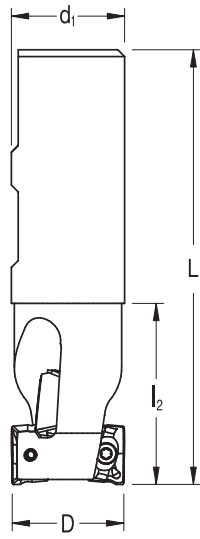


5315 VA 12 Milling Cutter



Weldon Shank

5315 VA 12 Weldon Shank

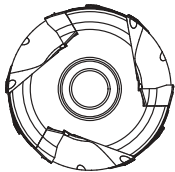
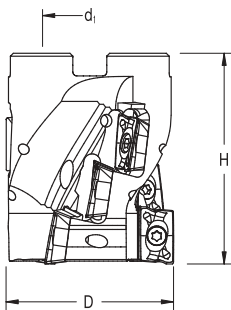
EDP #	Part Number	Dimensions (inch)								Spares			
		D	L/H	a_p max. Profiling	a_p max. Slotting	l_2	d_1	Z	No. of flutes	EDP #	EDP #		
029349	C5315VA12WA1.00R0.9	1.000	3.85	0.900	0.591	1.570	1.000	4	2	027860	F3007T	022157	T8
029350	C5315VA12WA1.00R1.37	1.000	4.28	1.370	0.276	2.000	1.000	6	2	027860	F3007T	022157	T8
029351	C5315VA12WA1.25R1.37	1.250	4.28	1.370	0.787	2.000	1.250	9	3	027860	F3007T	022157	T8
029352	C5315VA12WA1.50R1.77	1.500	5.04	1.770	0.787	2.350	1.500	12	3	027860	F3007T	022157	T8

5315 VA 12 Shell Mill Fixation

029353	C5315VA12-A1.50R1.33	1.500	2.000	1.330	0.787	-	0.750	9	3	027860	F3007T	022157	T8
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Please note that a maximum of 0.031" insert radius is allowed on the 5315VA12 range of cutters. Larger radii inserts can be used on the leading edge if the body is modified. For inserts, see next page.

NOTE: For stainless steels, PH stainless steels and high temperature alloys, the 46 geometry should only be used for profiling.



Shell Mill Fixation

5315 VA 12

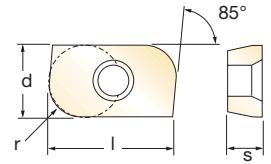
Milling Cutter Order Example: **C5315VA12WA1.00R0.9**

Milling Insert Order Example: **ADKT12T3PDER-45 SC3025**



Depth of Cut (a)

Inserts for 5315 VA 12



EDP #	Part Number	Grade	Application & Material			Dimensions (inch)				
			Roughing ▼	Semi-Finishing ▼▼	Finishing ▼▼▼	d	l	s	r	h _m min
027914	ADKT12T3PDER-45	SP6564				0.309	0.500	0.156	Facet	0.003
027913	ADKT12T3PDER-45	X500	◆			0.309	0.500	0.156	Facet	0.003
027915	ADKT12T3PDER-45	MP91M	◆			0.309	0.500	0.156	Facet	0.003
027916	ADKT12T3PDER-45	SC3025	◆			0.309	0.500	0.156	Facet	0.003
029098	ADGT12T3PDFR-721	GH1	◆			0.309	0.500	0.156	Facet	0.0015
029326	ADHT12T3PDER-46	SP6564	◆			0.309	0.500	0.156	Facet	0.002
029327	ADHT12T3PDER-46	X500	◆◆			0.309	0.500	0.156	Facet	0.002
029328	ADHT12T308ER-46	SP6564	◆			0.309	0.500	0.156	0.031	0.002
029309	ADHT12T308ER-46	X500	◆◆			0.309	0.500	0.156	0.031	0.002



Please note that for the 5315 range, only a maximum 0.031" radius is allowed.

AD_12 Recommended Cutting Conditions

Material	▼ Roughing			▼▼ Semi-finishing			▼▼▼ Finishing		
	Speed V _C (SFM)	Feed f _z (IPT)	D.O.C a _p (in)	Speed V _C (SFM)	Feed f _z (IPT)	D.O.C a _p (in)	Speed V _C (SFM)	Feed f _z (IPT)	D.O.C a _p (in)
◆ Unalloyed Steels	395 - 1000	0.002 - 0.005	See I ₁	-	-	-	-	-	-
◆ Alloyed Steels	245 - 525	0.002 - 0.004	See I ₁	-	-	-	-	-	-
◆ Stainless Steels	410 - 870	0.002 - 0.004	See I ₁	-	-	-	-	-	-
◆ PH Stainless	160 - 335	0.002 - 0.004	See I ₁	-	-	-	-	-	-
◆ Cast Irons	400 - 1300	0.002 - 0.005	See I ₁	-	-	-	-	-	-
◆ Aluminum & Alloys	655 - 5250	0.002 - 0.008*	See I ₁	-	-	-	-	-	-
◆ High Temp. Alloys	80 - 195	0.002 - 0.004	See I ₁	-	-	-	-	-	-
◆ Hard Steels (52-56 HRC)	-	-	-	-	-	-	-	-	-

*For 1" diameter cutters, the maximum feed rate is 0.006".

NOTE: For stainless steels, PH stainless steels and high temperature alloys, the 46 geometry should only be used for profiling.

Star Guide Key to Recommended Inserts

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

Technical Data:

ISO Grade Chart

Materials	Code	Coated					Micro-grain Uncoated
		CVD			PVD		
		HC MP91M	HC X500	HC SC3025	HC SP6564	HF GH1	
◆ Unalloyed and Alloyed Steels P	C8	P01					
		P05					
	C7	P10					
		P15					
		P20					
	C6	P25					
		P30					
	C5	P35					
		P40					
		P50					
◆ Stainless Steels M	M05						
	M10						
	M15						
	M20						
	M30						
	M35						
	M40						
◆ Cast Irons K	C4	K01					
		K05					
	C3	K10					
		K15					
	C2	K20					
		K25					
	C1	K30					
		K35					
		K40					
	◆ Aluminum & Alloys N	N01					
N05							
N10							
N15							
N20							
N25							
N30							
◆ High Temperature Alloys S	S01						
	S05						
	S10						
	S15						
	S20						
	S25						
	S30						

New!

- **MP91M:** For use on steels and alloyed steels. This grade is recommended every time wear characteristics are more important than toughness.
- **X500:** Premium grade for use in difficult conditions and low cutting speeds.
- **SC3025:** The 1st choice grade for all cast iron applications.
 - Excellent wear and abrasion resistance offers greater tool life.
 - 25% - 50% longer tool life than the competition in laboratory and field tests.
- **SP6564:** Recommended for stainless steels and high temperature alloys, in either higher speed or dry machining applications.
- **GH1:** Micrograin grade for machining aluminum. The grade performs equally well with or without coolant.

Case study:

PowerMill90

Part:	Plate
Tool:	C7690VA12-A2.00Z06R
Insert:	ADKT12T3PDER-45 X500
Material:	Unalloyed Steels
Results:	<i>Competition</i> Stellram
Speed (feet/min):	470 SFM 630 SFM
DOC:	0.118" 0.236"
Feedrate:	21 IPM 36 IPM
Feed per Tooth:	0.004" 0.005"
Results:	2 components per Insert 12



North American locations:

STELLRAM U.S.A. 1 TELEDYNE PLACE, LAVERGNE, TENNESSEE, U.S.A. 37086

TEL: 615 641 4200

CUSTOMER ORDER & TECHNICAL TEL: **800 232 1200**

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TEL: (800) 668 6928 FAX: (800) 432 6227

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