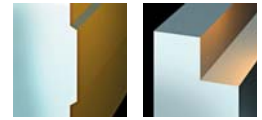




# 5210 VS 12 Long Edge Cutter

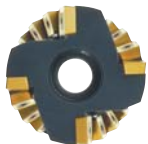
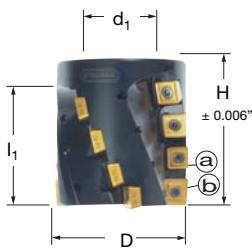


## 5210 VS 12 Shell Mill Fixation

EDP #	Part Number	Dimensions (inch)						No. of Inserts	Spares				
		D	L/H	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>1</sub>		EDP#		EDP#		
015406	C5210VS12-3.00R2.75	3.00	3.23	2.75	-	-	1.25	a.	14	015266	D5013T	015241	T20
								b.	2	015266	D5013T	015241	T20

## 5210 VS 12 Caterpillar Vee Flange

015407	C5210VS12F2.00R3.00	2.00	9.51	3.00	4.13	5.51	F50	a.	13	015266	D5013T	015241	T20
								b.	1	015266	D5013T	015241	T20
015408	C5210VS12F2.50R3.75	2.50	10.10	3.75	4.72	6.1	F50	a.	20	015266	D5013T	015241	T20
								b.	2	015266	D5013T	015241	T20



Shell Mill Fixation



Caterpillar Vee Flange



## 5210 VS 12 Technical Advice

Milling Cutter Order Example: **C5210VS12-3.00R2.75**

Milling Insert Order Example: **SOMT12M612SN-B PFZ**

**SOMT15M612SN-B PFZ**

For complete cutting conditions refer to page: **208**

Radial depth of cut,  
as a percentage of  
cutter diameter

To find programmed feedrate:

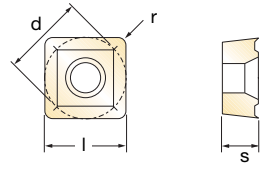
$$h_m = f_z \times \sqrt{\frac{\text{Depth of Cut}}{\text{Cutter diameter}}}$$

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

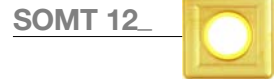
### Radial Depth of Cut

% 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 VS 12



EDP#	Part Number	Grade	Application & Material			Dimensions (inch)				
			Roughing ▼	Semi-Finishing ▼▼	Finishing ▼▼▼	d	l	s	r	$h_m$ min
017329	SOMT12M612SN-B	MP91M a.				0.500	0.500	0.236	0.047	0.0059
017733	SOMT12M612SN-B	GH1 a.				0.500	0.500	0.236	0.047	0.0059
017734	SOMT12M612SN-B	PFZ a.	◆			0.500	0.500	0.236	0.047	0.0059
017732	SOMT12M612SN-B	SF30 a.				0.500	0.500	0.236	0.047	0.0059
017735	SOMT12M612SN-B	SFZ a.	◆			0.500	0.500	0.236	0.047	0.0059
015191	SOMT12M612SN-B	X44 a.				0.500	0.500	0.236	0.047	0.0059
015190	SOMT12M612SN-B	X500 a.	◆			0.500	0.500	0.236	0.047	0.0059
017330	SOMT15M612SN-B	MP91M b.				0.625	0.625	0.236	0.047	0.0059
017737	SOMT15M612SN-B	GH1 b.				0.625	0.625	0.236	0.047	0.0059
017738	SOMT15M612SN-B	PFZ b.	◆			0.625	0.625	0.236	0.047	0.0059
017736	SOMT15M612SN-B	SF30 b.				0.625	0.625	0.236	0.047	0.0059
017739	SOMT15M612SN-B	SFZ b.	◆			0.625	0.625	0.236	0.047	0.0059
015193	SOMT15M612SN-B	X44 b.				0.625	0.625	0.236	0.047	0.0059
015192	SOMT15M612SN-B	X500 b.	◆			0.625	0.625	0.236	0.047	0.0059



## Recommended Cutting Conditions

Material	▼ Roughing			▼▼ Semi-Finishing			▼▼▼ Finishing		
	Speed $V_C$ (feet/min)	Feed/Rev. $h_m$ (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 - 720	0.012 - 0.020	See $l_1$	-	-	-	-	-	-
◆ Alloyed Steels	230 - 360	0.010 - 0.018	See $l_1$	-	-	-	-	-	-
◆ Stainless Steels	-	-	-	-	-	-	-	-	-
◆ PH Stainless	-	-	-	-	-	-	-	-	-
◆ Cast Irons	460 - 910	0.010 - 0.018	See $l_1$	-	-	-	-	-	-
◆ Aluminum & 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
	P ◆	Alloyed Steels	M ◆	PH Stainless	N ◆	Aluminum & Alloys
					S ◆	High Temp. Alloys
					H ◆	Hard Materials