



EX-2000 SERIES

Dual Spindle, Single Turret
Horizontal Turning Center Specifications



*All specifications are subject to change without prior notice
Verification of technical changes may be confirmed after receipt of order*

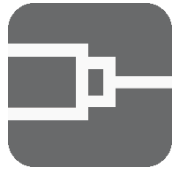


EX-2000

Twin built-in spindle motors allow for highly accurate machining. Both spindles are capable of **0.001** degree indexing to complete complex processes.



The turret is designed for extreme rigidity with its wide and heavy build, oversized heavy duty couplings, and enhanced clamping pressure.



Spindle Specifications

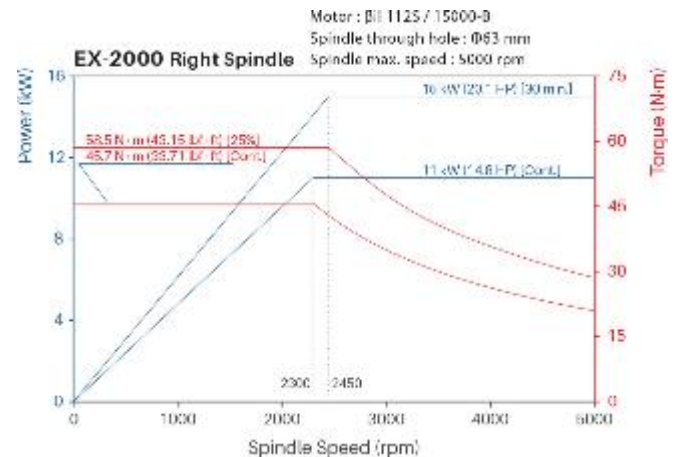
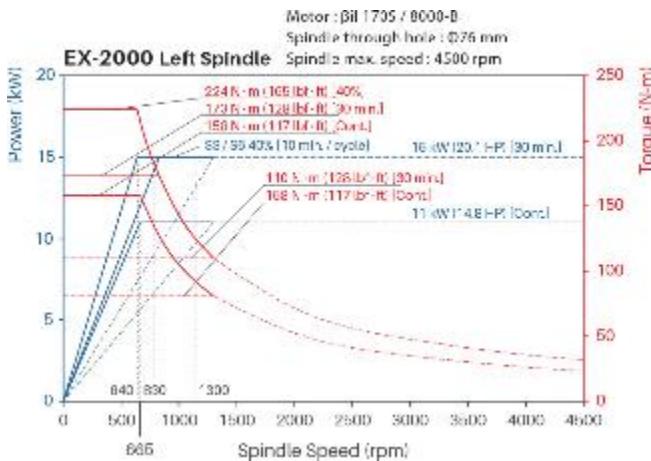


Takisawa Taiwan designs, manufactures, and assembles their own spindles offering high rigidity and accuracy with easy maintenance.



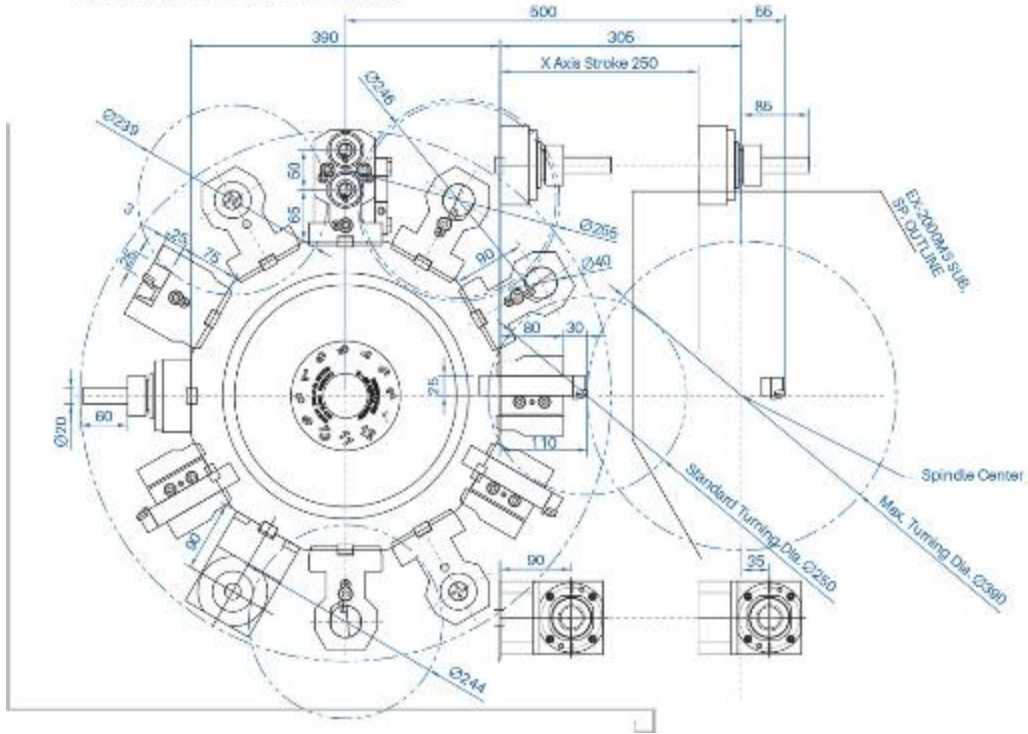
Spindle Output Diagram

Powered by FANUC MOTOR for high stability & high accuracy

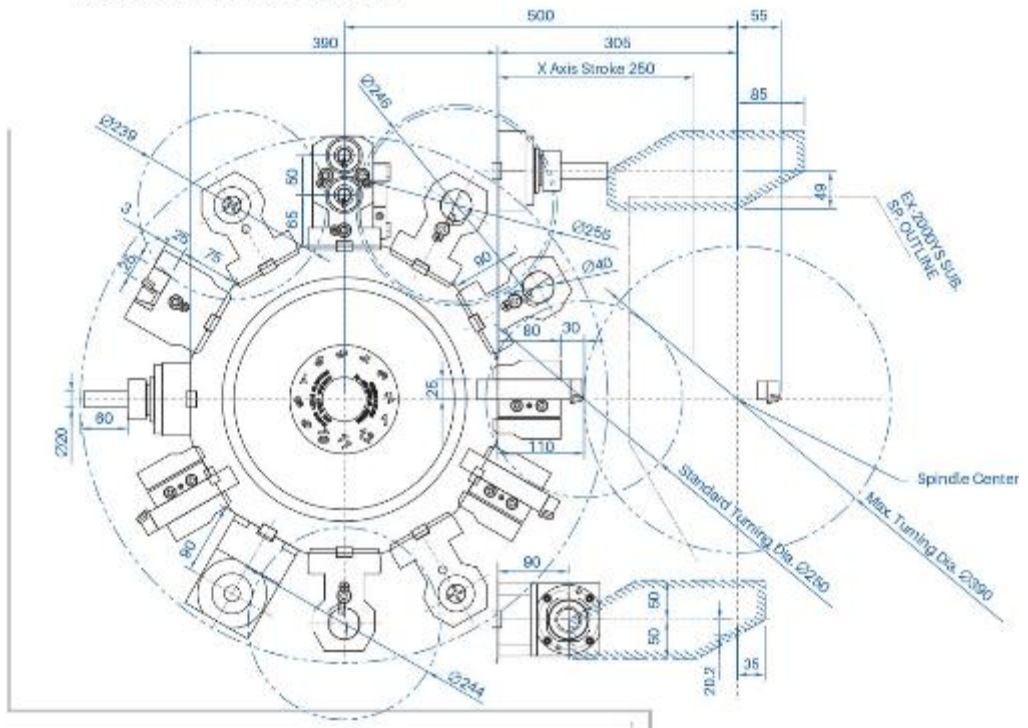


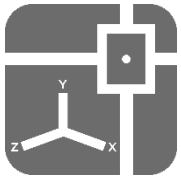
Interference Diagram

EX-2000MT / EX-2000MS

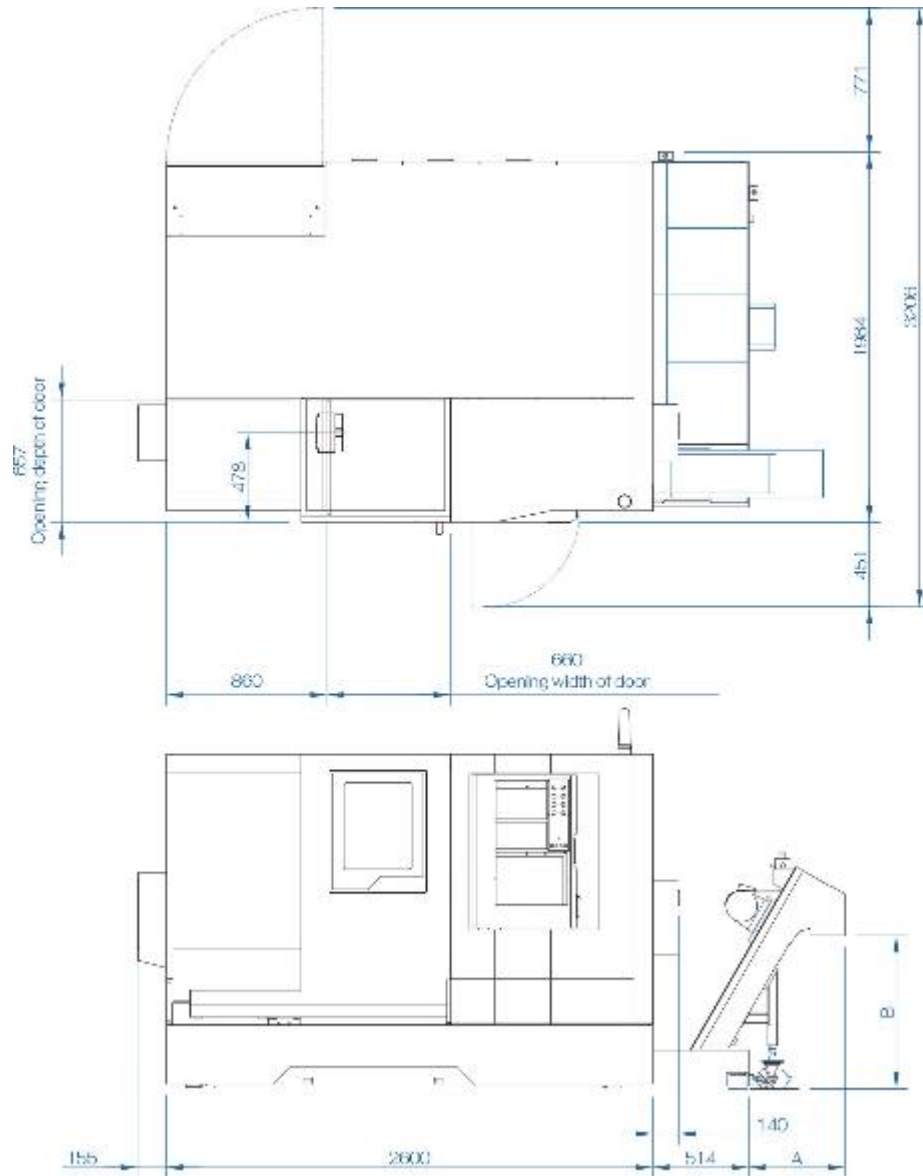


EX-2000YT / EX-2000YS



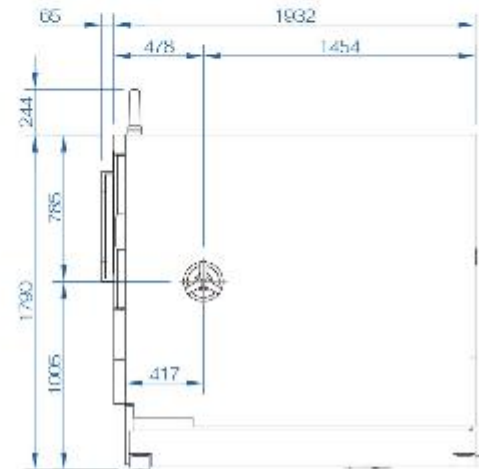


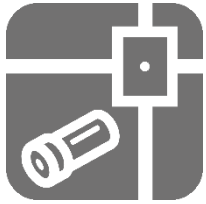
Machine Dimensions



Chip Conveyor Dimension

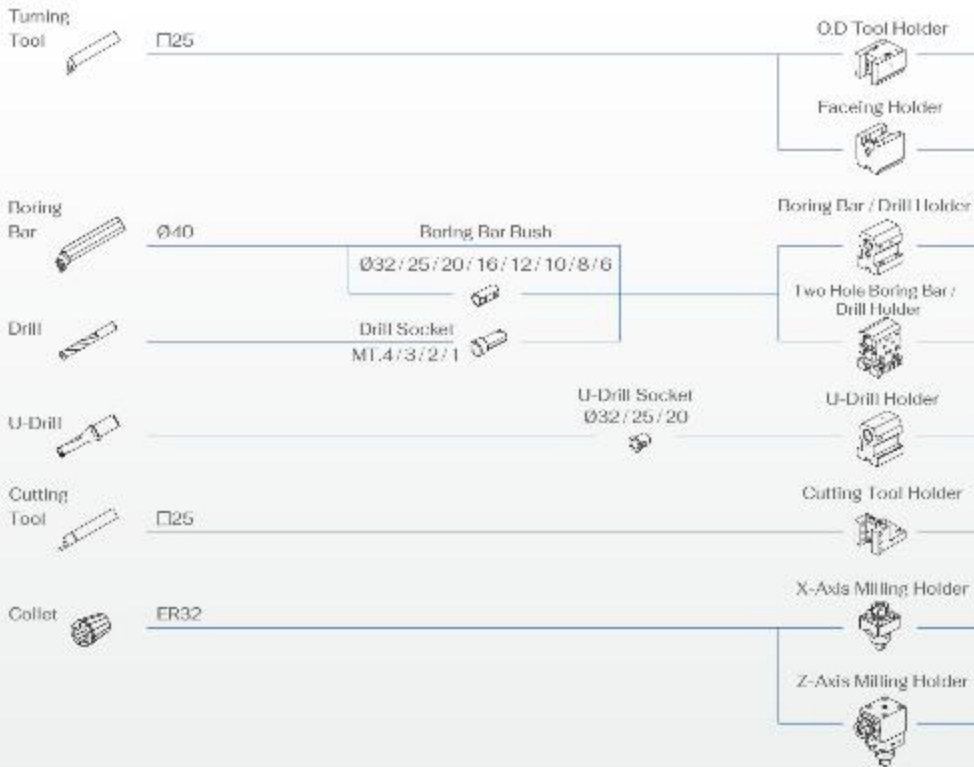
| | A | B |
|-------------|-----|------|
| Standard | 553 | 820 |
| CE | 553 | 820 |
| Italy | 578 | 1043 |
| Switzerland | 578 | 1123 |



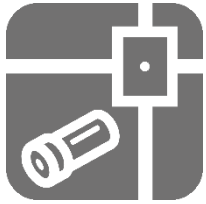


Tooling System

EX-2000MT / EX-2000YT

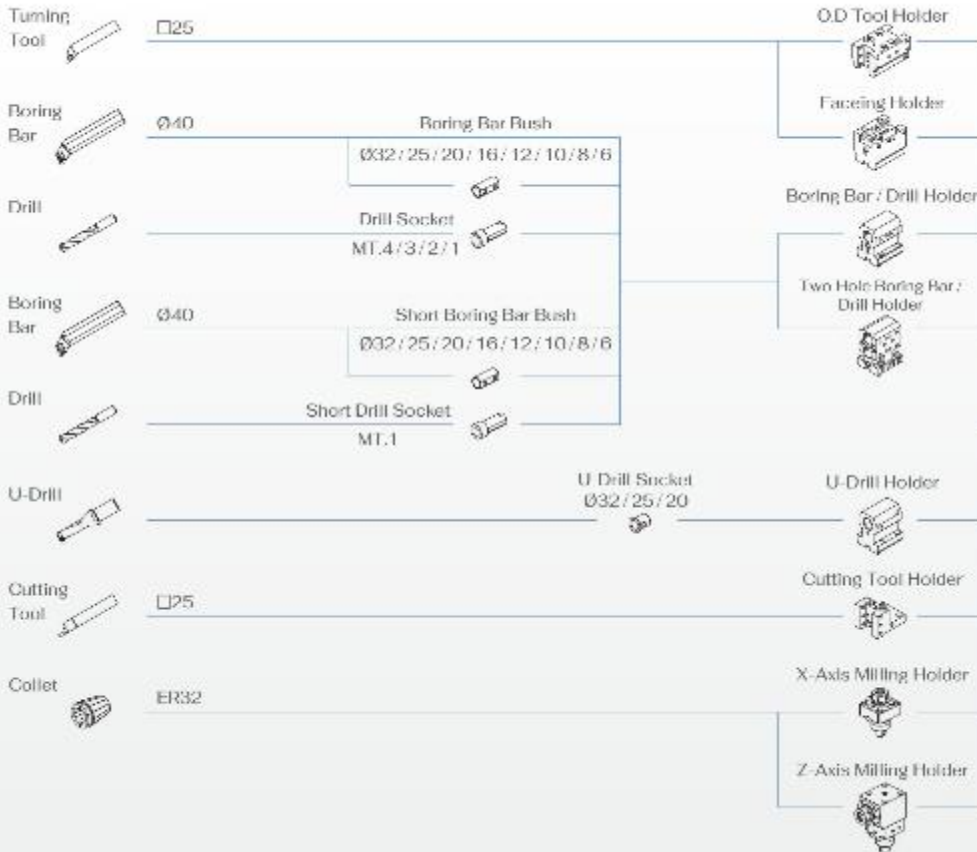


EX-2000MT,
EX-2000YT



Tooling System

EX-2000MS / EX-2000YS



EX-2000MS,
EX-2000YS

Designed and built by Takisawa Taiwan Technology Co., LTD in Taiwan, this CNC turning center is sold and serviced by JTEKT Toyoda Americas Corporation and our exclusive distribution partners.

| | | | TX-2000 | | | |
|---------------|---------------------------|-------|--------------|-----------|--------------|-----------|
| Item | | | MT | MS | YT | YS |
| Capacity | Max. Swing | mm | 800 | 800 | 800 | 800 |
| | Standard Turning Diameter | mm | 250 | 250 | 250 | 250 |
| | Max. Turning Diameter | mm | 390 | 390 | 390 | 390 |
| | Max. Turning Length | mm | 510.5 | 510.5 | 510.5 | 510.5 |
| | Max. Bar Work Capacity | mm | 65 | 65 / 52 | 65 | 65 / 52 |
| | Dist. Between Centers | mm | — | 787 | — | 787 |
| Travel | X-Axis Travel | mm | 250 | 250 | 250 | 250 |
| | Z-Axis Travel | mm | 590 | 590 | 590 | 590 |
| | Y-Axis Travel | mm | — | — | ± 50 | ± 50 |
| | B-Axis Travel | mm | 570 | 570 | 570 | 570 |
| Left Spindle | Spindle Speed | rpm | 4500 | 4500 | 4500 | 4500 |
| | Spindle Nose | | A2-6 | A2-6 | A2-6 | A2-6 |
| | Through Hole Dia. | mm | 76 | 76 | 76 | 76 |
| | Bearing Diameter | mm | 110 | 110 | 110 | 110 |
| Right Spindle | Spindle Speed | rpm | — | 5000 | — | 5000 |
| | Spindle Nose | | — | A2-5 | — | A2-5 |
| | Through Hole Dia. | mm | — | 61 | — | 61 |
| | Bearing Diameter | mm | — | 80 | — | 80 |
| Turret | Number of Tools | | T12 | T12 | T12 | T12 |
| | OD Tool Shank Dia. | | 25 | 25 | 25 | 25 |
| | ID Tool Shank Dia. | mm | 40 | 40 | 40 | 40 |
| | Milling Shank Dia. | mm | 20 | 20 | 20 | 20 |
| | Spindle Speed | | 4000 | 4000 | 4000 | 4000 |
| Tailstock | Tailstock Type | | Regular Ctr. | — | Regular Ctr. | — |
| | | | Rolling Ctr. | — | Rolling Ctr. | — |
| | Tapered Bore Type | | MT5 | — | MT5 | — |
| Feedrate | X-Axis Rapid Traverse | m/min | 30 | 30 | 30 | 30 |
| | Z-Axis Rapid Traverse | m/min | 36 | 36 | 36 | 36 |
| | Y-Axis Rapid Traverse | m/min | — | — | 10 | 10 |
| | B-Axis Rapid Traverse | m/min | 36 | 36 | 36 | 36 |
| Motor | Left Spindle Motor | kW | 15 / 11 | 15 / 11 | 15 / 11 | 15 / 11 |
| | Right Spindle Motor | kW | — | 15 / 11 | — | 15 / 11 |
| | Milling Spindle Motor | kW | 5.5 / 3.7 | 5.5 / 3.7 | 5.5 / 3.7 | 5.5 / 3.7 |
| | Index Motor | kW | 1.2 | 1.2 | 1.2 | 1.2 |
| | X-Axis Servo Motor | kW | 3 | 3 | 3 | 3 |
| | Z-Axis Servo Motor | kW | 3 | 3 | 3 | 3 |
| | Y-Axis Servo Motor | kW | — | — | 1.4 | 1.4 |
| | B-Axis Servo Motor | kW | 1.8 | 1.8 | 1.8 | 1.8 |
| Machine Size | Height | mm | 1795 | 1790 | 1790 | 1790 |
| | Width | mm | 2600 | 2600 | 2600 | 2600 |
| | Depth | mm | 1932 | 1932 | 1932 | 1932 |
| | Weight | kg | 5300 | 5500 | 5700 | 5900 |

Control Specification : FANUC Oi-TF

| | |
|------------------------------------|---|
| CONTROL | CONTROLLABLE AXES: X, Z, C1, Y, & B AXIS (YT, YS SPEC ONLY), C2 FOR YS ONLY |
| | CONTROLLABLE AXES: X, Z, C1, & B AXIS (MT, MS SPEC ONLY), C2 FOR MS ONLY |
| | LEAST INPUT INCREMENT |
| | MAXIMUM PROGRAMMABLE DIMENSION (±999999.999) |
| FEED | FEEDRATE OVERRIDE |
| | DWELL: G04 |
| | ORIGINAL POINT RETURN: G27, G28, G30 |
| | MANUAL HANDLE FEED RATE: 0.001/0.01/0.1MM |
| | DRY RUN |
| | RAPID TRAVERSE OVERRIDE: F0, 25%, 50%, 100% |
| | FEED PER MINUTE/FEED PER REVOLUTION:G98, G99 |
| TOOL FUNCTIONS | TOOL NUMBER DISPLAY |
| | TOOL NOSE RADIUS COMPENSATION |
| | TOOL OFFSET PAIRS: 99 PAIRS |
| | TOOL OFFSET |
| PROGRAMMING FUNCTIONS | ABSOLUTE/INCREMENTAL PROGRAMMING |
| | MULTIPLE REPETITIVE CYCLE: G70~G76 |
| | CANNED CYCLES |
| | DECIMAL POINT INPUT |
| | INCH/METRIC CONVERSION |
| | CHAMFERING/CORNER R |
| | CIRCULAR INTERPOLATION: G02/03 |
| | SUB-PROGRAM CALL |
| | COORDINATE SYSTEM SETTING |
| | WORK PIECE COORDINATE SYSTEM |
| | CONSTANT SURFACE SPEED CONTROL |
| | AUXILIARY FUNCTION |
| | INPUT CODE: EIA/ISO AUTOMATIC RECOGNITION |
| | INPUT/OUTPUT INTERFACE: RS 232C |
| | PART PROGRAM STORAGE LENGTH: 2560M (1Mbyte) |
| | NUMBER OF REGISTERABLE PROGRAMS: 800 |
| | SEARCHING FUNCTION |
| | LABEL SKIP |
| | PARITY CHECK |
| OPTIONAL BLOCK SKIP | |
| OTHER | MDI/CRT UNIT: 10.4" LCD COLOR |
| | STORED STROKE CHECK |
| | BACKGROUND EDITING |
| | HELP FUNCTION |
| | LOAD METER |
| | SELF-DIAGNOSIS FUNCTION |
| | 1st SPINDLE ORIENTATION |
| | LOAD INSPECTION FUNCTION |
| SAFETY CLUTCH FOR CRASH PROTECTING | |

Standard Equipment

- 8" 3 jaw thru-hole power chucks with soft jaws
- 6" 3 jaw thru-hole power chucks with soft jaws on Sub-Spindle **(MS, YS spec only)**
- Built-In Spindle Motors with C Axis
- 12 station servo motor driven bi-directional indexing live turret
- Spindle chiller
- Programmable tailstock quill, programmable positioning tailstock **(MT, YT spec only)**
- Hinged Belt Type Lift-Up Chip Conveyor, Right Side Discharge
- OD tool holder 2pcs
- End face tool holder 2 pcs
- Boring bar tool holder 4 pcs
- Live tool holder ER32 one set each axis X&Z, including collets
- One full set of bushings, one set each size
- Graphic function
- G54-G59 Workpiece Coordinate System
- Safety Door Interlock and Safety Logic
- Bar Feeder Interface
- Halogen Work Light
- 3-Color Operation Status Light
- Auto Slide Way Lubrication System
- One(1) set Leveling Pads
- One(1) set of Adjusting Tools and Tool Box
- Manuals: Operation, Control, Parts List, Electrical Diagram
- Custom Macro B
- Manual Guide I
- 10.4" Color LCD
- 1 HP Coolant Pump