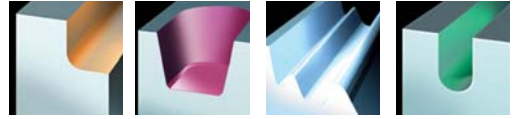




5510 VS 06

Contour Milling Cutter



5510 VS 06 Weldon Shank

EDP#	Part Number	Dimensions (inch)					No. of Inserts	Spares				
		D	L	l ₁	l ₂	d ₁		EDP#		EDP#		
014296	C5510VS06WA1.00R1.15	1.00	4.03	1.15	1.75	1.00	a.	3	015268	F2506TP	018488	T7
							b.	4	015268	F2506TP	018488	T7



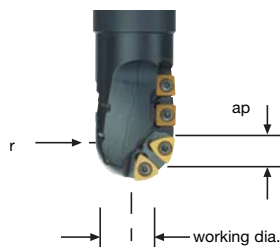
5510 VS 06 Technical Advice

Milling Cutter Order Example: **C5510VS06WA1.00R1.15**
 Milling Insert Order Example: **SPEW060304SN X500**
XPEW08/250308SN-B X500
 For complete cutting conditions refer to page: **208**

When using these tools for slotting operations, maximum cutting depth is half the diameter cutter.



Weldon Shank



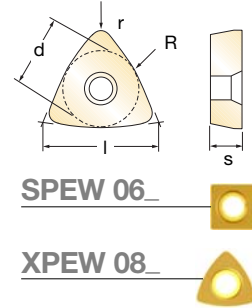
Working Diameter:

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

where:

- DW = Working Diameter
- r = Cutter radius
- a_p = Axial Depth of Cut

Inserts for 5510 VS 06



EDP#	Part Number	Grade	Application & Material			Dimensions (inch)							
			Roughing	Semi-Finishing	Finishing	d	l	s	r	R	h_m min		
014413	SPEW060304SN	X500	b.	◆◆◆	▼▼	▼▼▼	0.250	0.315	0.125	0.016	-	0.0059	SPEW 06_
014419	XPEW08/250308SN-B	X500	a.	◆◆◆			0.250	0.315	0.125	0.031	0.492	0.0024	XPEW 08_

To find programmed feedrate:

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

Average chip thickness:

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

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

Recommended Cutting Conditions

Material	Speed	▼ Roughing	D.O.C.	Speed	▼▼ Semi-Finishing	D.O.C.	Speed	▼▼▼ Finishing	D.O.C.
	V_C (feet/min)	Feed/Rev h_m (inch)	a_p (inch)	V_C (feet/min)	Feed h_m (inch)	a_p (inch)	V_C (feet/min)	Feed h_m (inch)	a_p (inch)
◆ Unalloyed Steels	600 - 720	0.006 - 0.014	0.12 - 1.18	-	-	-	-	-	-
◆ Alloyed Steels	230 - 360	0.006 - 0.012	0.12 - 1.18	-	-	-	-	-	-
◆ Stainless Steels	-	-	-	-	-	-	-	-	-
◆ PH Stainless	-	-	-	-	-	-	-	-	-
◆ Cast Irons	460 - 910	0.006 - 0.012	0.12 - 1.18	-	-	-	-	-	-
◆ Aluminum & Alloys	-	-	-	-	-	-	-	-	-
◆ High Temp. Alloys	-	-	-	-	-	-	-	-	-
◆ Hard Steels (52-56 HRC)	-	-	-	-	-	-	-	-	-

h_m = average chip thickness

Star Guide Key to Recommended Tools

Material Designations			
◆ Unalloyed Steels	◆ Stainless Steels	◆ Cast Irons	◆ High Temp. Alloys
◆ Alloyed Steels	◆ PH Stainless	◆ Aluminum & Alloys	◆ Hard Materials