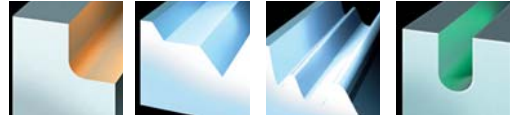


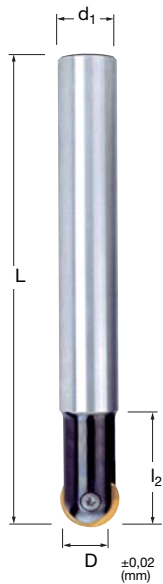
5500 V 10

Contour Milling Cutter



5500 V 10 Cylindrical Shank

EDP #	Part Number	Dimensions (mm)						No. of Inserts	Spares		
		D	L	l ₂	d ₁	a	EDP#		EDP#	EDP#	
021667	5500V 10 CR	10	160	25	12	5	1	015250	55.672	018488	T7



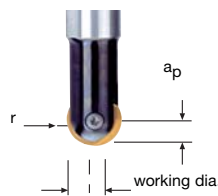
Cylindrical Shank



Depth of cut (a)

5500 V 10 Technical Advice

Milling Cutter Order Example: **5500V10CR**
 Milling Insert Order Example: **RG10 SP1032**
 For complete cutting conditions refer to page: **264**

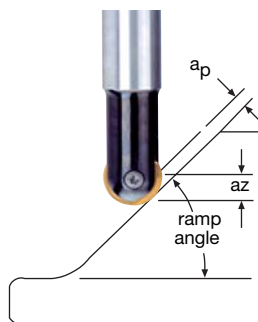


Working Diameter:

$$DW = 2 \times \sqrt{r^2 - (r - a_p)^2}$$

where: **DW** = Working Diameter
r = Cutter radius
ap = Axial Depth of Cut

Ramp Milling Method

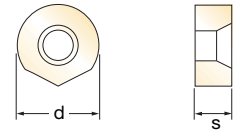


Ramp-up Data

Cutter Diameter 10,00 mm		Ramp Angle
ap (mm)	az (mm)	
3,7	4,8	15°
2,5	4,4	30°
1,5	3,6	45°
0,7	2,6	60°
0,17	1,4	75°
0,1	0,5	85°

Torque Limits .65 Nm

Inserts for 5500 V 10



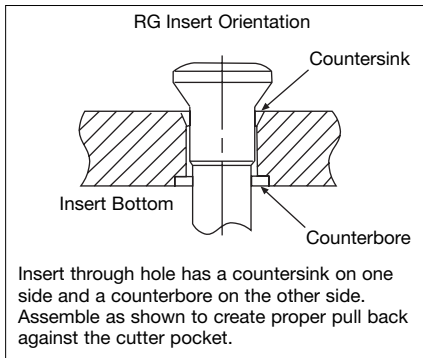
EDP#	Part Number	Grade	Application & Material			Dimensions (mm)				
			Roughing	Semi-Finishing	Finishing	d	l	s	r	h _m min
024117	RG 10	SP1032	▼	▼▼	▼▼▼	10,0	-	2,0	5,0	0,02

RG 10_



027795	RG 10S	SP1064				10,0	-	2,0	5,0	0,02
--------	--------	--------	--	--	--	------	---	-----	-----	------

RG 10S_



Insert Interchangeability*

Metric		Inch	
Diameter	Insert Number	Diameter	Insert Number
10 mm	RG 10	.375 in.	RG .375

*Insert interchangeability allows metric inserts to be used in inch cutters and vice-versa.

To find programmed feedrate:

$$f_z = h_m \times \sqrt{\frac{D}{a_p}} \times \sqrt{\frac{D_w}{a_e}}$$

where:

- f_z = Feed per tooth
- h_m = Average chip thickness
- D = Cutter diameter (outside)
- a_e = Radial Depth of Cut
- D_w = Working Diameter
- a_p = Axial Depth of Cut

Average chip thickness:

$$h_m = \frac{f_z}{\sqrt{\frac{D}{a_p}} \times \sqrt{\frac{D_w}{a_e}}}$$

RG_10 Recommended Cutting Conditions

Material	Speed	▼ Roughing	D.O.C.	Speed	▼▼ Semi-Finishing	D.O.C.	Speed	▼▼▼ Finishing	D.O.C.
	V _C (m/min)	Feed h _m (mm)		a _p (mm)	V _C (m/min)		Feed h _m (mm)	a _p (mm)	
◆ Unalloyed Steels	-	-	-	-	-	-	180 - 360	0,10	< 1,0
◆ Alloyed Steels	-	-	-	-	-	-	110 - 240	0,10	< 1,0
◆ Stainless Steels	-	-	-	-	-	-	140 - 240	0,10	< 1,0
◆ PH Stainless	-	-	-	-	-	-	120 - 190	0,08	< 1,0
◆ Cast Irons	-	-	-	-	-	-	100 - 160	0,08	< 1,0
◆ Aluminium & Alloys	-	-	-	-	-	-	400 - 1000	0,10	< 1,0
◆ High Temp. Alloys	-	-	-	-	-	-	45 - 60	0,08	< 1,0
◆ Hard Steels (52-56 HRC)	-	-	-	-	-	-	50 - 100	0,05	< 0,5

h_m = average chip thickness

Star Guide Key to Recommended Tools

Material Designations								
	P ◆	Unalloyed Steels	M ◆	Stainless Steels	K ◆	Cast Irons	S ◆	High Temp. Alloys
	P ◆	Alloyed Steels	M ◆	PH Stainless	N ◆	Aluminium & Alloys	H ◆	Hard Materials