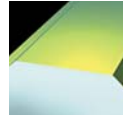


8_0 VOD45_04 Face Mills



8000 VOD45_04 Unequal Pitch - Assembled Body & Cartridge

EDP #	Part Number	Dimensions (mm)						No. of Inserts	EDP#	Cartridge	Spares			
		D	H	d ₁	a	a _{1 max.}	EDP#				EDP#	EDP#	EDP#	
021837	8000VOD45-100R	100	68	32	3,5	8	6	014313	80VOD45R-04	015270	F4011T	015241	T20	
021838	8000VOD45-125R	125	63	40	3,5	8	8	014313	80VOD45R-04	015270	F4011T	015241	T20	
021839	8000VOD45-160R	160	63	40	3,5	8	10	014313	80VOD45R-04	015270	F4011T	015241	T20	
021840	8000VOD45-200R	200	63	60	3,5	8	12	014313	80VOD45R-04	015270	F4011T	015241	T20	
021841	8000VOD45-250R	250	63	60	3,5	8	16	014313	80VOD45R-04	015270	F4011T	015241	T20	
021842	8000VOD45-315R	315	80	60	3,5	8	20	014313	80VOD45R-04	015270	F4011T	015241	T20	
021843	8000VOD45-400R	400	80	60	3,5	8	24	014313	80VOD45R-04	015270	F4011T	015241	T20	

8010 VOD45_04 Equal Pitch - Assembled Body & Cartridge

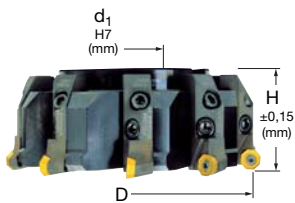
021936	8010VOD45-100R	100	68	32	3,5	8	6	014313	80VOD45R-04	015270	F4011T	015241	T20
021937	8010VOD45-125R	125	63	40	3,5	8	8	014313	80VOD45R-04	015270	F4011T	015241	T20
021938	8010VOD45-160R	160	63	40	3,5	8	10	014313	80VOD45R-04	015270	F4011T	015241	T20
021939	8010VOD45-200R	200	63	60	3,5	8	12	014313	80VOD45R-04	015270	F4011T	015241	T20

8100 VOD45_04 Unequal Pitch - Assembled Body & Cartridge

021982	8100VOD45-125R	125	63	40	3,5	8	6	014313	80VOD45R-04	015270	F4011T	015241	T20
021983	8100VOD45-160R	160	63	40	3,5	8	8	014313	80VOD45R-04	015270	F4011T	015241	T20
021984	8100VOD45-200R	200	63	60	3,5	8	10	014313	80VOD45R-04	015270	F4011T	015241	T20
021985	8100VOD45-250R	250	63	60	3,5	8	10	014313	80VOD45R-04	015270	F4011T	015241	T20
021986	8100VOD45-315R	315	80	60	3,5	8	12	014313	80VOD45R-04	015270	F4011T	015241	T20
021987	8100VOD45-400R	400	80	60	3,5	8	14	014313	80VOD45R-04	015270	F4011T	015241	T20

8_0 VOD45_04 Cartridge Spares

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



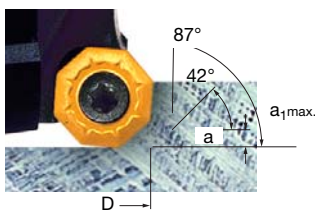
Cutter Body & Cartridge

8_0 VOD45_04 Technical Advice

Milling Cutter Order Example: **8010VOD45-100R**
 Milling Insert Order Example: **ODET0404APEN-44 MP91M**
 For complete cutting conditions refer to page: **264**

Feedrate compensation: For 45° cutting, divide the h_m value by the sine of the approach angle (the sine of 45° = 0,707)

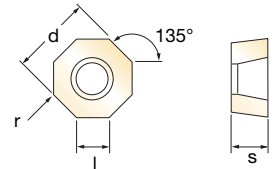
$$\text{ie: } \frac{h_m}{0,707} \quad \text{or} \quad \frac{0,08}{0,707} = 0,113 \text{ mm programmed feed rate}$$



Depth of Cut (a)



Inserts for 8_0 VOD45_04



EDP#	Part Number	Grade	Application & Material			Dimensions (mm)				
			Roughing ▼	Semi-Finishing ▼▼	Finishing ▼▼▼	d	l	s	r	h _m min
022199	ODET 04 04APEN-44	MP91M			◆◆	12,7	4,0	4,76	Facet	0,04
022198	ODET 04 04APEN-44	X500			◆◆	12,7	4,0	4,76	Facet	0,04
027722	ODET 04 04APEN-44	SP6564			◆◆	12,7	4,0	4,76	Facet	0,04
024911	ODET 04 04APFN-441	GH1	◆	◆	◆	12,7	4,0	4,76	Facet	0,02
017775	ODMT 04 04APEN-41	MP91M		◆◆		12,7	4,0	4,76	Facet	0,04
022061	ODMT 04 04APEN-41	X500		◆◆		12,7	4,0	4,76	Facet	0,04
027724	ODMT 04 04APEN-41	SP6564		◆◆		12,7	4,0	4,76	Facet	0,04
017303	ODMT 04 0408EN-41	MP91M				12,7	4,0	4,76	0,8	0,04
015143	ODMT 04 0408EN-41	X500	◆◆			12,7	4,0	4,76	0,8	0,04
027723	ODMT 04 0408EN-41	SP6564	◆◆			12,7	4,0	4,76	0,8	0,04
017304	ODMW 04 0408SN	MP91M	◆◆			12,7	4,0	4,76	0,8	0,27
015130	ODMW 04 0408SN	PFZ				12,7	4,0	4,76	0,8	0,27
017671	ODMW 04 0408SN	SF30				12,7	4,0	4,76	0,8	0,27
024115	ODMW 04 0408SN	X44				12,7	4,0	4,76	0,8	0,27
017672	ODMW 04 0408SN	X500				12,7	4,0	4,76	0,8	0,27
027197	ODMW 04 0408SN	SP6564	◆			12,7	4,0	4,76	0,8	0,27



OD_04 Recommended Cutting Conditions

Material	▼ Roughing			▼▼ Semi-Finishing			▼▼▼ Finishing		
	Speed V _C (m/min)	Feed h _m (mm)	D.O.C. a _p (mm)	Speed V _C (m/min)	Feed h _m (mm)	D.O.C. a _p (mm)	Speed V _C (m/min)	Feed h _m (mm)	D.O.C. a _p (mm)
◆ Unalloyed Steels	180 - 220	0,30 - 0,50	2,0 - 3,5	220 - 260	0,20 - 0,35	1,0 - 2,0	220 - 300	0,08 - 0,15	0,2 - 1,0
◆ Alloyed Steels	70 - 110	0,27 - 0,40	2,0 - 3,5	100 - 150	0,20 - 0,30	1,0 - 2,0	100 - 195	0,08 - 0,15	0,2 - 1,0
◆ Stainless Steels	120 - 140	0,20 - 0,35	2,0 - 3,5	140 - 180	0,15 - 0,25	1,0 - 2,0	180 - 230	0,05 - 0,15	0,2 - 1,0
◆ PH Stainless	55 - 70	0,15 - 0,25	2,0 - 3,5	70 - 85	0,10 - 0,20	1,0 - 2,0	80 - 100	0,05 - 0,10	0,2 - 1,0
◆ Cast Irons	140 - 280	0,30 - 0,35	2,0 - 3,5	180 - 300	0,15 - 0,25	1,0 - 2,0	200 - 350	0,05 - 0,15	0,2 - 1,0
◆ Aluminium & Alloys	275 - 450	0,20 - 0,30	2,0 - 3,5	400 - 750	0,10 - 0,25	1,0 - 2,0	700 - 1000	0,05 - 0,15	0,2 - 1,0
◆ High Temp. Alloys	25 - 40	0,15 - 0,25	2,0 - 3,5	35 - 50	0,10 - 0,20	1,0 - 2,0	45 - 60	0,05 - 0,10	0,2 - 1,0
◆ Hard Steels (52-56 HRC)	-	-	-	-	-	-	-	-	-

h_m = average chip thickness

Star Guide Key to Recommended Tools

Material Designations					
◆	Unalloyed Steels	◆	Stainless Steels	◆	Cast Irons
◆	Alloyed Steels	◆	PH Stainless	◆	Aluminium & Alloys
		◆		◆	High Temp. Alloys
				◆	Hard Materials