

# Factors for selecting the optimum Cutting Disc

**Maximum efficiency can only be achieved if a cutting disc perfectly matches your machine and application.**

## Extra-thin Cutting Discs

Our extra thin cutting discs bear the product code XT. With a maximum disc width of only 1.9mm, they are the ideal tool for processing thin-walled and solid materials. Extra-thin cutting discs cut much easier due to the lower friction at the work piece. This minimises the thermal load and greatly reduces blueing of the work piece. Its almost burr-free cut also minimises time-consuming reworking.

## Sturdy Cutting Discs

Cutting Discs with a width greater than 1.9mm are identified by the code FT within the product name. They are suitable for tough jobs such as freehand cutting of structural and tool steel as a result of the fabrics reinforcement. For stationary cutting, use discs labelled with ST.

## The right combination of tool and machine

Very efficient discs need strong drive machines to achieve the optimum performance of the cutting disc.

		Powerful machines range from				
Machine Type	Disc Diameter	Ø100	Ø115	Ø125	Ø180	Ø230
	Compressed-Air	>450 W	>650 W	>850 W	>1,600 W	>1,900 W
	Electrical	>550 W	>1,000 W	>1,200 W	>2,000 W	>2,200 W

## For low-powered machines

Select a softer disc. The softer bond releases new abrasive grit more easily. Soft discs are characterised by a high cutting ability. Weaker machines do not provide enough power for hard discs to release new abrasive grit. If used with a weak machine, the cutting ability deteriorates and the disc becomes blunt.

## For powerful machines

Select a hard disc from the Rhodius quality lines BRAINTOOLS, TOPline or PROline. These discs have a very long lifetime and cutting ability on efficient machines. Soft discs on efficient machines lead to a fast disintegration of the bond. If used, the disc's lifetime is shortened significantly.

# Cutting Technical Information

**1** Metal ring with expiry date centred and secure fixing in the machine

**2** Paper label all product and safety information on every disc

**3** Fibreglass fabric strong high-quality fabric for greater safety during cutting

**5** Fibreglass fabric second fabric for even greater safety and stability



**4** Mix

### Abrasive grit

The corresponding grain or an optimum mix of different grain types needs to be selected depending on which materials are being cut.



### Grinding-active filling materials

Besides high-quality types of grain, Rhodius cutting discs also contain substances that actively optimise your cutting work.

### Bond

How the abrasive grit is bonded and how it is adapted optimally to the application, constitute significant factors in achieving a high cost-effectiveness.



## Maximum Working Speed

The maximum permissible working speed is shown on each grinding tool in m/s.

V[M/SEC]	50	63	80	100
d1[mm]	RPM			
30	31,830	40,105	50,900	63,660
40	23,870	30,080	38,200	47,750
50	19,100	24,060	30,560	38,200
65	14,690	18,510	23,500	29,380
75	12,565	15,830	20,100	25,130
100	9,550	12,030	15,280	19,100
110	8,680	10,940	13,890	17,360
115	8,300	10,460	13,285	16,610
125	7,640	9,630	12,200	15,280
150	6,370	8,020	10,185	12,730
180	5,310	6,685	8,600	10,610
200	4,775	6,015	7,640	9,550
230	4,150	5,230	6,600	8,300
250	3,820	4,810	6,110	7,640
300	3,180	4,010	5,100	6,365
350	2,730	3,440	4,365	5,460
400	2,380	3,010	3,820	4,775
450	2,120	2,675	3,395	4,245
500	1,910	2,405	3,060	3,820
600	1,590	2,005	2,550	3,180

To see our range of Rhodius Cutting Discs, scan QR code below!

