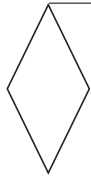


STAR GUIDE™ for Milling Inserts



Introducing the Stellram Star Guide which will enable you to select your inserts in 3 easy steps. Simply follow the appropriate star point based on the selected material.

1st Choice



Star point will indicate the recommended insert for each material. Stellram's Star Guide enables you to find the right insert for your machining requirements.

- 1 Select Material.
- 2 Follow color-coded star point to insert section for your application (roughing, semi-finishing or finishing).
- 3 Follow color-coded star point to cutting conditions for your application .

Application

Roughing

Semi-Finishing

Finishing

Inserts for 7745 VOD 06

EDP#	Part Number	Grade	Application & Material			Dimensions (inch)					
			Roughing	Semi-Finishing	Finishing	d	l	s	r	h _m min	
026591	ODET0605APEN-44	MP91M			◆◆◆	0.630	0.630	0.219	Facet	0.0016	
026598	ODET0605APEN-44	SP4036			◆◆◆	0.630	0.630	0.219	Facet	0.0016	
026592	ODET0605APEN-44	X500			◆◆◆	0.630	0.630	0.219	Facet	0.0016	
026588	ODET0605APFN-441	GH1	◆	◆	◆	0.630	0.630	0.219	Facet	0.0008	
026589	ODMT0605APEN-41	MP91M		◆◆	◆◆◆	0.630	0.630	0.219	Facet	0.0016	
026597	ODMT0605APEN-41	SP0436		◆◆	◆◆◆	0.630	0.630	0.219	Facet	0.0016	
026590	ODMT0605APEN-41	X500		◆◆	◆◆◆	0.630	0.630	0.219	Facet	0.0016	
026836	ODMW060512SN	MP91M		◆◆	◆◆◆	0.630	0.630	0.219	0.047	0.0106	
026837	ODMW060512SN	SF30		◆◆	◆◆◆	0.630	0.630	0.219	0.047	0.0106	
026838	ODMW060512SN	X500		◆◆	◆◆◆	0.630	0.630	0.219	0.047	0.0106	
027743	ODMW060512SN	SP6564		◆◆	◆◆◆	0.630	0.630	0.219	0.047	0.0106	
026595	ODMW060512TN	MP91M		◆◆	◆◆◆	0.630	0.630	0.219	0.047	0.0067	
026599	ODMW060512TN	SP4036		◆◆	◆◆◆	0.630	0.630	0.219	0.047	0.0067	
026596	ODMW060512TN	X500		◆◆	◆◆◆	0.630	0.630	0.219	0.047	0.0067	

OD_06 Recommended Cutting Conditions

Material	Roughing			Semi-Finishing			Finishing		
	Speed V _C (feet/min)	Feed f _{TM} (inch)	D.O.C. a _p (inch)	Speed V _C (feet/min)	Feed f _{TM} (inch)	D.O.C. a _p (inch)	Speed V _C (feet/min)	Feed f _{TM} (inch)	D.O.C. a _p (inch)
Unalloyed Steels	600 - 720	0.012 - 0.028	0.10 - 0.18	730 - 850	0.008 - 0.016	0.04 - 0.08	730 - 980	0.003 - 0.006	0.01 - 0.04
Alloyed Steels	230 - 360	0.011 - 0.020	0.10 - 0.18	330 - 490	0.008 - 0.014	0.04 - 0.08	330 - 630	0.003 - 0.006	0.01 - 0.04
Stainless Steels	400 - 450	0.011 - 0.016	0.10 - 0.18	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 - 0.012	0.10 - 0.18	230 - 270	0.004 - 0.008	0.04 - 0.08	270 - 320	0.002 - 0.004	0.01 - 0.04
Cast Irons	460 - 910	0.008 - 0.018	0.10 - 0.18	600 - 980	0.006 - 0.012	0.04 - 0.08	660 - 1140	0.002 - 0.006	0.01 - 0.04
Aluminum & Alloys	910 - 1470	0.008 - 0.014	0.10 - 0.18	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	0.007 - 0.010	0.10 - 0.18	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)	-	-	-	170 - 270	0.002 - 0.005	0.02 - 0.06	170 - 320	0.001 - 0.002	0.01 - 0.02

Star Guide Key to Recommended Tools

Material Designations					
◆	◆◆	◆◆◆	◆◆◆◆	◆◆◆◆◆	◆◆◆◆◆◆
P	M	K	S	H	G
Unalloyed Steels	Stainless Steels	Cast Irons	High Temp. Alloys	Aluminum & Alloys	Hard Materials
Alloyed Steels	PH Stainless				















h_m = average chip thickness

You now have the right milling cutter, inserts and cutting conditions for your specific application.






Machining Materials



8 star points represent each main group of machinable materials. A segment has been given a color to identify each material group.

Unalloyed Steel		 P
Alloyed Steel		
Stainless Steel		 M
PH Stainless		
Cast Irons		 K
Aluminum & Alloys		 N
High Temperature Alloys		 S
Hard Materials (52-56 HRC)		 H

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