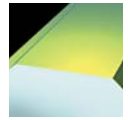




8_0 VOD45_04 Face Mills



8000 VOD45_04 Unequal Pitch - Assembled Body & Cartridge

EDP #	Part Number	Dimensions (inch)						No. of Inserts	EDP#	Cartridge	Spares			
		D	H	d ₁	a	a ₁					EDP#		EDP#	
015296	A8000VOD45-100R-04	3.94	2.68	1.25	0.16	0.30	6	014313	80VOD45R-04	015270	F4011T	015241	T20	
015297	A8000VOD45-125R-04	4.92	2.48	1.50	0.16	0.30	8	014313	80VOD45R-04	015270	F4011T	015241	T20	
015298	A8000VOD45-160R-04	6.30	2.48	1.50	0.16	0.30	10	014313	80VOD45R-04	015270	F4011T	015241	T20	
015299	A8000VOD45-200R-04	7.87	2.48	2.50	0.16	0.30	12	014313	80VOD45R-04	015270	F4011T	015241	T20	
015300	A8000VOD45-250R-04	9.84	2.48	2.50	0.16	0.30	16	014313	80VOD45R-04	015270	F4011T	015241	T20	
015301	A8000VOD45-315R-04	12.40	3.15	2.50	0.16	0.30	20	014313	80VOD45R-04	015270	F4011T	015241	T20	
015302	A8000VOD45-400R-04	15.75	3.15	2.50	0.16	0.30	24	014313	80VOD45R-04	015270	F4011T	015241	T20	

8010 VOD45_04 Equal Pitch - Assembled Body & Cartridge

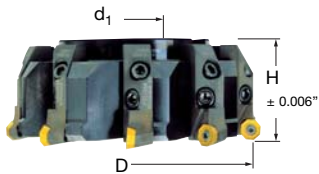
016780	A8010VOD45-100R-04	3.94	2.68	1.25	0.16	0.30	6	014313	80VOD45R-04	015270	F4011T	015241	T20
016781	A8010VOD45-125R-04	4.92	2.48	1.50	0.16	0.30	8	014313	80VOD45R-04	015270	F4011T	015241	T20
016782	A8010VOD45-160R-04	6.30	2.48	1.50	0.16	0.30	10	014313	80VOD45R-04	015270	F4011T	015241	T20
016783	A8010VOD45-200R-04	7.87	2.48	2.50	0.16	0.30	12	014313	80VOD45R-04	015270	F4011T	015241	T20

8100 VOD45_04 Unequal Pitch - Assembled Body & Cartridge

015588	A8100VOD45-125R-04	4.92	2.48	1.50	0.16	0.30	6	014313	80VOD45R-04	015270	F4011T	015241	T20
015589	A8100VOD45-160R-04	6.30	2.48	1.50	0.16	0.30	8	014313	80VOD45R-04	015270	F4011T	015241	T20
015590	A8100VOD45-200R-04	7.87	2.48	2.50	0.16	0.30	10	014313	80VOD45R-04	015270	F4011T	015241	T20
015591	A8100VOD45-250R-04	9.84	2.48	2.50	0.16	0.30	10	014313	80VOD45R-04	015270	F4011T	015241	T20
015592	A8100VOD45-315R-04	12.40	3.15	2.50	0.16	0.30	12	014313	80VOD45R-04	015270	F4011T	015241	T20
015593	A8100VOD45-400R-04	15.75	3.15	2.50	0.16	0.30	14	014313	80VOD45R-04	015270	F4011T	015241	T20

8_0 VOD45_04 Cartridge Spares

EDP #	Cartridge Part Number	EDP#	
014313	80VOD45R-04	015255	7065



Cutter Body & Cartridge

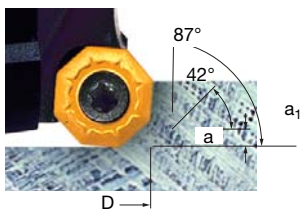


8_0 VOD45_04 Technical Advice

Milling Cutter Order Example: **A8010VOD45-200R-04**
 Milling Insert Order Example: **ODET0404APEN-44 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)

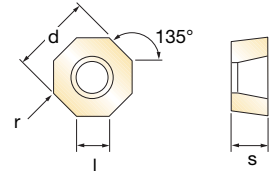
$$\text{ie: } \frac{h_m}{0.707} \quad \text{or} \quad \frac{0.004''}{0.707} = 0.0056 \text{ in. programmed feed rate}$$



Depth of Cut (a)



Inserts for 8_0 VOD45_04



EDP#	Part Number	Grade	Application & Material			Dimensions (inch)				
			Roughing ▼	Semi-Finishing ▼▼	Finishing ▼▼▼	d	l	s	r	h _m min
022199	ODET0404APEN-44	MP91M			◆◆	0.500	0.157	0.187	Facet	0.0016
022198	ODET0404APEN-44	X500			◆◆	0.500	0.157	0.187	Facet	0.0016
027722	ODET0404APEN-44	SP6564			◆◆	0.500	0.157	0.187	Facet	0.0016
024911	ODET0404APFN-441	GH1	◆	◆	◆	0.500	0.157	0.187	Facet	0.0008
017775	ODMT0404APEN-41	MP91M		◆◆		0.500	0.157	0.187	Facet	0.0016
022061	ODMT0404APEN-41	X500		◆◆		0.500	0.157	0.187	Facet	0.0016
027724	ODMT0404APEN-41	SP6564		◆◆		0.500	0.157	0.187	Facet	0.0016
017303	ODMT040408EN-41	MP91M				0.500	0.157	0.187	0.031	0.0016
015143	ODMT040408EN-41	X500	◆◆			0.500	0.157	0.187	0.031	0.0016
027723	ODMT040408EN-41	SP6564	◆◆			0.500	0.157	0.187	0.031	0.0016
017304	ODMW040408SN	MP91M	◆◆			0.500	0.157	0.187	0.031	0.0106
015130	ODMW040408SN	PFZ				0.500	0.157	0.187	0.031	0.0106
017671	ODMW040408SN	SF30				0.500	0.157	0.187	0.031	0.0106
024115	ODMW040408SN	X44				0.500	0.157	0.187	0.031	0.0106
017672	ODMW040408SN	X500				0.500	0.157	0.187	0.031	0.0106
027197	ODMW040408SN	SP6564	◆			0.500	0.157	0.187	0.031	0.0106



OD_04 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	0.012 - 0.020	0.08 - 0.14	730 - 850	0.008 - 0.014	0.04 - 0.08	730 - 980	0.003 - 0.006	0.01 - 0.04
◆ Alloyed Steels	230 - 360	0.011 - 0.016	0.08 - 0.14	330 - 490	0.008 - 0.012	0.04 - 0.08	330 - 630	0.003 - 0.006	0.01 - 0.04
◆ Stainless Steels	400 - 450	0.008 - 0.014	0.08 - 0.14	460 - 590	0.006 - 0.010	0.04 - 0.08	600 - 750	0.002 - 0.006	0.01 - 0.04
◆ PH Stainless	190 - 220	0.006 - 0.010	0.08 - 0.14	230 - 270	0.004 - 0.008	0.04 - 0.08	270 - 320	0.002 - 0.004	0.01 - 0.04
◆ Cast Irons	460 - 910	0.011 - 0.014	0.08 - 0.14	600 - 980	0.006 - 0.010	0.04 - 0.08	660 - 1140	0.002 - 0.006	0.01 - 0.04
◆ Aluminum & Alloys	910 - 1470	0.008 - 0.012	0.08 - 0.14	1320 - 2460	0.004 - 0.010	0.04 - 0.08	2300 - 3280	0.002 - 0.006	0.01 - 0.04
◆ High Temp. Alloys	90 - 130	0.006 - 0.010	0.08 - 0.14	120 - 160	0.004 - 0.008	0.04 - 0.08	150 - 190	0.002 - 0.004	0.01 - 0.04
◆ 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	