035 | 21 x 35MM        | 4406                  |
| CAH00M22.0035 | 22 x 35MM        | 4940                  |
| CAH00M23.0035 | 23 x 35MM        | 4940                  |
| CAH00M24.0035 | 24 x 35MM        | 5331                  |
| CAH00M25.0035 | 25 x 35MM        | 5331                  |
| CAH00M26.0035 | 26 x 35MM        | 5716                  |
| CAH00M27.0035 | 27 x 35MM        | 6026                  |
| CAH00M28.0035 | 28 x 35MM        | 6078                  |
| CAH00M29.0035 | 29 x 35MM        | 6302                  |

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAH00M30.0035 | 30 x 35MM        | 6416                  |
| CAH00M31.0035 | 31 x 35MM        | 6825                  |
| CAH00M32.0035 | 32 x 35MM        | 7066                  |
| CAH00M33.0035 | 33 x 35MM        | 7066                  |
| CAH00M34.0035 | 34 x 35MM        | 7583                  |
| CAH00M35.0035 | 35 x 35MM        | 7778                  |
| CAH00M36.0035 | 36 x 35MM        | 8186                  |
| CAH00M37.0035 | 37 x 35MM        | 8491                  |
| CAH00M38.0035 | 38 x 35MM        | 8675                  |
| CAH00M39.0035 | 39 x 35MM        | 8875                  |
| CAH00M40.0035 | 40 x 35MM        | 9163                  |
| CAH00M41.0035 | 41 x 35MM        | 9564                  |
| CAH00M42.0035 | 42 x 35MM        | 10329                 |
| CAH00M43.0035 | 43 x 35MM        | 10835                 |
| CAH00M44.0035 | 44 x 35MM        | 11650                 |
| CAH00M45.0035 | 45 x 35MM        | 11989                 |
| CAH00M50.0035 | 50 x 35MM        | 14350                 |

## HSS M2 ANNULAR CUTTER (DEPTH OF CUT - 50MM)

### HSN CODE - 8207

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAH00M12.0050 | 12 x 50MM        | 3901                  |
| CAH00M13.0050 | 13 x 50MM        | 3901                  |
| CAH00M14.0050 | 14 x 50MM        | 4194                  |
| CAH00M15.0050 | 15 x 50MM        | 4194                  |
| CAH00M16.0050 | 16 x 50MM        | 4550                  |
| CAH00M17.0050 | 17 x 50MM        | 4550                  |
| CAH00M18.0050 | 18 x 50MM        | 4825                  |
| CAH00M19.0050 | 19 x 50MM        | 4825                  |
| CAH00M20.0050 | 20 x 50MM        | 5440                  |
| CAH00M21.0050 | 21 x 50MM        | 5440                  |
| CAH00M22.0050 | 22 x 50MM        | 5928                  |
| CAH00M23.0050 | 23 x 50MM        | 5928                  |
| CAH00M24.0050 | 24 x 50MM        | 6727                  |
| CAH00M25.0050 | 25 x 50MM        | 6727                  |
| CAH00M26.0050 | 26 x 50MM        | 7032                  |
| CAH00M27.0050 | 27 x 50MM        | 7146                  |

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAH00M28.0050 | 28 x 50MM        | 7474                  |
| CAH00M29.0050 | 29 x 50MM        | 7882                  |
| CAH00M30.0050 | 30 x 50MM        | 8209                  |
| CAH00M31.0050 | 31 x 50MM        | 8365                  |
| CAH00M32.0050 | 32 x 50MM        | 8611                  |
| CAH00M33.0050 | 33 x 50MM        | 9014                  |
| CAH00M34.0050 | 34 x 50MM        | 9421                  |
| CAH00M35.0050 | 35 x 50MM        | 9910                  |
| CAH00M36.0050 | 36 x 50MM        | 10404                 |
| CAH00M37.0050 | 37 x 50MM        | 11065                 |
| CAH00M38.0050 | 38 x 50MM        | 11461                 |
| CAH00M39.0050 | 39 x 50MM        | 11776                 |
| CAH00M40.0050 | 40 x 50MM        | 12345                 |
| CAH00M41.0050 | 41 x 50MM        | 12834                 |
| CAH00M42.0050 | 42 x 50MM        | 13316                 |
| CAH00M43.0050 | 43 x 50MM        | 13649                 |



## HSS M2 ANNULAR CUTTER (DEPTH OF CUT - 50MM) HSN CODE - 8207

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAH00M44.0050 | 44 x 50MM        | 14132                 |
| CAH00M45.0050 | 45 x 50MM        | 14120                 |
| CAH00M50.0050 | 50 x 50MM        | 18601                 |

## HSS M2 ANNULAR CUTTER



## TCT ANNULAR CUTTER (DEPTH OF CUT - 35MM) HSN CODE - 8207

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT00M12.0035 | 12 x 35 MM       | 4504                  |
| CAT00M13.0035 | 13 x 35 MM       | 4504                  |
| CAT00M14.0035 | 14 x 35 MM       | 4504                  |
| CAT00M15.0035 | 15 x 35 MM       | 4504                  |
| CAT00M16.0035 | 16 x 35 MM       | 4504                  |
| CAT00M17.0035 | 17 x 35 MM       | 4504                  |
| CAT00M18.0035 | 18 x 35 MM       | 4504                  |
| CAT00M19.0035 | 19 x 35 MM       | 4504                  |
| CAT00M20.0035 | 20 x 35 MM       | 4504                  |
| CAT00M21.0035 | 21 x 35 MM       | 4504                  |
| CAT00M21.5035 | 21.50 x 35 MM    | 4504                  |
| CAT00M22.0035 | 22 x 35 MM       | 4504                  |
| CAT00M23.0035 | 23 x 35 MM       | 4504                  |
| CAT00M23.5035 | 23.50 x 35 MM    | 4504                  |
| CAT00M24.0035 | 24 x 35 MM       | 4504                  |
| CAT00M25.0035 | 25 x 35 MM       | 4504                  |
| CAT00M26.0035 | 26 x 35 MM       | 4803                  |
| CAT00M27.0035 | 27 x 35 MM       | 4803                  |
| CAT00M28.0035 | 28 x 35 MM       | 4803                  |

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT00M29.0035 | 29 x 35 MM       | 4803                  |
| CAT00M30.0035 | 30 x 35 MM       | 4803                  |
| CAT00M31.0035 | 31 x 35 MM       | 5917                  |
| CAT00M32.0035 | 32 x 35 MM       | 5917                  |
| CAT00M33.0035 | 33 x 35 MM       | 5917                  |
| CAT00M34.0035 | 34 x 35 MM       | 5917                  |
| CAT00M35.0035 | 35 x 35 MM       | 5917                  |
| CAT00M36.0035 | 36 x 35 MM       | 6755                  |
| CAT00M37.0035 | 37 x 35 MM       | 6755                  |
| CAT00M38.0035 | 38 x 35 MM       | 6755                  |
| CAT00M39.0035 | 39 x 35 MM       | 6755                  |
| CAT00M40.0035 | 40 x 35 MM       | 6755                  |
| CAT00M41.0035 | 41 x 35 MM       | 7664                  |
| CAT00M42.0035 | 42 x 35 MM       | 7664                  |
| CAT00M43.0035 | 43 x 35 MM       | 7664                  |
| CAT00M44.0035 | 44 x 35 MM       | 7664                  |
| CAT00M45.0035 | 45 x 35 MM       | 7664                  |
| CAT00M46.0035 | 46 x 35 MM       | 8720                  |
| CAT00M47.0035 | 47 x 35 MM       | 8720                  |

## TCT ANNULAR CUTTER (DEPTH OF CUT - 35MM) HSN CODE - 8207

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT00M47.5035 | 47.50 x 35 MM    | 8720                  |
| CAT00M48.0035 | 48 x 35 MM       | 8720                  |

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT00M49.0035 | 49 x 35 MM       | 8720                  |
| CAT00M50.0035 | 50 x 35 MM       | 8720                  |

## TCT ANNULAR CUTTER (DEPTH OF CUT - 50MM) HSN CODE - 8207

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT00M12.0050 | 12 x 50 MM       | 5055                  |
| CAT00M13.0050 | 13 x 50 MM       | 5055                  |
| CAT00M14.0050 | 14 x 50 MM       | 4590                  |
| CAT00M15.0050 | 15 x 50 MM       | 5055                  |
| CAT00M16.0050 | 16 x 50 MM       | 5055                  |
| CAT00M17.0050 | 17 x 50 MM       | 5055                  |
| CAT00M17.5050 | 17.50 x 50 MM    | 5055                  |
| CAT00M18.0050 | 18 x 50 MM       | 4590                  |
| CAT00M19.0050 | 19 x 50 MM       | 5055                  |
| CAT00M20.0050 | 20 x 50 MM       | 5055                  |
| CAT00M21.0050 | 21 x 50 MM       | 5055                  |
| CAT00M21.5050 | 21.50 x 50 MM    | 5055                  |
| CAT00M22.0050 | 22 x 50 MM       | 4590                  |
| CAT00M23.0050 | 23 x 50 MM       | 5055                  |
| CAT00M23.5050 | 23.50 x 50 MM    | 5055                  |
| CAT00M24.0050 | 24 x 50 MM       | 5055                  |
| CAT00M25.0050 | 25 x 50 MM       | 5055                  |
| CAT00M26.0050 | 26 x 50 MM       | 4897                  |
| CAT00M27.0050 | 27 x 50 MM       | 5343                  |
| CAT00M28.0050 | 28 x 50 MM       | 5343                  |
| CAT00M29.0050 | 29 x 50 MM       | 5343                  |
| CAT00M30.0050 | 30 x 50 MM       | 5343                  |
| CAT00M31.0050 | 31 x 50 MM       | 6755                  |
| CAT00M32.0050 | 32 x 50 MM       | 6755                  |
| CAT00M33.0050 | 33 x 50 MM       | 6755                  |
| CAT00M34.0050 | 34 x 50 MM       | 6755                  |
| CAT00M35.0050 | 35 x 50 MM       | 6755                  |
| CAT00M36.0050 | 36 x 50 MM       | 7733                  |
| CAT00M37.0050 | 37 x 50 MM       | 7733                  |
| CAT00M38.0050 | 38 x 50 MM       | 7733                  |
| CAT00M39.0050 | 39 x 50 MM       | 7733                  |
| CAT00M40.0050 | 40 x 50 MM       | 7733                  |
| CAT00M41.0050 | 41 x 50 MM       | 8720                  |

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT00M42.0050 | 42 x 50 MM       | 8720                  |
| CAT00M43.0050 | 43 x 50 MM       | 8720                  |
| CAT00M44.0050 | 44 x 50 MM       | 8720                  |
| CAT00M45.0050 | 45 x 50 MM       | 8720                  |
| CAT00M46.0050 | 46 x 50 MM       | 10042                 |
| CAT00M47.0050 | 47 x 50 MM       | 10042                 |
| CAT00M48.0050 | 48 x 50 MM       | 10042                 |
| CAT00M49.0050 | 49 x 50 MM       | 10042                 |
| CAT00M50.0050 | 50 x 50 MM       | 10042                 |
| CAT00M51.0050 | 51 x 50 MM       | 12081                 |
| CAT00M52.0050 | 52 x 50 MM       | 12081                 |
| CAT00M53.0050 | 53 x 50 MM       | 12081                 |
| CAT00M54.0050 | 54 x 50 MM       | 12081                 |
| CAT00M55.0050 | 55 x 50 MM       | 12081                 |
| CAT00M56.0050 | 56 x 50 MM       | 12875                 |
| CAT00M57.0050 | 57 x 50 MM       | 12875                 |
| CAT00M58.0050 | 58 x 50 MM       | 12875                 |
| CAT00M59.0050 | 59 x 50 MM       | 12875                 |
| CAT00M60.0050 | 60 x 50 MM       | 12875                 |
| CAT00M61.0050 | 61 x 50 MM       | 14800                 |
| CAT00M62.0050 | 62 x 50 MM       | 14800                 |
| CAT00M63.0050 | 63 x 50 MM       | 14800                 |
| CAT00M64.0050 | 64 x 50 MM       | 14800                 |
| CAT00M65.0050 | 65 x 50 MM       | 14800                 |
| CAT00M66.0050 | 66 x 50 MM       | 16902                 |
| CAT00M67.0050 | 67 x 50 MM       | 16902                 |
| CAT00M68.0050 | 68 x 50 MM       | 16902                 |
| CAT00M69.0050 | 69 x 50 MM       | 16902                 |
| CAT00M70.0050 | 70 x 50 MM       | 16902                 |
| CAT00M71.0050 | 71 x 50 MM       | 18925                 |
| CAT00M72.0050 | 72 x 50 MM       | 18925                 |
| CAT00M73.0050 | 73 x 50 MM       | 18925                 |
| CAT00M74.0050 | 74 x 50 MM       | 18925                 |



## TCT ANNULAR CUTTER (DEPTH OF CUT - 50MM) HSN CODE - 8207

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT00M75.0050 | 75 x 50 MM       | 18925                 |
| CAT00M76.0050 | 76 x 50 MM       | 20805                 |
| CAT00M77.0050 | 77 x 50 MM       | 20805                 |
| CAT00M78.0050 | 78 x 50 MM       | 20805                 |
| CAT00M79.0050 | 79 x 50 MM       | 20805                 |
| CAT00M80.0050 | 80 x 50 MM       | 20805                 |
| CAT00M81.0050 | 81 x 50 MM       | 24019                 |
| CAT00M82.0050 | 82 x 50 MM       | 24019                 |
| CAT00M83.0050 | 83 x 50 MM       | 24019                 |
| CAT00M84.0050 | 84 x 50 MM       | 24019                 |
| CAT00M85.0050 | 85 x 50 MM       | 24019                 |
| CAT00M86.0050 | 86 x 50 MM       | 25561                 |
| CAT00M87.0050 | 87 x 50 MM       | 25561                 |

| MATERIAL CODE  | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|----------------|------------------|-----------------------|
| CAT00M88.0050  | 88 x 50 MM       | 25561                 |
| CAT00M89.0050  | 89 x 50 MM       | 25561                 |
| CAT00M90.0050  | 90 x 50 MM       | 25561                 |
| CAT00M91.0050  | 91 x 50 MM       | 28000                 |
| CAT00M92.0050  | 92 x 50 MM       | 28000                 |
| CAT00M93.0050  | 93 x 50 MM       | 28000                 |
| CAT00M94.0050  | 94 x 50 MM       | 28000                 |
| CAT00M95.0050  | 95 x 50 MM       | 28000                 |
| CAT00M96.0050  | 96 x 50 MM       | 32008                 |
| CAT00M97.0050  | 97 x 50 MM       | 32008                 |
| CAT00M98.0050  | 98 x 50 MM       | 32008                 |
| CAT00M99.0050  | 99 x 50 MM       | 32008                 |
| CAT00M100.0050 | 100 x 50 MM      | 32008                 |

## TCT ANNULAR CUTTER (DEPTH OF CUT - 75MM) HSN CODE - 8207

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT00M14.0075 | 14 x 75 MM       | 9546                  |
| CAT00M15.0075 | 15 x 75 MM       | 9546                  |
| CAT00M16.0075 | 16 x 75 MM       | 9546                  |
| CAT00M17.0075 | 17 x 75 MM       | 9546                  |
| CAT00M17.5075 | 17.50 x 75 MM    | 9546                  |
| CAT00M18.0075 | 18 x 75 MM       | 9546                  |
| CAT00M19.0075 | 19 x 75 MM       | 9546                  |
| CAT00M20.0075 | 20 x 75 MM       | 9546                  |
| CAT00M21.0075 | 21 x 75 MM       | 9546                  |
| CAT00M21.5075 | 21.50 x 75 MM    | 9546                  |
| CAT00M22.0075 | 22 x 75 MM       | 9546                  |
| CAT00M23.0075 | 23 x 75 MM       | 9546                  |
| CAT00M23.5075 | 23.50 x 75 MM    | 9546                  |
| CAT00M24.0075 | 24 x 75 MM       | 9546                  |
| CAT00M25.0075 | 25 x 75 MM       | 9546                  |
| CAT00M26.0075 | 26 x 75 MM       | 10382                 |
| CAT00M27.0075 | 27 x 75 MM       | 10382                 |
| CAT00M28.0075 | 28 x 75 MM       | 10382                 |
| CAT00M29.0075 | 29 x 75 MM       | 10382                 |
| CAT00M30.0075 | 30 x 75 MM       | 10382                 |
| CAT00M31.0075 | 31 x 75 MM       | 12543                 |

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT00M32.0075 | 32 x 75 MM       | 12543                 |
| CAT00M33.0075 | 33 x 75 MM       | 12543                 |
| CAT00M34.0075 | 34 x 75 MM       | 12543                 |
| CAT00M35.0075 | 35 x 75 MM       | 12543                 |
| CAT00M36.0075 | 36 x 75 MM       | 14444                 |
| CAT00M37.0075 | 37 x 75 MM       | 14444                 |
| CAT00M38.0075 | 38 x 75 MM       | 14444                 |
| CAT00M39.0075 | 39 x 75 MM       | 14444                 |
| CAT00M40.0075 | 40 x 75 MM       | 14444                 |
| CAT00M41.0075 | 41 x 75 MM       | 16579                 |
| CAT00M42.0075 | 42 x 75 MM       | 16579                 |
| CAT00M43.0075 | 43 x 75 MM       | 16579                 |
| CAT00M44.0075 | 44 x 75 MM       | 16579                 |
| CAT00M45.0075 | 45 x 75 MM       | 16579                 |
| CAT00M46.0075 | 46 x 75 MM       | 19902                 |
| CAT00M47.0075 | 47 x 75 MM       | 19902                 |
| CAT00M48.0075 | 48 x 75 MM       | 19902                 |
| CAT00M49.0075 | 49 x 75 MM       | 19902                 |
| CAT00M50.0075 | 50 x 75 MM       | 19902                 |
| CAT00M51.0075 | 51 x 75 MM       | 20818                 |
| CAT00M52.0075 | 52 x 75 MM       | 20818                 |

## TCT ANNULAR CUTTER (DEPTH OF CUT - 75MM) HSN CODE - 8207

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT00M53.0075 | 53 x 75 MM       | 20818                 |
| CAT00M54.0075 | 54 x 75 MM       | 20818                 |
| CAT00M55.0075 | 55 x 75 MM       | 20818                 |
| CAT00M56.0075 | 56 x 75 MM       | 22049                 |
| CAT00M57.0075 | 57 x 75 MM       | 22049                 |
| CAT00M58.0075 | 58 x 75 MM       | 22049                 |
| CAT00M59.0075 | 59 x 75 MM       | 22049                 |
| CAT00M60.0075 | 60 x 75 MM       | 22049                 |
| CAT00M61.0075 | 61 x 75 MM       | 25012                 |
| CAT00M62.0075 | 62 x 75 MM       | 25012                 |
| CAT00M63.0075 | 63 x 75 MM       | 25012                 |
| CAT00M64.0075 | 64 x 75 MM       | 25012                 |
| CAT00M65.0075 | 65 x 75 MM       | 25012                 |
| CAT00M66.0075 | 66 x 75 MM       | 29117                 |
| CAT00M67.0075 | 67 x 75 MM       | 29117                 |
| CAT00M68.0075 | 68 x 75 MM       | 29117                 |
| CAT00M69.0075 | 69 x 75 MM       | 29117                 |
| CAT00M70.0075 | 70 x 75 MM       | 29117                 |
| CAT00M71.0075 | 71 x 75 MM       | 31565                 |
| CAT00M72.0075 | 72 x 75 MM       | 31565                 |
| CAT00M73.0075 | 73 x 75 MM       | 31565                 |
| CAT00M74.0075 | 74 x 75 MM       | 31565                 |
| CAT00M75.0075 | 75 x 75 MM       | 31565                 |
| CAT00M76.0075 | 76 x 75 MM       | 34695                 |

| MATERIAL CODE  | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|----------------|------------------|-----------------------|
| CAT00M77.0075  | 77 x 75 MM       | 34695                 |
| CAT00M78.0075  | 78 x 75 MM       | 34695                 |
| CAT00M79.0075  | 79 x 75 MM       | 34695                 |
| CAT00M80.0075  | 80 x 75 MM       | 34695                 |
| CAT00M81.0075  | 81 x 75 MM       | 39254                 |
| CAT00M82.0075  | 82 x 75 MM       | 39254                 |
| CAT00M83.0075  | 83 x 75 MM       | 39254                 |
| CAT00M84.0075  | 84 x 75 MM       | 39254                 |
| CAT00M85.0075  | 85 x 75 MM       | 39254                 |
| CAT00M86.0075  | 86 x 75 MM       | 41775                 |
| CAT00M87.0075  | 87 x 75 MM       | 41775                 |
| CAT00M88.0075  | 88 x 75 MM       | 41775                 |
| CAT00M89.0075  | 89 x 75 MM       | 41775                 |
| CAT00M90.0075  | 90 x 75 MM       | 41775                 |
| CAT00M91.0075  | 91 x 75 MM       | 45756                 |
| CAT00M92.0075  | 92 x 75 MM       | 45756                 |
| CAT00M93.0075  | 93 x 75 MM       | 45756                 |
| CAT00M94.0075  | 94 x 75 MM       | 45756                 |
| CAT00M95.0075  | 95 x 75 MM       | 45756                 |
| CAT00M96.0075  | 96 x 75 MM       | 52310                 |
| CAT00M97.0075  | 97 x 75 MM       | 52310                 |
| CAT00M98.0075  | 98 x 75 MM       | 52310                 |
| CAT00M99.0075  | 99 x 75 MM       | 52310                 |
| CAT00M100.0075 | 100 x 75 MM      | 52310                 |

## TCT ANNULAR CUTTER (DEPTH OF CUT - 100MM) HSN CODE - 8207

| MATERIAL CODE  | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|----------------|------------------|-----------------------|
| CAT00M20.00100 | 20 x 100 MM      | 12721                 |
| CAT00M21.00100 | 21 x 100 MM      | 12721                 |
| CAT00M21.50100 | 21.50 x 100 MM   | 12721                 |
| CAT00M22.00100 | 22 x 100 MM      | 12721                 |
| CAT00M23.00100 | 23 x 100 MM      | 12721                 |
| CAT00M23.50100 | 23.50 x 100 MM   | 12721                 |
| CAT00M24.00100 | 24 x 100 MM      | 12721                 |
| CAT00M25.00100 | 25 x 100 MM      | 12721                 |
| CAT00M25.50100 | 25.50 x 100 MM   | 14158                 |
| CAT00M26.00100 | 26 x 100 MM      | 14158                 |
| CAT00M27.00100 | 27 x 100 MM      | 14158                 |

| MATERIAL CODE  | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|----------------|------------------|-----------------------|
| CAT00M28.00100 | 28 x 100 MM      | 14158                 |
| CAT00M29.00100 | 29 x 100 MM      | 14158                 |
| CAT00M30.00100 | 30 x 100 MM      | 14158                 |
| CAT00M31.00100 | 31 x 100 MM      | 16280                 |
| CAT00M32.00100 | 32 x 100 MM      | 16280                 |
| CAT00M33.00100 | 33 x 100 MM      | 16280                 |
| CAT00M34.00100 | 34 x 100 MM      | 16280                 |
| CAT00M35.00100 | 35 x 100 MM      | 16280                 |
| CAT00M36.00100 | 36 x 100 MM      | 18808                 |
| CAT00M37.00100 | 37 x 100 MM      | 18808                 |
| CAT00M38.00100 | 38 x 100 MM      | 18808                 |

## TCT ANNULAR CUTTER (DEPTH OF CUT - 100MM) HSN CODE - 8207

| MATERIAL CODE  | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|----------------|------------------|-----------------------|
| CAT00M39.00100 | 39 x 100 MM      | 18808                 |
| CAT00M40.00100 | 40 x 100 MM      | 18808                 |
| CAT00M41.00100 | 41 x 100 MM      | 21209                 |
| CAT00M42.00100 | 42 x 100 MM      | 21209                 |
| CAT00M43.00100 | 43 x 100 MM      | 21209                 |
| CAT00M44.00100 | 44 x 100 MM      | 21209                 |
| CAT00M45.00100 | 45 x 100 MM      | 21209                 |
| CAT00M46.00100 | 46 x 100 MM      | 25276                 |
| CAT00M47.00100 | 47 x 100 MM      | 25276                 |
| CAT00M48.00100 | 48 x 100 MM      | 25276                 |
| CAT00M49.00100 | 49 x 100 MM      | 25276                 |
| CAT00M50.00100 | 50 x 100 MM      | 25276                 |
| CAT00M51.00100 | 51 x 100 MM      | 26646                 |
| CAT00M52.00100 | 52 x 100 MM      | 26646                 |
| CAT00M53.00100 | 53 x 100 MM      | 26646                 |
| CAT00M54.00100 | 54 x 100 MM      | 26646                 |
| CAT00M55.00100 | 55 x 100 MM      | 26646                 |
| CAT00M56.00100 | 56 x 100 MM      | 28221                 |
| CAT00M57.00100 | 57 x 100 MM      | 28221                 |
| CAT00M58.00100 | 58 x 100 MM      | 28221                 |
| CAT00M59.00100 | 59 x 100 MM      | 28221                 |
| CAT00M60.00100 | 60 x 100 MM      | 28221                 |
| CAT00M61.00100 | 61 x 100 MM      | 32019                 |
| CAT00M62.00100 | 62 x 100 MM      | 32019                 |
| CAT00M63.00100 | 63 x 100 MM      | 32019                 |
| CAT00M64.00100 | 64 x 100 MM      | 32019                 |
| CAT00M65.00100 | 65 x 100 MM      | 32019                 |
| CAT00M66.00100 | 66 x 100 MM      | 36975                 |
| CAT00M67.00100 | 67 x 100 MM      | 36975                 |
| CAT00M68.00100 | 68 x 100 MM      | 36975                 |
| CAT00M69.00100 | 69 x 100 MM      | 36975                 |
| CAT00M70.00100 | 70 x 100 MM      | 36975                 |
| CAT00M71.00100 | 71 x 100 MM      | 40082                 |
| CAT00M72.00100 | 72 x 100 MM      | 40082                 |
| CAT00M73.00100 | 73 x 100 MM      | 40082                 |
| CAT00M74.00100 | 74 x 100 MM      | 40082                 |
| CAT00M75.00100 | 75 x 100 MM      | 40082                 |
| CAT00M76.00100 | 76 x 100 MM      | 44063                 |

| MATERIAL CODE   | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|-----------------|------------------|-----------------------|
| CAT00M77.00100  | 77 x 100 MM      | 44063                 |
| CAT00M78.00100  | 78 x 100 MM      | 44063                 |
| CAT00M79.00100  | 79 x 100 MM      | 44063                 |
| CAT00M80.00100  | 80 x 100 MM      | 44063                 |
| CAT00M81.00100  | 81 x 100 MM      | 49854                 |
| CAT00M82.00100  | 82 x 100 MM      | 49854                 |
| CAT00M83.00100  | 83 x 100 MM      | 49854                 |
| CAT00M84.00100  | 84 x 100 MM      | 49854                 |
| CAT00M85.00100  | 85 x 100 MM      | 49854                 |
| CAT00M86.00100  | 86 x 100 MM      | 55264                 |
| CAT00M87.00100  | 87 x 100 MM      | 55264                 |
| CAT00M88.00100  | 88 x 100 MM      | 55264                 |
| CAT00M89.00100  | 89 x 100 MM      | 55264                 |
| CAT00M90.00100  | 90 x 100 MM      | 55264                 |
| CAT00M91.00100  | 91 x 100 MM      | 61201                 |
| CAT00M92.00100  | 92 x 100 MM      | 61201                 |
| CAT00M93.00100  | 93 x 100 MM      | 61201                 |
| CAT00M94.00100  | 94 x 100 MM      | 61201                 |
| CAT00M95.00100  | 95 x 100 MM      | 61201                 |
| CAT00M96.00100  | 96 x 100 MM      | 66435                 |
| CAT00M97.00100  | 97 x 100 MM      | 66435                 |
| CAT00M98.00100  | 98 x 100 MM      | 66435                 |
| CAT00M99.00100  | 99 x 100 MM      | 66435                 |
| CAT00M100.00100 | 100 x 100 MM     | 66435                 |

### TCT ANNULAR CUTTER



### DEPTH OF CUT - 25MM

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT01M12.0025 | 12 x 25MM        | 9507                  |
| CAT01M13.0025 | 13 x 25MM        | 9507                  |
| CAT01M14.0025 | 14 x 25MM        | 9507                  |
| CAT01M15.0025 | 15 x 25MM        | 9507                  |
| CAT01M16.0025 | 16 x 25MM        | 9507                  |
| CAT01M17.0025 | 17 x 25MM        | 9507                  |
| CAT01M18.0025 | 18 x 25MM        | 9507                  |
| CAT01M19.0025 | 19 x 25MM        | 9507                  |
| CAT01M20.0025 | 20 x 25MM        | 9507                  |
| CAT01M21.0025 | 21 x 25MM        | 9507                  |
| CAT01M22.0025 | 22 x 25MM        | 9852                  |
| CAT01M23.0025 | 23 x 25MM        | 9852                  |
| CAT01M24.0025 | 24 x 25MM        | 9852                  |
| CAT01M25.0025 | 25 x 25MM        | 9852                  |
| CAT01M26.0025 | 26 x 25MM        | 9852                  |
| CAT01M27.0025 | 27 x 25MM        | 9852                  |
| CAT01M28.0025 | 28 x 25MM        | 9852                  |
| CAT01M29.0025 | 29 x 25MM        | 9852                  |
| CAT01M30.0025 | 30 x 25MM        | 9852                  |
| CAT01M31.0025 | 31 x 25MM        | 10959                 |
| CAT01M32.0025 | 32 x 25MM        | 10959                 |
| CAT01M33.0025 | 33 x 25MM        | 10959                 |
| CAT01M34.0025 | 34 x 25MM        | 10959                 |
| CAT01M35.0025 | 35 x 25MM        | 11780                 |

### DEPTH OF CUT - 50MM

| MATERIAL CODE | ITEM DESCRIPTION | LIST PRICE (Rs.) EACH |
|---------------|------------------|-----------------------|
| CAT01M12.0050 | 12 x 50MM        | 11187                 |
| CAT01M13.0050 | 13 x 50MM        | 11187                 |
| CAT01M14.0050 | 14 x 50MM        | 11187                 |
| CAT01M15.0050 | 15 x 50MM        | 11187                 |
| CAT01M16.0050 | 16 x 50MM        | 11187                 |
| CAT01M17.0050 | 17 x 50MM        | 11187                 |
| CAT01M18.0050 | 18 x 50MM        | 11187                 |
| CAT01M19.0050 | 19 x 50MM        | 11187                 |
| CAT01M20.0050 | 20 x 50MM        | 11187                 |
| CAT01M21.0050 | 21 x 50MM        | 11187                 |
| CAT01M22.0050 | 22 x 50MM        | 11912                 |
| CAT01M23.0050 | 23 x 50MM        | 11912                 |
| CAT01M24.0050 | 24 x 50MM        | 11912                 |
| CAT01M25.0050 | 25 x 50MM        | 11912                 |
| CAT01M26.0050 | 26 x 50MM        | 11912                 |
| CAT01M26.5050 | 26.50 x 50MM     | 12337                 |
| CAT01M27.0050 | 27 x 50MM        | 12337                 |
| CAT01M28.0050 | 28 x 50MM        | 12337                 |
| CAT01M29.0050 | 29 x 50MM        | 12337                 |
| CAT01M30.0050 | 30 x 50MM        | 12337                 |
| CAT01M31.0050 | 31 x 50MM        | 12337                 |
| CAT01M31.7550 | 31.75 x 50MM     | 13041                 |
| CAT01M32.0050 | 32 x 50MM        | 13041                 |
| CAT01M33.0050 | 33 x 50MM        | 13041                 |
| CAT01M34.0050 | 34 x 50MM        | 13041                 |
| CAT01M35.0050 | 35 x 50MM        | 14133                 |



## RAIL TCT ANNULAR CUTTER

## PILOT PIN HSN CODE - 8207

| MATERIAL CODE  | ITEM DESCRIPTION | LIST PRICE FOR 10 Nos |
|----------------|------------------|-----------------------|
| PPN00M6.34L90  | 6.34mm x 90mm    | 6250                  |
| PPN00M6.34L106 | 6.34mm x 106mm   | 8628                  |
| PPN00M7.98L90  | 7.98mm x 90mm    | 6641                  |

| MATERIAL CODE  | ITEM DESCRIPTION | LIST PRICE FOR 10 Nos |
|----------------|------------------|-----------------------|
| PPN00M7.98L105 | 7.98mm x 105mm   | 9237                  |
| PPN00M7.98L130 | 7.98mm x 130mm   | 10777                 |
| PPN00M7.98L157 | 7.98mm x 157mm   | 12086                 |



## MAGNETIC DRILL MACHINE HSN CODE - 8459

| MATERIAL CODE | ITEM DESCRIPTION         | LIST PRICE (Rs.) EACH |
|---------------|--------------------------|-----------------------|
| MDM01DX35     | DX35, M12-M35, DOC 50    | 45000                 |
| MDM01DX60     | DX60, M14-M60, DOC 75    | 90000                 |
| MDM01DX120    | DX120, M18-M120, DOC 100 | 157000                |



## BDT PRODUCTS

