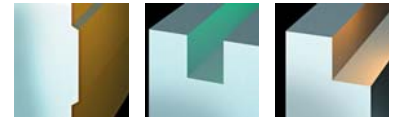




5315 VA 16 Long Edge Cutter

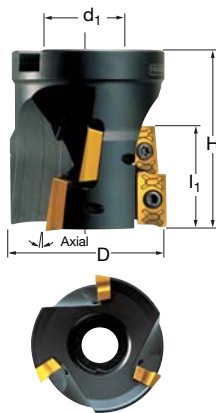


5315 VA 16 Shell Mill Fixation

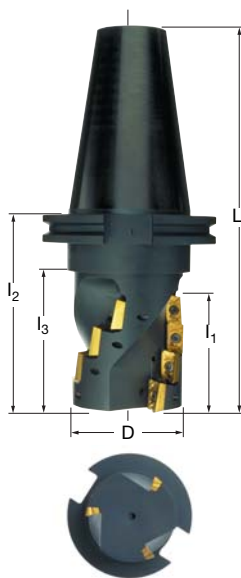
EDP #	Part Number	Dimensions (inch)							No. of Inserts	Spares		
		D	L/H	l ₁	l ₂	l ₃	d ₁	EDP#		 EDP#	 EDP#	
025681	C5315VA16-A2.0Z3R1.22	2.00	2.16	1.22	-	-	1.00	6	015262	D4010T	015240	T15
025682	C5315VA16-A2.0Z4R1.22	2.00	2.16	1.22	-	-	1.00	8	015262	D4010T	015240	T15
025684	C5315VA16-A2.5Z4R1.22	2.50	2.16	1.22	-	-	1.00	8	015262	D4010T	015240	T15
025685	C5315VA16-A2.5Z5R1.22	2.50	2.16	1.22	-	-	1.00	10	015262	D4010T	015240	T15
025687	C5315VA16-A3.0Z4R1.22	3.00	2.16	1.22	-	-	1.25	8	015262	D4010T	015240	T15
025688	C5315VA16-A3.0Z5R1.22	3.00	2.16	1.22	-	-	1.25	10	015262	D4010T	015240	T15

5315 VA 16 Caterpillar Vee Flange

025680	C5315VA16FA50/2.0R2.4	2.00	8.36	2.4	4.35	3.00	-	12	015262	D4010T	015240	T15
025683	C5315VA16FA50/2.5R2.4	2.50	8.36	2.4	4.35	3.00	-	12	015262	D4010T	015240	T15
025686	C5315VA16FA50/3.0R3.6	3.00	9.74	3.58	5.73	4.96	-	24	015262	D4010T	015240	T15



Shell Mill Fixation



Caterpillar Vee Flange

Radial depth of cut, as a percentage of cutter diameter

To find programmed feedrate:

$$h_m = f_z \times \sqrt{\frac{\text{Depth of Cut}}{\text{Cutter diameter}}}$$

where: f_z = Feed per tooth
 h_m = Average chip thickness

Radial Depth of Cut

% of Cutter Diameter	Multiply feed rate by
1%	6.5
2%	4.6
3%	3.8
4%	3.3
5%	2.9
6%	2.7
7%	2.5
8%	2.3
9%	2.2
10%	2.1
15%	1.7
20%	1.5
25%	1.3
30%	1.2
40%	1.0
50%	1.0
60%	1.0
70%	1.0
80%	1.0
90%	1.0
100%	1.0

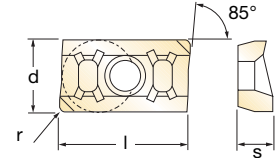
AP_16 Recommended Cutting Conditions

Material	▼ Roughing			▼▼ Semi-Finishing			▼▼▼ Finishing		
	Speed V _C (feet/min)	Feed/Flute 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	0.008 - 0.015	See l ₁	-	-	-	-	-	-
◆ Alloyed Steels	230 - 360	0.006 - 0.012	See l ₁	-	-	-	-	-	-
◆ Stainless Steels	400 - 450	0.005 - 0.010	See l ₁	-	-	-	-	-	-
◆ PH Stainless	190 - 220	0.004 - 0.007	See l ₁	-	-	-	-	-	-
◆ Cast Irons	460 - 910	0.006 - 0.012	See l ₁	-	-	-	-	-	-
◆ Aluminum & Alloys	910 - 1470	0.002 - 0.005	See l ₁	-	-	-	-	-	-
◆ High Temp. Alloys	90 - 130	0.004 - 0.007	See l ₁	-	-	-	-	-	-
◆ Hard Steels (52-56 HRC)	170 - 270	0.002 - 0.004	See l ₁	-	-	-	-	-	-

h_m = average chip thickness



Inserts for 5315 VA 16



EDP#	Part Number	Grade	Application & Material			Dimensions (inch)				
			Roughing ▼	Semi-Finishing ▼▼	Finishing ▼▼▼	d	l	s	r	h _m min
017621	APEX1604PDER-701	PFZ				0.375	0.656	0.187	Facet	0.0008
017623	APEX1604PDFR-701	SFZ				0.375	0.656	0.187	Facet	0.0008
014066	APEX1604PDFR-701	GH1	◆			0.375	0.656	0.187	Facet	0.0008
017291	APFW1604PDER	MP91M				0.375	0.656	0.187	Facet	0.0016
017627	APFW1604PDTR	X44				0.375	0.656	0.187	Facet	0.0039
017628	APFW1604PDTR	GH1				0.375	0.656	0.187	Facet	0.0039
018030	APFW1604PDTR	CN35				0.375	0.656	0.187	Facet	0.0039
017626	APFW1604PDTR	SF30				0.375	0.656	0.187	Facet	0.0039
017629	APFW1604PDTR	SFZ	◆			0.375	0.656	0.187	Facet	0.0039
017633	APHT1604PDER	SFZ				0.375	0.656	0.187	Facet	0.0020
015154	APHT1604PDFR	GH1				0.375	0.656	0.187	Facet	0.0008
017293	APHT1604PDTR-42	MP91M				0.375	0.656	0.187	Facet	0.0039
017634	APHT1604PDTR-42	PFZ				0.375	0.656	0.187	Facet	0.0039
015155	APHT1604PDTR-42	X500				0.375	0.656	0.187	Facet	0.0039
027718	APHT1604PDTR-42	SP6564				0.375	0.656	0.187	Facet	0.0039
017294	APKT1604PDER-43	MP91M	◆◆			0.375	0.656	0.187	Facet	0.0031
014067	APKT1604PDER-43	PFZ				0.375	0.656	0.187	Facet	0.0031
015156	APKT1604PDER-43	X500	◆◆			0.375	0.656	0.187	Facet	0.0031
027720	APKT1604PDER-43	SP6564	◆◆			0.375	0.656	0.187	Facet	0.0031
023102	APET160402TR-42	PFZ				0.375	0.656	0.187	0.008	0.0039
023103	APET160408TR-42	PFZ				0.375	0.656	0.187	0.031	0.0039
023104	APET160410TR-42	PFZ				0.375	0.656	0.187	0.039	0.0039
023105	APET160415TR-42	PFZ				0.375	0.656	0.187	0.059	0.0039
023106	APET160420TR-42	PFZ				0.375	0.656	0.187	0.079	0.0039
017618	APET160425TR-42	MP91M				0.375	0.656	0.187	0.098	0.0039
017619	APET160425TR-42	X500				0.375	0.656	0.187	0.098	0.0039
011488	APKT160408E-2C	MP91M				0.375	0.656	0.187	0.031	0.0039
010796	APKT160408E-2C	PFZ				0.375	0.656	0.187	0.031	0.0039
012468	APKT160408E-2C	SF30				0.375	0.656	0.187	0.031	0.0039
017228	APMT160412B-2C	MP91M				0.375	0.656	0.187	0.047	0.0039
013944	APMT160416B-2C	MP91M				0.375	0.656	0.187	0.063	0.0039
013945	APMT160424B-2C	MP91M				0.375	0.656	0.187	0.094	0.0039



Note: For this style of cutter, 0.098 in. corner rad max.



5315 VA 16 Technical Advice

Milling Cutter Order Example: **C5315VA16-A2.0Z4R1.22**
 Milling Insert Order Example: **APFW1604PDER MP91M**
 For complete cutting conditions refer to page: **208**

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