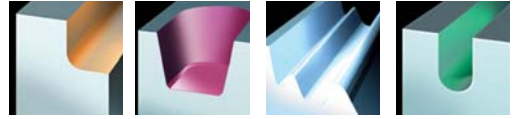


5510 VS 09

Contour Milling Cutter

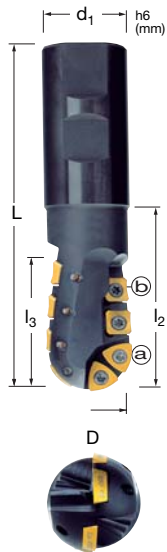


5510 VS 09 Weldon Shank

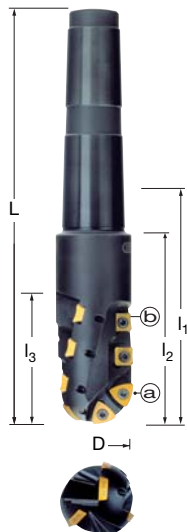
EDP#	Part Number	Dimensions (mm)							No. of Inserts	Spares			
		D	L	I ₁	I ₂	I ₃	d ₁	MT		EDP#	EDP#	EDP#	
021680	5510VS 09 WA032R48	32	130	-	70	48	32	-	c. 3	015269	F3508T	015240	T15
									d. 5	015269	F3508T	015240	T15

5510 VS 09 Morse Taper Shank

021678	5510VS 09 M032R48	32	179	76,5	70	48	-	MT4	c. 3	015269	F3508T	015240	T15
									d. 5	015269	F3508T	015240	T15



Weldon Shank



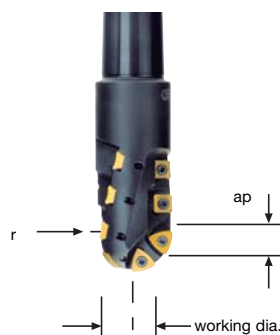
Morse Taper Shank



5510 VS 09 Technical Advice

Milling Cutter Order Example: **5510VS09WA032R48**
 Milling Insert Order Example: **SDMW09T308TN X500**
XDEW11/32T308SN-B X500
 For complete cutting conditions refer to page: **264**

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

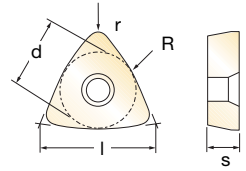


Working Diameter:

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

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

Inserts for 5510 VS 09



EDP#	Part Number	Grade	Application & Material			Dimensions (mm)					
			Roughing	Semi-Finishing	Finishing	d	l	s	r	R	h _m min
017717	SDCW 09 T3AETN	X44	d.			9,52	9,52	3,97	Facet	-	0,15
015231	SDHW 09 T3AETN	X500	d.			9,52	9,52	3,97	Facet	-	0,10
015232	SDMW 09 T308TN	X500	d.	◆◆◆	◆	9,52	9,52	3,97	0,8	-	0,12
015194	XDEW 11 /32T308SN-B	X44	c.			9,0	11,0	3,97	0,8	16	0,12
015195	XDEW 11 /32T308SN-B	X500	c.	◆◆◆	◆	9,0	11,0	3,97	0,8	16	0,12



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:

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

Recommended Cutting Conditions

Material	▼ Roughing			▼▼ Semi-Finishing			▼▼▼ Finishing		
	Speed V _C (m/min)	Feed/Rev h _m (mm)	D.O.C. a _p (mm)	Speed V _C (m/min)	Feed h _m (mm)	D.O.C. a _p (mm)	Speed V _C (m/min)	Feed h _m (mm)	D.O.C. a _p (mm)
◆ Unalloyed Steels	180 - 220	0,12 - 0,35	3,0 - 48,0	-	-	-	-	-	-
◆ Alloyed Steels	70 - 110	0,12 - 0,30	3,0 - 48,0	-	-	-	-	-	-
◆ Stainless Steels	-	-	-	-	-	-	-	-	-
◆ PH Stainless	-	-	-	-	-	-	-	-	-
◆ Cast Irons	140 - 280	0,12 - 0,30	3,0 - 48,0	-	-	-	-	-	-
◆ Aluminium & Alloys	-	-	-	-	-	-	-	-	-
◆ High Temp. Alloys	-	-	-	-	-	-	-	-	-
◆ Hard Steels (52-56 HRC)	-	-	-	-	-	-	-	-	-

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