

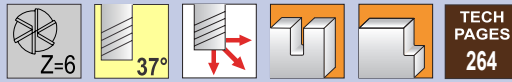
TOLERANCES

<i>d1</i>	+0.000" -0.002" (+.000mm -.050mm)
<i>d2</i>	h6
<i>r</i>	+0.001" -0.001" (+.025 -.025mm)

**NEW
ITEMS**

Series VRX-6

.2362" - .4724"
(6.000mm - 12.000mm)



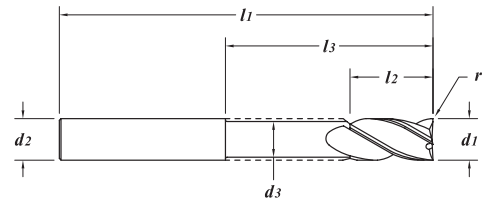
Recommended for Inconel, pH materials, titanium and tool steels >40Rc

Square End, Corner Radius

AlTiN Coating

Solid submicron grain carbide end mill - center cutting
 6 flutes for better finish and longer tool life
 Reduces vibration for more aggressive machining resulting in less cycle times and greater productivity
 Staggered flute geometry

Recommended for Trochoidal / Dynamic milling



EDP#	<i>d1</i> † Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>r</i> Corner Radius	<i>l3</i> Reach Length	<i>d3</i> Neck Diameter	1-11	12-24	25-49	50-100
	Decimal	Metric										
NEW 60101	.2362	6.000	6.0	65	20	-	-	-	21.60	20.66	19.72	18.78
NEW 60103	.2362	6.000	6.0	65	20	0.50	-	-	26.48	25.33	24.18	23.03
60100	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	-	-	20.85	19.94	19.04	18.13
60102	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	.010"	-	25.52	24.41	23.30	22.19
60104	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	.015"	-	25.52	24.41	23.30	22.19
NEW 60105	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	.020"	-	25.52	24.41	23.30	22.19
60106	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	.030"	-	25.52	24.41	23.30	22.19
60162	.3150	8.000	8.0	65	22	-	-	-	30.82	29.48	28.14	26.80
NEW 60107	.3150	8.000	8.0	65	22	0.50	-	-	35.83	34.27	32.71	31.16
NEW 60109	.3750	3/8"	9.525	3/8"	2"	1/2"	-	-	30.03	28.72	27.42	26.11
NEW 60111	.3750	3/8"	9.525	3/8"	2"	1/2"	.020"	-	36.54	34.95	33.36	31.77
60108	.3750	3/8"	9.525	3/8"	2-1/2"	7/8"	-	-	35.09	33.56	32.04	30.51
60110	.3750	3/8"	9.525	3/8"	2-1/2"	7/8"	.015"	-	40.18	38.43	36.69	34.94
NEW 60113	.3750	3/8"	9.525	3/8"	2-1/2"	7/8"	.020"	-	40.18	38.43	36.69	34.94
60112	.3750	3/8"	9.525	3/8"	2-1/2"	7/8"	.030"	-	40.18	38.43	36.69	34.94
60114	.3750	3/8"	9.525	3/8"	2-1/2"	7/8"	.060"	-	40.18	38.43	36.69	34.94
NEW 60184	.3750	3/8"	9.525	3/8"	3"	1-1/4"	.030"	-	52.88	50.58	48.28	45.98
60164	.3937	10.000	10.0	70	22	-	-	-	42.08	40.25	38.42	36.59
NEW 60115	.3937	10.000	10.0	70	22	0.50	-	-	48.58	46.47	44.36	42.24
NEW 60117	.3937	10.000	10.0	70	22	1.00	-	-	48.58	46.47	44.36	42.24
NEW 60119	.4724	12.000	12.0	65	20	-	-	-	51.22	48.99	46.77	44.54
NEW 60121	.4724	12.000	12.0	65	20	0.50	-	-	63.68	60.91	58.14	55.37
NEW 60123	.4724	12.000	12.0	75	26	-	-	-	54.65	52.27	49.90	47.52
NEW 60125	.4724	12.000	12.0	75	26	0.75	-	-	71.04	67.95	64.86	61.77
60166	.4724	12.000	12.0	75	32	-	-	-	54.65	52.27	49.90	47.52
NEW 60127	.4724	12.000	12.0	75	32	0.50	-	-	71.04	67.95	64.86	61.77
NEW 60129	.4724	12.000	12.0	75	32	1.00	-	-	71.04	67.95	64.86	61.77

HIGH PERFORMANCE
END MILLS
MATERIAL HARDNESS (Rc)
70
35
0

continued →

Series VRX-6 (continued)

.5000" - 1.000"
(12.700mm - 25.400mm)

EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	r Corner Radius	$l3$ Reach Length	$d3$ Neck Diameter	1-11	12-24	25-49	50-100	
	Decimal	Metric											
NEW 60131	.5000	1/2"	12.700	1/2"	2-1/2"	5/8"	-	-	-	49.12	46.98	44.85	42.71
NEW 60157	.5000	1/2"	12.700	1/2"	2-1/2"	5/8"	.015"	-	-	61.07	58.41	55.76	53.10
NEW 60133	.5000	1/2"	12.700	1/2"	2-1/2"	5/8"	.020"	-	-	61.07	58.41	55.76	53.10
NEW 60159	.5000	1/2"	12.700	1/2"	2-1/2"	5/8"	.030"	-	-	61.07	58.41	55.76	53.10
NEW 60186	.5000	1/2"	12.700	1/2"	2-1/2"	5/8"	.125"	-	-	61.07	58.41	55.76	53.10
NEW 60135	.5000	1/2"	12.700	1/2"	3"	1"	-	-	-	52.47	50.19	47.91	45.63
60116	.5000	1/2"	12.700	1/2"	3"	1-1/4"	-	-	-	52.47	50.19	47.91	45.63
60118	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.010"	-	-	68.16	65.20	62.23	59.27
60120	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.015"	-	-	68.16	65.20	62.23	59.27
60122	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.020"	-	-	68.16	65.20	62.23	59.27
60124	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.030"	-	-	68.16	65.20	62.23	59.27
60126	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.060"	-	-	68.16	65.20	62.23	59.27
60128	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.125"	-	-	68.16	65.20	62.23	59.27
NEW 60137	.5000	1/2"	12.700	1/2"	4"	1-1/2"	-	-	-	71.01	67.93	64.84	61.75
NEW 60139	.5000	1/2"	12.700	1/2"	4"	1-1/2"	.030"	-	-	80.74	77.23	73.72	70.21
60130	.5000	1/2"	12.700	1/2"	4"	2-1/8"	-	-	-	71.01	67.93	64.84	61.75
60132	.5000	1/2"	12.700	1/2"	4"	2-1/8"	.010"	-	-	80.74	77.23	73.72	70.21
60134	.5000	1/2"	12.700	1/2"	4"	2-1/8"	.020"	-	-	80.74	77.23	73.72	70.21
60136	.5000	1/2"	12.700	1/2"	4"	2-1/8"	.030"	-	-	80.74	77.23	73.72	70.21
NEW 60141	.6250	5/8"	15.875	5/8"	3"	3/4"	-	-	-	94.08	89.99	85.90	81.81
NEW 60143	.6250	5/8"	15.875	5/8"	3"	3/4"	.020"	-	-	105.46	100.87	96.29	91.70
60138	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	-	-	-	96.83	92.62	88.41	84.20
60140	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.015"	-	-	108.40	103.69	98.97	94.26
NEW 60145	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.020"	-	-	108.40	103.69	98.97	94.26
60142	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.030"	-	-	108.40	103.69	98.97	94.26
60144	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.060"	-	-	108.40	103.69	98.97	94.26
60146	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.125"	-	-	108.40	103.69	98.97	94.26
60148	.6250	5/8"	15.875	5/8"	4"	1-5/8"	-	-	-	103.41	98.91	94.42	89.92
60150	.6250	5/8"	15.875	5/8"	4"	1-5/8"	.030"	-	-	115.76	110.73	105.69	100.66
60168	.6299		16.000	16.0	88	32	-	-	-	101.02	96.62	92.23	87.84
NEW 60170	.6299		16.000	16.0	88	32	0.50	-	-	113.03	108.12	103.20	98.29
NEW 60174	.6299		16.000	16.0	100	40	-	-	-	107.41	102.74	98.07	93.40
NEW 60176	.6299		16.000	16.0	100	40	0.50	-	-	120.19	114.96	109.74	104.51
NEW 60180	.6299		16.000	16.0	100	32	-	50	14.50	117.59	112.48	107.36	102.25
NEW 60182	.6299		16.000	16.0	100	32	0.50	50	14.50	130.36	124.69	119.02	113.36
60152	.7500	3/4"	19.050	3/4"	4"	1-1/2"	-	-	-	138.22	132.21	126.20	120.19
60154	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.015"	-	-	155.12	148.38	141.63	134.89
NEW 60147	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.020"	-	-	155.12	148.38	141.63	134.89
60156	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.030"	-	-	155.12	148.38	141.63	134.89
60158	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.060"	-	-	155.12	148.38	141.63	134.89
60160	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.125"	-	-	155.12	148.38	141.63	134.89
NEW 60149	.7500	3/4"	19.050	3/4"	6"	3"	-	-	-	217.11	207.67	198.23	188.79
NEW 60151	.7500	3/4"	19.050	3/4"	6"	3"	.030"	-	-	252.52	241.54	230.56	219.58
NEW 60153	1.000	1"	25.400	1"	6"	3"	.030"	-	-	419.84	401.59	383.33	365.08
NEW 60155	1.000	1"	25.400	1"	7"	1-1/4"	-	4-1/8"	.980"	453.36	433.65	413.94	394.23

