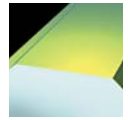


8_0 VS45_12 Face Mills



8000 VS45_12 Unequal Pitch - Assembled Body & Cartridge

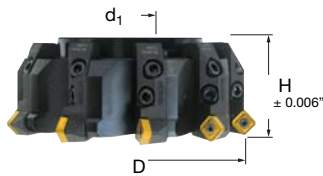
EDP #	Part Number	Dimensions (inch)					No. of Inserts	EDP#	Cartridge	Spares		
		D	H	d ₁	a					EDP#	EDP#	EDP#
015317	A8000VS45-100R	3.94	2.68	1.25	0.275	6	014946	80VS45R-12	015266	D5013T	015241	T20
015318	A8000VS45-125R	4.92	2.48	1.50	0.275	8	014946	80VS45R-12	015266	D5013T	015241	T20
015319	A8000VS45-160R	6.30	2.48	1.50	0.275	10	014946	80VS45R-12	015266	D5013T	015241	T20
015320	A8000VS45-200R	7.87	2.48	2.50	0.275	12	014946	80VS45R-12	015266	D5013T	015241	T20
015321	A8000VS45-250R	9.84	2.48	2.50	0.275	16	014946	80VS45R-12	015266	D5013T	015241	T20
015322	A8000VS45-315R	12.40	3.15	2.50	0.275	20	014946	80VS45R-12	015266	D5013T	015241	T20
015323	A8000VS45-400R	15.75	3.15	2.50	0.275	24	014946	80VS45R-12	015266	D5013T	015241	T20

8100 VS45_12 Unequal Pitch - Assembled Body & Cartridge

EDP #	Part Number	Dimensions (inch)					No. of Inserts	EDP#	Cartridge	Spares		
		D	H	d ₁	a					EDP#	EDP#	EDP#
015606	A8100VS45-125R	4.92	2.48	1.50	0.275	6	014946	80VS45R-12	015266	D5013T	015241	T20
015607	A8100VS45-160R	6.30	2.48	1.50	0.275	8	014946	80VS45R-12	015266	D5013T	015241	T20
015608	A8100VS45-200R	7.87	2.48	2.50	0.275	10	014946	80VS45R-12	015266	D5013T	015241	T20
015609	A8100VS45-250R	9.84	2.48	2.50	0.275	10	014946	80VS45R-12	015266	D5013T	015241	T20
015610	A8100VS45-315R	12.40	3.15	2.50	0.275	12	014946	80VS45R-12	015266	D5013T	015241	T20
015611	A8100VS45-400R	15.75	3.15	2.50	0.275	14	014946	80VS45R-12	015266	D5013T	015241	T20

8_0 VS45_12 Cartridge Spares

EDP #	Cartridge Part Number	EDP#	EDP#
014946	80VS45R-12	015255	7065



Cutter Body & Cartridge

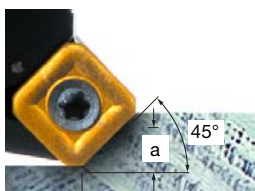


8_0 VS45_12 Technical Advice

Milling Cutter Order Example: **A8000VS45-315R**
 Milling Insert Order Example: **SCMT12M512EN-41 MP91M**
 For complete cutting conditions refer to page: 208

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

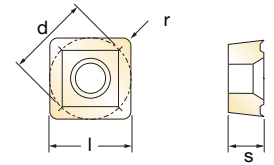
$$\text{ie: } \frac{h_m}{0.707} \quad \text{or} \quad \frac{0.004''}{0.707} = 0.0056 \text{ in. programmed feed rate}$$



Depth of Cut (a)



Inserts for 8_0 VS45_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
	P	Alloyed Steels		M	PH Stainless
	K	Cast Irons		N	Aluminum & Alloys
	S	High Temp. Alloys		H	Hard Materials