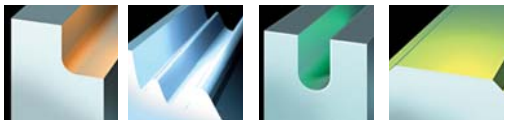
7700 VR 06 Contour Milling Cutter



7700 VR 06 Weldon Shank

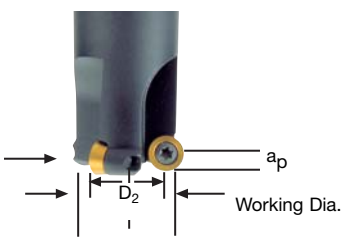
EDP #	Part Number	Dimensions (inch) D_1	D_2	L/H	l_2	d_1	a	No. of Inserts	Spares EDP#		EDP#	
014884	**C7700VR06WA.625R2.60**	0.625	0.390	4.530	2.600	0.625	0.120	2	015060	F2505T	018488	T7
014885	**C7700VR06WA.750R2.30**	0.750	0.513	4.450	2.300	0.750	0.120	3	015060	F2505T	018488	T7
015416	**C7700VR06WA.750R3.50**	0.750	0.513	5.650	3.500	0.750	0.120	3	015060	F2505T	018488	T7
015417	**C7700VR06WA.750R4.70**	0.750	0.513	6.850	4.700	0.750	0.120	3	015060	F2505T	018488	T7

Weldon Shank

Depth of Cut (a)

7700 VR 06 Technical Advice

Milling Cutter Order Example: **C7700VR06WA.750R2.30**
Milling Insert Order Example: **RPEX0602M0F-701 SFZ**
For complete cutting conditions refer to page: **208**



Working Diameter:

$$DW = D_2 + 2 \times \sqrt{r^2 - (r - a_p)^2}$$

where:
DW = Working Diameter
D_2 = Diameter of cutter insert center to center
r = Insert radius
a_p = Axial Depth of Cut

To find programmed feedrate:

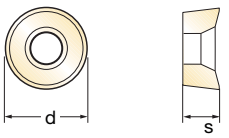
$$f_z = h_m \times \sqrt{\frac{D}{a_p}} \times \sqrt{\frac{D_w}{a_e}}$$

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:

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

Inserts for 7700 VR 06



EDP#	Part Number	Grade	Application & Material: Roughing	Semi-Finishing	Finishing	d	l	s	r	h_m min
024755	**RPEW0602M0T**	**X500**		◆ ◆		0.236	-	0.094	0.118	0.0039
017686	**RPEX0602M0F-701**	**GH1**	◆	◆	◆	0.236	-	0.094	0.118	0.0008
015212	**RPEX0602M0F-701**	**SFZ**		◆ ◆ ◆ ◆	◆ ◆ ◆ ◆ ◆	0.236	-	0.094	0.118	0.0008
024104	**RPEX0602M0F-701**	**X44**			◆	0.236	-	0.094	0.118	0.0008
023327	**RPMT0602M0E-41**	**MP91M**	◆			0.236	-	0.094	0.118	0.0012
015219	**RPMT0602M0E-41**	**X500**				0.236	-	0.094	0.118	0.0012

RPEW 06_

RPEX 06_ -701

RPMT 06_ -41

RP_06 Recommended Cutting Conditions

Material	▼ Roughing Speed V_c (feet/min)	Feed h_m (inch)	D.O.C. a_p (inch)	▼▼ Semi-Finishing Speed V_c (feet/min)	Feed h_m (inch)	D.O.C. a_p (inch)	▼▼▼ Finishing Speed V_c (feet/min)	Feed h_m (inch)	D.O.C. a_p (inch)
◆ Unalloyed Steels	-	-	-	730 - 850	0.004 - 0.006	0.02 - 0.06	730 - 980	0.003 - 0.005	0.00 - 0.02
◆ Alloyed Steels	-	-	-	330 - 490	0.003 - 0.005	0.02 - 0.06	330 - 630	0.002 - 0.004	0.00 - 0.02
◆ Stainless Steels	-	-	-	460 - 590	0.002 - 0.004	0.02 - 0.06	600 - 750	0.002 - 0.003	0.00 - 0.02
◆ PH Stainless	-	-	-	230 - 270	0.002 - 0.004	0.02 - 0.06	270 - 320	0.002 - 0.003	0.00 - 0.02
◆ Cast Irons	-	-	-	600 - 980	0.003 - 0.005	0.02 - 0.06	660 - 1140	0.002 - 0.004	0.00 - 0.02
◆ Aluminum & Alloys	-	-	-	1320 - 2460	0.002 - 0.002	0.02 - 0.06	2300 - 3280	0.002 - 0.002	0.00 - 0.02
◆ High Temp. Alloys	-	-	-	120 - 160	0.002 - 0.004	0.02 - 0.06	150 - 190	0.002 - 0.003	0.00 - 0.02
◆ Hard Steels (52-56 HRC)	-	-	-	-	-	-	170 - 320	0.001 - 0.002	0.00 - 0.02

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

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