

Introduction

Stately Goods Wholesalers CO. L.L.C. has launched the fabrication and material processing range by the beginning of 2023 in its own brand with customized high quality materials by well reputed factories in U.A.E, India, and China.

Starting with cutting, grinding and sanding discs specification which have been manufactured with GERMAN TECHNOLOGY.

Abrasive Types

A	Aluminium Oxide: The most common of all grains, used for heavy-duty, general- purpose work
WA	White Aluminium Oxide: The high friability of this grain gives it the characteristic of fast and cool cutting used for light grinding of steel of all kinds, particularly stainless and tool steel
ZA	Zirconia Aluminium Oxide: For high-performance grinding and very long life Excellent on ferrous metals, castings, and stainless steel
C	Silicon Carbide: For grinding masonry, concrete, stone, and non-ferrous metals

Introduction

Diameter of wheel in mm.	15 m/s	20 m/s	25 m/s	30 m/s	35 m/s	45 m/s	60 m/s	80 m/s	100 m/s
	R.P.M								
65	4400	5900	7350	8800	10300	13200	17600	23500	29400
75	3825	5100	6380	7650	9000	11455	15300	20400	25500
80	3600	4800	6000	7200	8400	10700	14400	19000	24000
90	3185	4245	5300	6370	7430	9560	12750	17000	21200
100	2860	3800	4750	5700	6700	8600	11400	15250	19000
115	2500	3350	4150	5000	5800	7500	10000	13300	16600
125	2300	3050	3800	4600	5350	6900	9200	12200	15250
150	1900	2550	3200	3800	4500	5700	7600	10200	12700
175	1650	2200	2700	3300	3800	4900	6600	8800	11000
180	1600	2150	2650	3200	3720	4800	6400	8500	10600
200	1430	1900	2400	2860	3350	4300	5700	7600	9500
230	1250	1660	2075	2500	2900	3500	5000	6500	8300
250	1150	1525	1900	2300	2700	3450	4600	6100	7600
300	950	1270	1600	1900	2200	2900	3800	5100	6400
350	820	1100	1365	1640	1900	2450	3280	4400	5500
400	720	950	1200	1440	1670	2150	2880	3800	4750
450	640	850	1060	1280	1500	1900	2560	3400	4250
500	575	765	955	1150	1350	1720	2300	3050	3800
600	480	640	800	960	1100	1430	1920	2550	3200
750	380	510	640	760	900	1150	1520	2050	2550
900	320	425	530	640	750	950	1280	1700	2100
1000	285	380	475	570	670	860	1140	1530	1900

Technicalities

Grinding Wheel Quality

The quality of grinding wheel performance is related to the specific conditions of a given application, such as type of machine and composition of work piece and is evaluated according to two criteria: G-Ratio and Efficiency.

1. G-Ratio or Grinding Ratio

In grinding applications this is the ratio of the weight of material removed to the loss of grinding wheel weight over a given period.

This ratio is equivalent to the length of wheel life for a specific application.

In cutting applications, it is the ratio of the area of material cut to the area of the cut-off wheel lost. The higher the ratio, the more work the wheel will do. G-Ratio Calculation:

$$G = \frac{\text{Grinding Applications}}{\text{Material removed (gr.)}} \\ \text{Wheel weight loss (gr.)}$$

$$G = \frac{\text{Cutting Applications}}{\text{Section area x no.of cuts (cm}^2\text{)}} \\ \text{Wheel area loss (cm}^2\text{)}$$

2. Efficiency

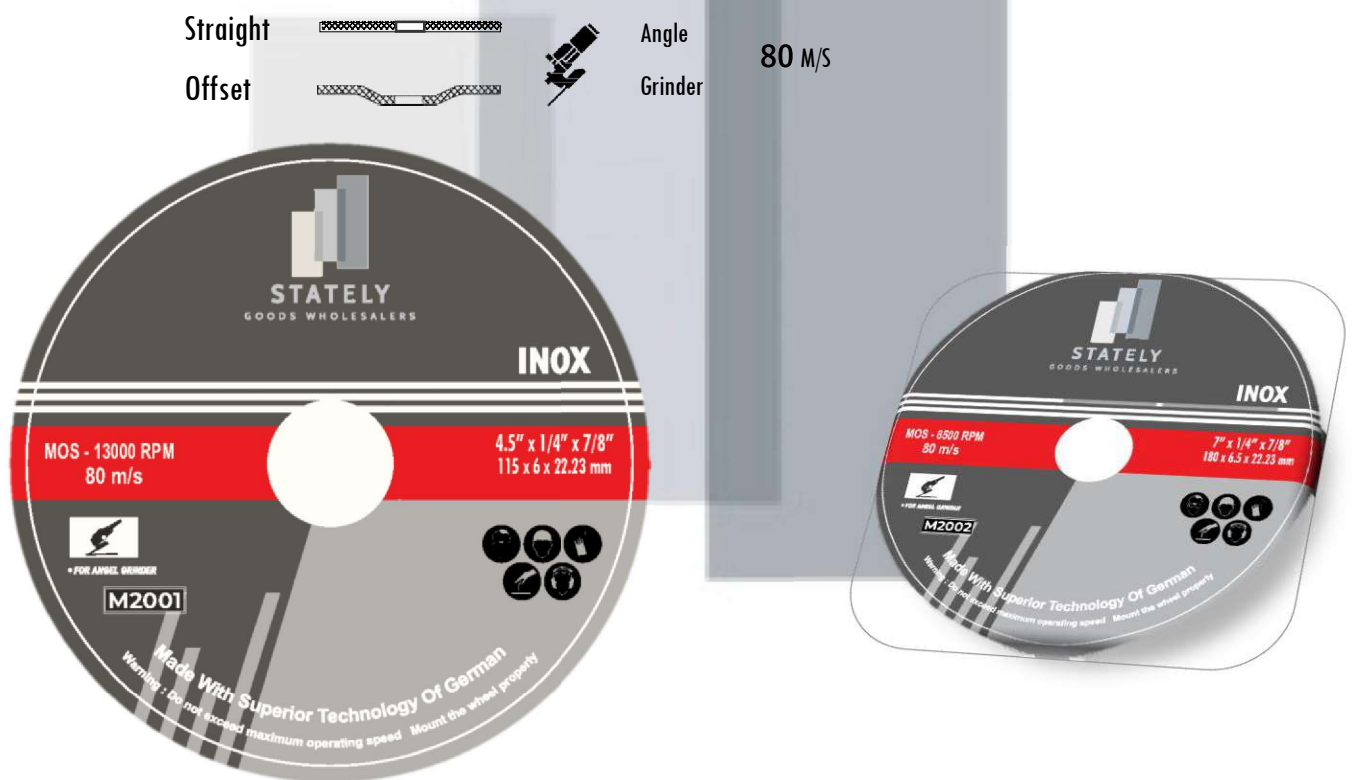
This indicates the rate of material removal (grams/min.) in grinding applications, or the total area of the material that has been cut in each period (cm²/min.) in cutting applications. Efficiency calculation:

$$E = \frac{\text{Grinding Applications}}{\text{Material removed (gr.)}} \\ \text{Test Period (min.)}$$

$$E = \frac{\text{Cutting Applications}}{\text{Section area x no.of cuts (cm}^2\text{)}} \\ \text{Test Period (min.)}$$

Grinding Disc – Stately

- **A 24 RBF - Bond** design offers excellent stock removal. Recommended for use on structural steel and welds.
- **A 24 TBF - High grain concentration**, for tough grinding and notching.
- **A 30 RBF - New combination of grain and bond** makes for an easier grind, higher efficiency, and longer life.



Dimensions		Stately Item No	Type	Specs	R.P.M
Inches	MM				
4 1/2 x 1 1/4 x 7/8	115 x 6.5 x 22.23	M2001	Offset	A 30 RBF	13,300
7 x 1 1/4 x 7/8	180 x 6.5 x 22.23	M2002	Offset	A 30 RBF	8,500