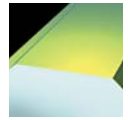


8_0 VSE45_12 Face Mills



8000 VSE45_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#
015331	A8000VSE45-100R12	3.94	2.68	1.25	0.275	6	014948	80VSE45R-12	015270	F4011T	015241	T20
015332	A8000VSE45-125R12	4.92	2.48	1.50	0.275	8	014948	80VSE45R-12	015270	F4011T	015241	T20
015333	A8000VSE45-160R12	6.30	2.48	1.50	0.275	10	014948	80VSE45R-12	015270	F4011T	015241	T20
015334	A8000VSE45-200R12	7.87	2.48	2.50	0.275	12	014948	80VSE45R-12	015270	F4011T	015241	T20
015335	A8000VSE45-250R12	9.84	2.48	2.50	0.275	16	014948	80VSE45R-12	015270	F4011T	015241	T20
015336	A8000VSE45-315R12	12.40	3.15	2.50	0.275	20	014948	80VSE45R-12	015270	F4011T	015241	T20
015337	A8000VSE45-400R12	15.75	3.15	2.50	0.275	24	014948	80VSE45R-12	015270	F4011T	015241	T20

8010 VSE45_12 Equal Pitch - Assembled Body & Cartridge

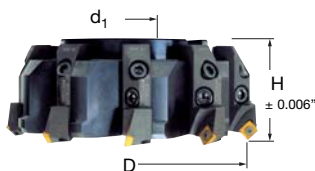
016797	A8010VSE45-100R12	4.17	2.68	1.25	0.410	6	014948	80VSE90R-12	015270	F4011T	015241	T20
016798	A8010VSE45-125R12	5.16	2.48	1.50	0.410	8	014948	80VSE90R-12	015270	F4011T	015241	T20
016799	A8010VSE45-160R12	6.54	2.48	1.50	0.410	10	014948	80VSE90R-12	015270	F4011T	015241	T20
016800	A8010VSE45-200R12	8.11	2.48	2.50	0.410	12	014948	80VSE90R-12	015270	F4011T	015241	T20

8100 VSE45_12 Unequal Pitch - Assembled Body & Cartridge

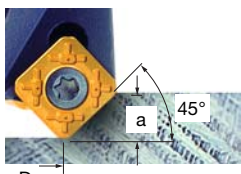
015618	A8100VSE45-125R12	4.92	2.48	1.50	0.275	6	014948	80VSE45R-12	015270	F4011T	015241	T20
015619	A8100VSE45-160R12	6.30	2.48	1.50	0.275	8	014948	80VSE45R-12	015270	F4011T	015241	T20
015620	A8100VSE45-200R12	7.87	2.48	2.50	0.275	10	014948	80VSE45R-12	015270	F4011T	015241	T20
015621	A8100VSE45-250R12	9.84	2.48	2.50	0.275	10	014948	80VSE45R-12	015270	F4011T	015241	T20
015622	A8100VSE45-315R12	12.40	3.15	2.50	0.275	12	014948	80VSE45R-12	015270	F4011T	015241	T20
015623	A8100VSE45-400R12	15.75	3.15	2.50	0.275	14	014948	80VSE45R-12	015270	F4011T	015241	T20

8_0 VSE45_12 Cartridge Spares

EDP #	Cartridge Part Number	EDP#	
014948	80VSE45R-12	015255	7065



Cutter Body & Cartridge



Depth of Cut (a)



8_0 VSE45_12 Technical Advice

Milling Cutter Order Example: **A8000VSE45-250R12**
 Milling Insert Order Example: **SDKT1204AEEN-45 X500**
 For complete cutting conditions refer to page: **208**

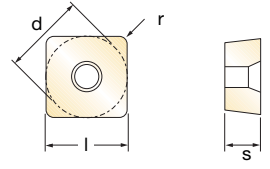
SD_12 Recommended Cutting Conditions

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 - 0.018	0.12 - 0.24	730 - 850	0.006 - 0.012	0.04 - 0.12	730 - 980	0.006 - 0.007	0.01 - 0.04
◆ Alloyed Steels	230 - 360	0.008 - 0.014	0.12 - 0.24	330 - 490	0.006 - 0.010	0.04 - 0.12	330 - 630	0.006 - 0.007	0.01 - 0.04
◆ Stainless Steels	400 - 450	0.006 - 0.012	0.12 - 0.24	460 - 590	0.006 - 0.010	0.04 - 0.12	600 - 750	0.006 - 0.007	0.01 - 0.04
◆ PH Stainless	190 - 220	0.006 - 0.010	0.08 - 0.16	230 - 270	0.006 - 0.008	0.04 - 0.08	270 - 320	0.002 - 0.004	0.01 - 0.04
◆ Cast Irons	460 - 910	0.006 - 0.012	0.12 - 0.24	600 - 980	0.004 - 0.009	0.04 - 0.12	660 - 1140	0.002 - 0.006	0.01 - 0.04
◆ Aluminum & Alloys	910 - 1470	0.006 - 0.012	0.12 - 0.24	1320 - 2460	0.004 - 0.009	0.04 - 0.12	2300 - 3280	0.002 - 0.006	0.01 - 0.04
◆ High Temp. Alloys	90 - 130	0.006 - 0.010	0.08 - 0.16	120 - 160	0.006 - 0.008	0.04 - 0.08	150 - 190	0.002 - 0.004	0.01 - 0.04
◆ Hard Steels (52-56 HRC)	-	-	-	170 - 270	0.002 - 0.005	0.02 - 0.06	170 - 320	0.001 - 0.002	0.01 - 0.02

h_m = average chip thickness



Inserts for 8_0 VSE45_ 12



EDP#	Part Number	Grade	Application & Material			Dimensions (inch)				
			Roughing ▼	Semi-Finishing ▼▼	Finishing ▼▼▼	d	l	s	r	h _m min
018203	SDCT1204AEEN	SF30				0.500	0.500	0.187	Facet	0.0016
017243	SDCT1204AEFN	GH1	◆	◆	◆	0.500	0.500	0.187	Facet	0.0008
017318	SDCW1204AEEN	MP91M		◆	◆	0.500	0.500	0.187	Facet	0.0012
017719	SDCW1204AEFN	SFZ			◆	0.500	0.500	0.187	Facet	0.0008
017722	SDCW1204AETN	GH1				0.500	0.500	0.187	Facet	0.0059
018205	SDCW1204AETN	CN35				0.500	0.500	0.187	Facet	0.0067
017720	SDCW1204AETN	SF30				0.500	0.500	0.187	Facet	0.0059
017723	SDCW1204AETN	SFZ		◆		0.500	0.500	0.187	Facet	0.0039
017721	SDCW1204AETN	X44				0.500	0.500	0.187	Facet	0.0059
017727	SDEX1204AEEN-701	PFZ				0.500	0.500	0.187	Facet	0.0008
015149	SDEX1204AEFN-701	GH1				0.500	0.500	0.187	Facet	0.0008
015230	SDEX1204AEFN-701	SFZ				0.500	0.500	0.187	Facet	0.0008
017321	SDHT1204AEEN-421	MP91M				0.500	0.500	0.187	Facet	0.0016
015133	SDHT1204AEEN-421	PFZ				0.500	0.500	0.187	Facet	0.0016
015187	SDHT1204AEEN-421	X500	◆		◆◆	0.500	0.500	0.187	Facet	0.0016
027734	SDHT1204AEEN-421	SP6564				0.500	0.500	0.187	Facet	0.0016
017322	SDHT1204AETN-42	MP91M				0.500	0.500	0.187	Facet	0.0059
017728	SDHT1204AETN-42	PFZ				0.500	0.500	0.187	Facet	0.0059
027735	SDHT1204AETN-42	SP6564				0.500	0.500	0.187	Facet	0.0059
017729	SDHT1204AETN-42	X500	◆			0.500	0.500	0.187	Facet	0.0039
017324	SDHW1204AETN	MP91M				0.500	0.500	0.187	Facet	0.0059
015134	SDHW1204AETN	PFZ				0.500	0.500	0.187	Facet	0.0059
017730	SDHW1204AETN	X500				0.500	0.500	0.187	Facet	0.0059
026601	SDKT1204AEEN-45	MP91M		◆◆	◆	0.500	0.500	0.187	Facet	0.0020
026603	SDKT1204AEEN-45	X500		◆◆	◆	0.500	0.500	0.187	Facet	0.0020
027739	SDKT1204AEEN-45	SP6564		◆◆	◆	0.500	0.500	0.187	Facet	0.0020
018206	SDEW120412TN	X500				0.500	0.500	0.187	0.047	0.0059
017326	SDMT120412EN-41	MP91M	◆			0.500	0.500	0.187	0.047	0.0020
015135	SDMT120412EN-41	PFZ				0.500	0.500	0.187	0.047	0.0020
014411	SDMT120412EN-41	X500				0.500	0.500	0.187	0.047	0.0020
027737	SDMT120412EN-41	SP6564	◆◆			0.500	0.500	0.187	0.047	0.0020
017328	SDMW120412TN	MP91M	◆			0.500	0.500	0.187	0.047	0.0059
015136	SDMW120412TN	PFZ				0.500	0.500	0.187	0.047	0.0059
015233	SDMW120412TN	X500				0.500	0.500	0.187	0.047	0.0047



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

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

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 ◆ Aluminum & Alloys	H ◆ Hard Materials	