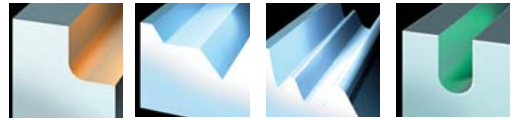
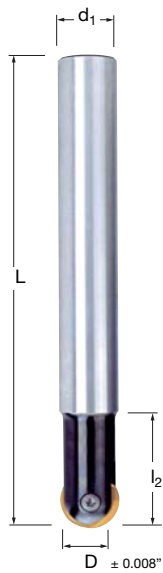


5500 V .625 Contour Milling Cutter



5500 V .625 Cylindrical Shank

EDP#	Part Number	Dimensions (inch)						No. of Inserts	Spares		
		D	L	l ₂	d ₁	a	EDP#		EDP#	EDP#	
023817	C5500V.625CR	0.625	8	1.968	0.625	0.312	1	022150	55.675	015240	T15



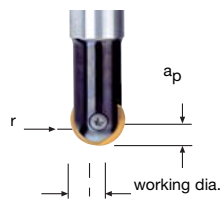
Cylindrical Shank



Depth of cut (a)

5500 V .625 Technical Advice

Milling Cutter Order Example: **C5500V .625CR**
 Milling Insert Order Example: **RG .625 SP1032**
 For complete cutting conditions refer to page: **208**

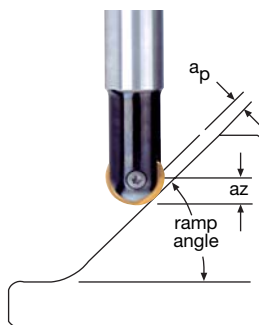


Working Diameter:

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

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

Ramp Milling Method

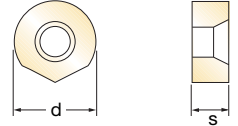


Ramp-up Data

Cutter Diameter 0.625 in.		Ramp Angle
a _p (in.)	az (in.)	
0.236	0.303	15°
0.157	0.271	30°
0.094	0.220	45°
0.043	0.157	60°
0.012	0.078	75°
0.004	0.027	85°

Torque Limits 23 in. lbs.

Inserts for 5500 V .625



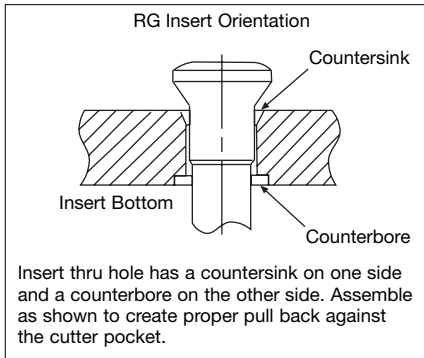
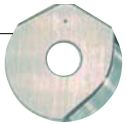
EDP#	Part Number	Grade	Application & Material			Dimensions (inch)				
			Roughing	Semi-Finishing	Finishing	d	l	s	r	h _m min
023818	RG.625	SP1032			◆◆◆◆◆	0.625	-	0.118	0.313	0.0008

RG .625_



027797	RG16S	SP1064			◆◆◆◆◆	0.630	-	0.118	0.315	0.0008
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RG 16S_



Insert Interchangeability*

Metric		Inch	
Diameter	Insert Number	Diameter	Insert Number
16 mm	RG 16	.625 in.	RG .625

*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_.625 Recommended Cutting Conditions

Material	▼ Roughing			▼▼ Semi-Finishing			▼▼▼ Finishing		
	Speed V _C (feet/min)	Feed h _m (inch)	D.O.C. a _p (inch)	Speed V _C (feet/min)	Feed h _m (inch)	D.O.C. a _p (inch)	Speed V _C (feet/min)	Feed h _m (inch)	D.O.C. a _p (inch)
◆ Unalloyed Steels	-	-	-	-	-	-	600 - 1180	0.004 - 0.006	<0.040
◆ Alloyed Steels	-	-	-	-	-	-	370 - 780	0.004 - 0.006	<0.040
◆ Stainless Steels	-	-	-	-	-	-	460 - 780	0.004 - 0.006	<0.040
◆ PH Stainless	-	-	-	-	-	-	400 - 620	0.003 - 0.005	<0.040
◆ Cast Irons	-	-	-	-	-	-	330 - 520	0.003 - 0.005	<0.040
◆ Aluminum & Alloys	-	-	-	-	-	-	1320 - 3280	0.004 - 0.006	<0.040
◆ High Temp. Alloys	-	-	-	-	-	-	150 - 190	0.003 - 0.005	<0.040
◆ Hard Steels (52-56 HRC)	-	-	-	-	-	-	170 - 320	0.001 - 0.002	<0.020

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	Aluminum & Alloys	◆ H	Hard Materials