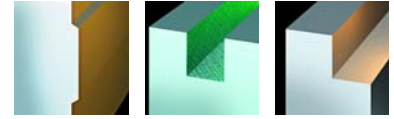




# 5210 VM 04 Long Edge Cutter



## 5210 VM 04 Weldon Shank

EDP #	Part Number	Dimensions (mm)						No. of Inserts	Spares			
		D	L	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	EDP#			EDP#		
018306	5210VM 04 W016R22	16	80	22	30	20	a.	6	015059	F2004T	018487	T6
							b.	1	015060	F2505T	018488	T7



## 5210 VM 04 Technical Advice

Milling Cutter Order Example: **5210VM04W016R22**  
 Milling Insert Order Example: **MPHW0402PPTR X500**  
**MPHW0602PPTR X500**  
 For complete cutting conditions refer to page: **264**



Weldon Shank

Radial depth of cut, as a percentage of cutter diameter

**To find programmed feedrate:**

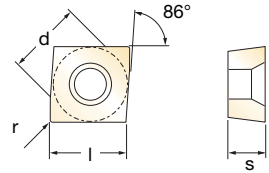
$$h_m = f_z \times \sqrt{\frac{\text{Depth of Cut}}{\text{Cutter diameter}}}$$

where:  $f_z$  = Feed per tooth  
 $h_m$  = Average chip thickness

### Radial Depth of Cut

% of Cutter Diameter	Multiply feed rate by
1%	6,5
2%	4,6
3%	3,8
4%	3,3
5%	2,9
6%	2,7
7%	2,5
8%	2,3
9%	2,2
10%	2,1
15%	1,7
20%	1,5
25%	1,3
30%	1,2
40%	1,0
50%	1,0
60%	1,0
70%	1,0
80%	1,0
90%	1,0
100%	1,0

## Inserts for 5210 VM 04



EDP#	Part Number	Grade	a.	Application & Material			Dimensions (mm)				
				Roughing ▼	Semi-Finishing ▼▼	Finishing ▼▼▼	d	l	s	r	$h_m$ min
024148	MPFW 04 02PPTR	GH1	a.				4,76	4,76	2,38	Facet	0,07
017645	MPFW 04 02PPTR	SF30	a.				4,76	4,76	2,38	Facet	0,07
015158	MPFW 04 02PPTR	SFZ	a.	◆	◆		4,76	4,76	2,38	Facet	0,07
017427	MPFW 04 02PPTR	X44	a.	◆			4,76	4,76	2,38	Facet	0,07
017666	MPHW 04 02PPTR	X500	a.				4,76	4,76	2,38	Facet	0,07
017649	MPFW 06 02PPTR	GH1	b.				6,35	6,35	2,38	Facet	0,07
017647	MPFW 06 02PPTR	SF30	b.				6,35	6,35	2,38	Facet	0,07
014400	MPFW 06 02PPTR	SFZ	b.	◆	◆		6,35	6,35	2,38	Facet	0,07
017648	MPFW 06 02PPTR	X44	b.	◆			6,35	6,35	2,38	Facet	0,07
017668	MPHW 06 02PPTR	X500	b.				6,35	6,35	2,38	Facet	0,07

MPFW 04\_

MPHW 04\_

MPFW 06\_

MPHW 06\_

## 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	0,10 - 0,16	- 22,0	-	-	-	-	-	-
◆ Alloyed Steels	70 - 110	0,08 - 0,12	- 22,0	-	-	-	-	-	-
◆ Stainless Steels	-	-	-	-	-	-	-	-	-
◆ PH Stainless	-	-	-	-	-	-	-	-	-
◆ Cast Irons	140 - 280	0,08 - 0,12	- 22,0	-	-	-	-	-	-
◆ Aluminium & Alloys	-	-	-	-	-	-	-	-	-
◆ High Temp. Alloys	-	-	-	-	-	-	-	-	-
◆ Hard Steels (52-56 HRC)	-	-	-	-	-	-	-	-	-

$h_m$  = average chip thickness

## Star Guide Key to Recommended Tools

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