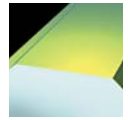




8_0 VSE45_09 Face Mills



8000 VSE45_09 Unequal Pitch - Assembled Body & Cartridge

EDP #	Part Number	Dimensions (inch)					No. of Inserts	EDP#	Cartridge	Spares			
		D	H	d ₁	a					EDP#		EDP#	
015324	A8000VSE45-100R09	3.94	2.68	1.25	0.20	6	014947	80VSE45R-09	015269	F3508T	015240	T15	
015325	A8000VSE45-125R09	4.92	2.48	1.50	0.20	8	014947	80VSE45R-09	015269	F3508T	015240	T15	
015326	A8000VSE45-160R09	6.30	2.48	1.50	0.20	10	014947	80VSE45R-09	015269	F3508T	015240	T15	
015327	A8000VSE45-200R09	7.87	2.48	2.50	0.20	12	014947	80VSE45R-09	015269	F3508T	015240	T15	
015328	A8000VSE45-250R09	9.84	2.48	2.50	0.20	16	014947	80VSE45R-09	015269	F3508T	015240	T15	
015329	A8000VSE45-315R09	12.40	3.15	2.50	0.20	20	014947	80VSE45R-09	015269	F3508T	015240	T15	
015330	A8000VSE45-400R09	15.75	3.15	2.50	0.20	24	014947	80VSE45R-09	015269	F3508T	015240	T15	

8010 VSE45_09 Equal Pitch - Assembled Body & Cartridge

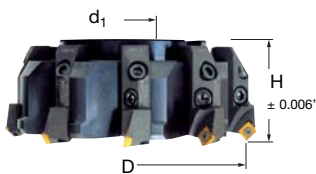
016793	A8010VSE45-100R09	3.94	2.68	1.25	0.20	6	014947	80VSE45R-09	015269	F3508T	015240	T15
016794	A8010VSE45-125R09	4.92	2.48	1.50	0.20	8	014947	80VSE45R-09	015269	F3508T	015240	T15
016795	A8010VSE45-160R09	6.30	2.48	1.50	0.20	10	014947	80VSE45R-09	015269	F3508T	015240	T15
016796	A8010VSE45-200R09	7.87	2.48	2.50	0.20	12	014947	80VSE45R-09	015269	F3508T	015240	T15

8100 VSE45_09 Unequal Pitch - Assembled Body & Cartridge

015612	A8100VSE45-125R09	4.92	2.48	1.50	0.20	6	014947	80VSE45R-09	015269	F3508T	015240	T15
015613	A8100VSE45-160R09	6.30	2.48	1.50	0.20	8	014947	80VSE45R-09	015269	F3508T	015240	T15
015614	A8100VSE45-200R09	7.87	2.48	2.50	0.20	10	014947	80VSE45R-09	015269	F3508T	015240	T15
015615	A8100VSE45-250R09	9.84	2.48	2.50	0.20	10	014947	80VSE45R-09	015269	F3508T	015240	T15
015616	A8100VSE45-315R09	12.40	3.15	2.50	0.20	12	014947	80VSE45R-09	015269	F3508T	015240	T15
015617	A8100VSE45-400R09	15.75	3.15	2.50	0.20	14	014947	80VSE45R-09	015269	F3508T	015240	T15

8_0 VSE45_09 Cartridge Spares

EDP #	Cartridge Part Number	EDP#	
014947	80VSE45R-09	015255	7065



Cutter Body & Cartridge

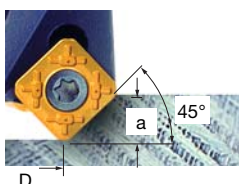
8_0 VSE45_09 Technical Advice



Milling Cutter Order Example: **A8000VSE45-250R09**
 Milling Insert Order Example: **SDKT09T3AEEN-45 X500**
 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)

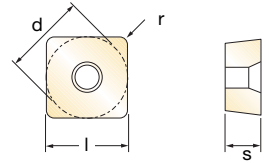
$$\text{ie: } \frac{h_m}{0.707} \quad \text{or} \quad \frac{0.004''}{0.707} = 0.0056 \text{ in. programmed feed rate}$$



Depth of Cut (a)



Inserts for 8_0 VSE45_09



EDP#	Part Number	Grade	Application & Material			Dimensions (inch)				
			Roughing ▼	Semi-Finishing ▼▼	Finishing ▼▼▼	d	l	s	r	h _m min
017714	SDCT09T3AEEN	SF30				0.375	0.375	0.156	Facet	0.0016
017242	SDCT09T3AEFN	GH1	◆	◆	◆	0.375	0.375	0.156	Facet	0.0008
017715	SDCW09T3AEFN	SFZ			◆	0.375	0.375	0.156	Facet	0.0008
017718	SDCW09T3AETN	GH1				0.375	0.375	0.156	Facet	0.0059
018204	SDCW09T3AETN	CN35				0.375	0.375	0.156	Facet	0.0047
017716	SDCW09T3AETN	SF30				0.375	0.375	0.156	Facet	0.0059
017717	SDCW09T3AETN	X44				0.375	0.375	0.156	Facet	0.0059
017726	SDEX09T3AEEN-701	PFZ				0.375	0.375	0.156	Facet	0.0012
015148	SDEX09T3AEFN-701	GH1				0.375	0.375	0.156	Facet	0.0008
015229	SDEX09T3AEFN-701	SFZ				0.375	0.375	0.156	Facet	0.0008
017320	SDHT09T3AEEN-421	MP91M				0.375	0.375	0.156	Facet	0.0012
023356	SDHT09T3AEEN-421	PFZ				0.375	0.375	0.156	Facet	0.0012
015186	SDHT09T3AEEN-421	X500			◆◆	0.375	0.375	0.156	Facet	0.0012
027733	SDHT09T3AEEN-421	SP6564				0.375	0.375	0.156	Facet	0.0012
017323	SDHW09T3AETN	MP91M				0.375	0.375	0.156	Facet	0.0039
023358	SDHW09T3AETN	PFZ				0.375	0.375	0.156	Facet	0.0039
015231	SDHW09T3AETN	X500				0.375	0.375	0.156	Facet	0.0039
027741	SDHW09T3AETN	SP6564				0.375	0.375	0.156	Facet	0.0039
026600	SDKT09T3AEEN-45	MP91M		◆◆	◆◆	0.375	0.375	0.156	Facet	0.0020
026602	SDKT09T3AEEN-45	X500		◆◆	◆◆	0.375	0.375	0.156	Facet	0.0020
027738	SDKT09T3AEEN-45	SP6564		◆◆	◆◆	0.375	0.375	0.156	Facet	0.0020
017319	SDET09T308EN	MP91M				0.375	0.375	0.156	0.031	0.0012
017724	SDET09T308EN	PFZ				0.375	0.375	0.156	0.031	0.0012
017725	SDET09T308FN	GH1				0.375	0.375	0.156	0.031	0.0008
017325	SDMT09T308EN-41	MP91M	◆			0.375	0.375	0.156	0.031	0.0016
023362	SDMT09T308EN-41	PFZ				0.375	0.375	0.156	0.031	0.0016
014410	SDMT09T308EN-41	X500				0.375	0.375	0.156	0.031	0.0016
027736	SDMT09T308EN-41	SP6564	◆◆			0.375	0.375	0.156	0.031	0.0016
017327	SDMW09T308TN	MP91M	◆			0.375	0.375	0.156	0.031	0.0059
027742	SDMW09T308TN	SP6564				0.375	0.375	0.156	0.031	0.0059
023363	SDMW09T308TN	PFZ				0.375	0.375	0.156	0.031	0.0059
015232	SDMW09T308TN	X500				0.375	0.375	0.156	0.031	0.0047



SD_09 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	0.005 - 0.012	0.12 - 0.20	730 - 850	0.004 - 0.010	0.04 - 0.12	730 - 980	0.003 - 0.006	0.01 - 0.04
◆ Alloyed Steels	230 - 360	0.005 - 0.010	0.12 - 0.20	330 - 490	0.004 - 0.008	0.04 - 0.12	330 - 630	0.003 - 0.006	0.01 - 0.04
◆ Stainless Steels	400 - 450	0.005 - 0.009	0.12 - 0.20	460 - 590	0.004 - 0.008	0.04 - 0.12	600 - 750	0.002 - 0.006	0.01 - 0.04
◆ PH Stainless	-	-	-	230 - 270	0.004 - 0.007	0.04 - 0.12	270 - 320	0.002 - 0.004	0.01 - 0.04
◆ Cast Irons	460 - 910	0.005 - 0.010	0.12 - 0.20	600 - 980	0.004 - 0.008	0.04 - 0.12	660 - 1140	0.002 - 0.006	0.01 - 0.04
◆ Aluminum & Alloys	910 - 1470	0.004 - 0.009	0.12 - 0.20	1320 - 2460	0.003 - 0.007	0.04 - 0.12	2300 - 3280	0.002 - 0.006	0.01 - 0.04
◆ High Temp. Alloys	-	-	-	120 - 160	0.004 - 0.007	0.04 - 0.12	150 - 190	0.002 - 0.004	0.01 - 0.04
◆ Hard Steels (52-56 HRC)	-	-	-	-	-	-	170 - 320	0.001 - 0.002	0.01 - 0.02

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