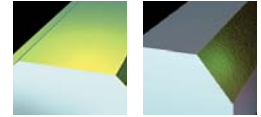




7745 VOD 06 Milling Cutter



7745 VOD 06 Shell Mill Fixation

EDP #	Part Number	Dimensions (mm)							No. of Inserts	Spares			
		D	L/H	l_2	d_1	$a_{1 \text{ max.}}$	a	EDP#			EDP#		
026581	7745VOD 06 -A050R	50	40	-	22	10	4,5	4	015270	F4011T	015241	T20	
026582	7745VOD 06 -A063R	63	40	-	22	10	4,5	5	015270	F4011T	015241	T20	
026583	7745VOD 06 -A080R	80	50	-	27	10	4,5	6	015270	F4011T	015241	T20	
026584	7745VOD 06 -A100R	100	55	-	32	10	4,5	7	015270	F4011T	015241	T20	
026585	7745VOD 06 -A125R	125	63	-	40	10	4,5	8	015270	F4011T	015241	T20	
026586	7745VOD 06 -160R	160	63	-	40	10	4,5	10	015270	F4011T	015241	T20	

Milling cutters with through coolant except \varnothing 160.

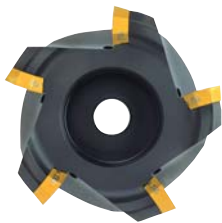
7745 VOD 06 Technical Advice



Milling Cutter Order Example: **7745VOD06-A080R**
 Milling Insert Order Example: **ODET0605APEN-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)

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



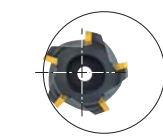
Shell Mill Fixation



Depth of Cut (a)

Circular Ramp Milling Method

Maximum Depth of Cut per Revolution = 5,8 mm

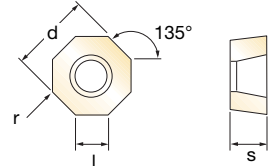


Hole Ø Diameter

Milling with Circular Interpolation

Milling Cutter Nominal Diameter Ø Da	Milling Cutter Diameter Ø Da	Hole Ø Diameter D		Ramp Angle
		min.	max.	
Ø 50	Ø 60	Ø 94	Ø 118	6,0°
Ø 63	Ø 73	Ø 120	Ø 144	4,6°
Ø 80	Ø 90	Ø 154	Ø 178	3,3°
Ø 100	Ø 110	Ø 194	Ø 218	2,6°
Ø 125	Ø 135	Ø 244	Ø 268	2,0°
Ø 160	Ø 170	Ø 314	Ø 338	1,5°

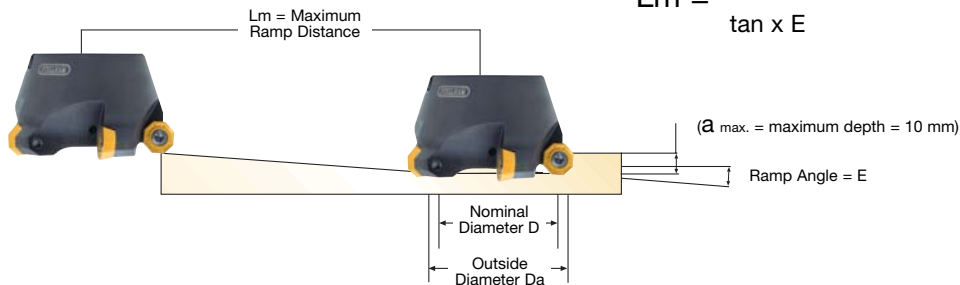
Inserts for 7745 VOD 06



EDP#	Part Number	Grade	Application & Material			Dimensions (mm)				
			Roughing	Semi-Finishing	Finishing	d	l	s	r	h _m min
026591	ODET 06 05APEN-44	MP91M			◆◆	16,0	6,0	5,55	Facet	0,04
026598	ODET 06 05APEN-44	SP4036			◆◆◆	16,0	6,0	5,55	Facet	0,04
026592	ODET 06 05APEN-44	X500			◆◆◆	16,0	6,0	5,55	Facet	0,04
026588	ODET 06 05APFN-441	GH1	◆	◆	◆	16,0	6,0	5,55	Facet	0,02
025836	ODMT 06 05APEN-41	MP91M		◆◆		16,0	6,0	5,55	Facet	0,04
025837	ODMT 06 05APEN-41	SP4036		◆◆◆		16,0	6,0	5,55	Facet	0,04
025890	ODMT 06 05APEN-41	X500	◆	◆◆		16,0	6,0	5,55	Facet	0,04
025836	ODMW 06 0512SN	MP91M	◆			16,0	6,0	5,55	1,2	0,27
025837	ODMW 06 0512SN	SF30				16,0	6,0	5,55	1,2	0,27
025838	ODMW 06 0512SN	X500				16,0	6,0	5,55	1,2	0,27
027743	ODMW 06 0512SN	SP6564	◆◆			16,0	6,0	5,55	1,2	0,27
026595	ODMW 06 0512TN	MP91M	◆			16,0	6,0	5,55	1,2	0,17
026599	ODMW 06 0512TN	SP4036		◆		16,0	6,0	5,55	1,2	0,17
026596	ODMW 06 0512TN	X500	◆			16,0	6,0	5,55	1,2	0,17



Linear Ramp Milling Method



OD_06 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 - 0,70	2,5 - 4,5	220 - 260	0,20 - 0,40	1,0 - 2,0	220 - 300	0,08 - 0,15	0,2 - 1,0
◆ Alloyed Steels	70 - 110	0,27 - 0,50	2,5 - 4,5	100 - 150	0,20 - 0,35	1,0 - 2,0	100 - 195	0,08 - 0,15	0,2 - 1,0
◆ Stainless Steels	120 - 140	0,27 - 0,40	2,5 - 4,5	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 - 0,30	2,5 - 4,5	70 - 85	0,10 - 0,20	1,0 - 2,0	80 - 100	0,05 - 0,10	0,2 - 1,0
◆ Cast Irons	140 - 280	0,20 - 0,45	2,5 - 4,5	180 - 300	0,15 - 0,30	1,0 - 2,0	200 - 350	0,05 - 0,15	0,2 - 1,0
◆ Aluminium & Alloys	275 - 450	0,20 - 0,35	2,5 - 4,5	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	0,17 - 0,25	2,5 - 4,5	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)	-	-	-	50 - 85	0,06 - 0,12	0,5 - 1,5	50 - 100	0,03 - 0,06	0,2 - 0,5

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