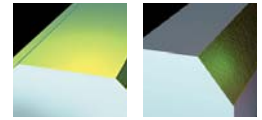


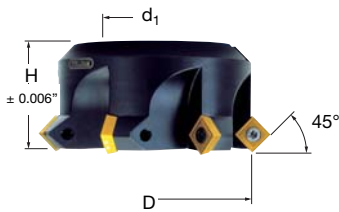


7745 VS 12 Milling Cutter



7745 VS 12 Shell Mill Fixation

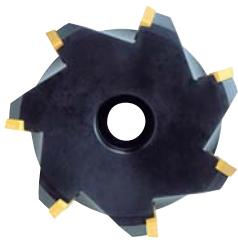
EDP #	Part Number	Dimensions (inch)				No. of Inserts	Spares			
		D	H	d ₁	a		EDP#	 EDP#	 EDP#	
015425	C7745VS12-A1.50R	1.500	1.250	0.500	0.275	4	015266	D5013T	015241	T20
015426	C7745VS12-A2.00R	2.000	1.570	0.750	0.275	4	015266	D5013T	015241	T20
015427	C7745VS12-A2.50R	2.500	1.570	0.750	0.275	5	015266	D5013T	015241	T20
015428	C7745VS12-A3.00R	3.000	1.970	1.000	0.275	6	015266	D5013T	015241	T20
015429	C7745VS12-A4.00R	4.000	1.970	1.250	0.275	7	015266	D5013T	015241	T20
015430	C7745VS12-A5.00R	5.000	2.480	1.500	0.275	8	015266	D5013T	015241	T20



7745 VS 12 Technical Advice



Milling Cutter Order Example: **C7745VS12-A3.00R**
 Milling Insert Order Example: **SCMT12M512EN -41 MP91M**
 For complete cutting conditions refer to page: **208**



Shell Mill Fixation

Feedrate compensation: For 45° cutting, divide the h_m value by the sine of the approach angle (the sine of 45° = 0.707)

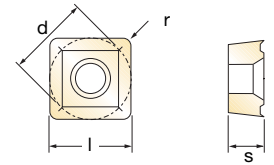
$$\text{ie: } \frac{h_m}{0.707} \quad \text{or} \quad \frac{0.004''}{0.707} = 0.0056 \text{ in. programmed feed rate}$$



Depth of Cut (a)



Inserts for 7745 VS 12



EDP#	Part Number	Grade	Application & Material			Dimensions (inch)				
			Roughing ▼	Semi-Finishing ▼▼	Finishing ▼▼▼	d	l	s	r	h _m min
017312	SCCT12M5ACER	MP91M		♦	♦♦	0.500	0.500	0.197	Facet	0.0012
025811	SCCT12M5ACTR	SP4036		♦	♦♦♦♦	0.500	0.500	0.197	Facet	0.0059
017695	SCCT12M5ACTR	GH1			♦♦♦♦	0.500	0.500	0.197	Facet	0.0059
017693	SCCT12M5ACTR	SF30			♦♦♦♦	0.500	0.500	0.197	Facet	0.0059
017696	SCCT12M5ACTR	SFZ			♦♦♦♦	0.500	0.500	0.197	Facet	0.0059
017694	SCCT12M5ACTR	X44			♦♦♦♦	0.500	0.500	0.197	Facet	0.0059
017697	SCHT12M5ACTN	PFZ		♦♦		0.500	0.500	0.197	Facet	0.0059
017698	SCHT12M5ACTN	X500		♦		0.500	0.500	0.197	Facet	0.0059
015144	SCKT12M5ACSN-41	X500	♦			0.500	0.500	0.197	Facet	0.0047
017314	SCKT12M5ACSN-41	MP91M	♦♦♦			0.500	0.500	0.197	Facet	0.0047
017699	SCKT12M5ACSN-41	PFZ	♦♦			0.500	0.500	0.197	Facet	0.0047
024083	SCKT12M5ACSN-41	SF30	♦♦			0.500	0.500	0.197	Facet	0.0047
017706	SCMT12M508E	SF30				0.500	0.500	0.197	0.031	0.0059
024944	SCMT12M508E	X44				0.500	0.500	0.197	0.031	0.0059
017707	SCMT12M512E	SF30				0.500	0.500	0.197	0.047	0.0059
017709	SCMT12M512T	GH1				0.500	0.500	0.197	0.047	0.0059
017316	SCMT12M512T	MP91M				0.500	0.500	0.197	0.047	0.0059
015227	SCMT12M512T	PFZ				0.500	0.500	0.197	0.047	0.0059
017708	SCMT12M512T	SF30				0.500	0.500	0.197	0.047	0.0059
017710	SCMT12M512T	SFZ				0.500	0.500	0.197	0.047	0.0059
015228	SCMT12M512T	X44				0.500	0.500	0.197	0.047	0.0059
024129	SCMT12M512T	X500				0.500	0.500	0.197	0.047	0.0047
017317	SCMT12M512EN-41	MP91M				0.500	0.500	0.197	0.047	0.0020
024108	SCMT12M512EN-41	PFZ				0.500	0.500	0.197	0.047	0.0020
015226	SCMT12M512EN-41	X500				0.500	0.500	0.197	0.047	0.0020
027732	SCMT12M512EN-41	SP6564				0.500	0.500	0.197	0.047	0.0020



SC_12 Recommended Cutting Conditions

Material	▼ Roughing			▼▼ Semi-Finishing			▼▼▼ Finishing		
	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)	Speed V _C (feet/min)	Feed h _m (inch)	D.O.C. a _p (inch)
♦ Unalloyed Steels	600 - 720	0.008 - 0.024	0.14 - 0.28	730 - 850	0.008 - 0.018	0.04 - 0.14	730 - 980	0.006 - 0.011	0.01 - 0.04
♦ Alloyed Steels	230 - 360	0.008 - 0.018	0.14 - 0.28	330 - 490	0.008 - 0.016	0.04 - 0.14	330 - 630	0.006 - 0.011	0.01 - 0.04
♦ Stainless Steels	400 - 450	0.008 - 0.014	0.14 - 0.28	460 - 590	0.006 - 0.012	0.04 - 0.14	600 - 750	0.006 - 0.011	0.01 - 0.04
♦ PH Stainless	-	-	-	-	-	-	-	-	-
♦ Cast Irons	460 - 910	0.006 - 0.016	0.14 - 0.28	600 - 980	0.006 - 0.012	0.04 - 0.14	660 - 1140	0.006 - 0.011	0.01 - 0.04
♦ Aluminum & Alloys	-	-	-	-	-	-	-	-	-
♦ High Temp. Alloys	-	-	-	-	-	-	-	-	-
♦ Hard Steels (52-56 HRC)	-	-	-	170 - 270	0.002 - 0.005	0.04 - 0.10	170 - 320	0.002 - 0.003	0.01 - 0.04

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