

.3150" - .4724"
(8.000mm - 12.000mm)



**TECH
PAGES
302-303**

TOLERANCES

$d1$	$+0.000" - .002" (+.000mm - .050mm)$
$d2$	$h6$
r	$+0.001" - .001" (+.025 - .025mm)$

Recommended for titanium, stainless, and tool steels under 45Rc

Seven-Flute End Mill

BALIQ® ALCRONOS Coating (AlCrN-Based)

Solid submicron grain carbide end mill - non-center cutting

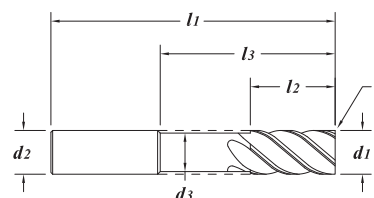
Engineered for High Efficiency Milling

Multiple flutes for increased feed rates

Staggered flute geometry

PCT (Polish Carbide Treatment) enhances tool life

Up to 15% Radial (ae) engagement



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										
64100	.3150	8.000	8.0	65	22	-	-	-	53.99	51.65	49.30	46.95
64102	.3150	8.000	8.0	65	22	0.50	-	-	59.48	56.89	54.31	51.72
64104	.3150	8.000	8.0	65	22	1.00	-	-	59.48	56.89	54.31	51.72
64105	.3150	8.000	8.0	75	27	1.60	-	-	72.94	69.77	66.60	63.43
64106	.3150	8.000	8.0	75	32	-	-	-	66.75	63.84	60.94	58.04
64108	.3150	8.000	8.0	75	32	0.50	-	-	72.94	69.77	66.60	63.43
64110	.3150	8.000	8.0	75	32	1.00	-	-	72.94	69.77	66.60	63.43
NEW 64267	.3750	3/8"	9.525	3/8"	2"	5/8"	-	-	49.94	47.77	45.60	43.43
NEW 64268	.3750	3/8"	9.525	3/8"	2"	5/8"	.010"	-	57.05	54.57	52.09	49.61
NEW 64269	.3750	3/8"	9.525	3/8"	2"	5/8"	.015"	-	57.05	54.57	52.09	49.61
NEW 64270	.3750	3/8"	9.525	3/8"	2"	5/8"	.020"	-	57.05	54.57	52.09	49.61
NEW 64271	.3750	3/8"	9.525	3/8"	2"	5/8"	.030"	-	57.05	54.57	52.09	49.61
64112	.3750	3/8"	9.525	3/8"	2-1/2"	1"	-	-	58.67	56.12	53.57	51.02
64114	.3750	3/8"	9.525	3/8"	2-1/2"	1"	.020"	-	64.24	61.45	58.65	55.86
64116	.3750	3/8"	9.525	3/8"	2-1/2"	1"	.030"	-	64.24	61.45	58.65	55.86
64117	.3750	3/8"	9.525	3/8"	3"	1"	.025"	-	78.14	74.75	71.35	67.95
64118	.3750	3/8"	9.525	3/8"	3"	1-1/2"	-	-	70.76	67.68	64.61	61.53
64120	.3750	3/8"	9.525	3/8"	3"	1-1/2"	.020"	-	78.14	74.75	71.35	67.95
64122	.3750	3/8"	9.525	3/8"	3"	1-1/2"	.030"	-	78.14	74.75	71.35	67.95
64123	.3750	3/8"	9.525	3/8"	3"	1-1/2"	.060"	-	78.14	74.75	71.35	67.95
64246	.3750	3/8"	9.525	3/8"	4"	7/8"	.015"	1-7/8"	101.71	97.28	92.86	88.44
64124	.3937	10.000	10.0	70	25	-	-	-	68.70	65.71	62.73	59.74
64126	.3937	10.000	10.0	70	25	0.50	-	-	75.83	72.53	69.24	65.94
64128	.3937	10.000	10.0	70	25	1.00	-	-	75.83	72.53	69.24	65.94
64130	.4724	12.000	12.0	75	26	-	-	-	82.48	78.89	75.31	71.72
64132	.4724	12.000	12.0	75	26	0.50	-	-	100.42	96.05	91.69	87.32
64134	.4724	12.000	12.0	75	26	1.00	-	-	100.42	96.05	91.69	87.32
64136	.4724	12.000	12.0	75	32	-	-	-	82.48	78.89	75.31	71.72
64138	.4724	12.000	12.0	75	32	0.50	-	-	100.42	96.05	91.69	87.32
64140	.4724	12.000	12.0	75	32	1.00	-	-	100.42	96.05	91.69	87.32
64141	.4724	12.000	12.0	100	42	1.00	-	-	121.80	116.50	111.21	105.91
64142	.4724	12.000	12.0	100	50	-	-	-	110.76	105.94	101.13	96.31
64144	.4724	12.000	12.0	100	50	0.50	-	-	121.80	116.50	111.21	105.91
64146	.4724	12.000	12.0	100	50	1.00	-	-	121.80	116.50	111.21	105.91

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										
64218	.5000	1/2"	12.700	1/2"	2-1/2"	5/8"	-	-	-	77.07	73.72	70.37	67.02
64220	.5000	1/2"	12.700	1/2"	2-1/2"	5/8"	.015"	-	-	89.80	85.90	81.99	78.09
64222	.5000	1/2"	12.700	1/2"	2-1/2"	5/8"	.030"	-	-	89.80	85.90	81.99	78.09
64223	.5000	1/2"	12.700	1/2"	2-1/2"	5/8"	.060"	-	-	89.80	85.90	81.99	78.09
64224	.5000	1/2"	12.700	1/2"	3"	1"	-	-	-	80.10	76.62	73.13	69.65
64226	.5000	1/2"	12.700	1/2"	3"	1"	.015"	-	-	97.27	93.04	88.81	84.58
64228	.5000	1/2"	12.700	1/2"	3"	1"	.030"	-	-	97.27	93.04	88.81	84.58
64148	.5000	1/2"	12.700	1/2"	3"	1-1/4"	-	-	-	80.10	76.62	73.13	69.65
64150	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.015"	-	-	97.27	93.04	88.81	84.58
64152	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.020"	-	-	97.27	93.04	88.81	84.58
64154	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.030"	-	-	97.27	93.04	88.81	84.58
64156	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.060"	-	-	97.27	93.04	88.81	84.58
64157	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.125"	-	-	97.27	93.04	88.81	84.58
64158	.5000	1/2"	12.700	1/2"	3-1/2"	1-1/2"	-	-	-	104.17	99.64	95.11	90.58
64160	.5000	1/2"	12.700	1/2"	3-1/2"	1-1/2"	.030"	-	-	114.82	109.82	104.83	99.84
64161	.5000	1/2"	12.700	1/2"	4"	5/8"	.015"	2-1/8"	.475"	128.62	123.02	117.43	111.84
64242	.5000	1/2"	12.700	1/2"	4"	1-5/8"	-	-	-	106.87	102.22	97.58	92.93
64244	.5000	1/2"	12.700	1/2"	4"	1-5/8"	.015"	-	-	117.52	112.41	107.30	102.19
64162	.5000	1/2"	12.700	1/2"	4"	2"	-	-	-	106.87	102.22	97.58	92.93
64163	.5000	1/2"	12.700	1/2"	4"	2"	.015"	-	-	117.52	112.41	107.30	102.19
64164	.5000	1/2"	12.700	1/2"	4"	2"	.030"	-	-	117.52	112.41	107.30	102.19
64165	.5000	1/2"	12.700	1/2"	4"	2"	.125"	-	-	117.52	112.41	107.30	102.19
NEW 64248	.5512		14.000	14.0	88	32	0.50	-	-	143.31	137.08	130.85	124.62
64166	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	-	-	-	135.99	130.08	124.16	118.25
64168	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.030"	-	-	148.65	142.19	135.72	129.26
64170	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.060"	-	-	148.65	142.19	135.72	129.26
NEW 64171	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.120"	-	-	148.65	142.19	135.72	129.26
64172	.6250	5/8"	15.875	5/8"	4"	1-3/4"	-	-	-	143.18	136.95	130.73	124.50
64174	.6250	5/8"	15.875	5/8"	4"	1-3/4"	.030"	-	-	156.71	149.90	143.08	136.27
64176	.6250	5/8"	15.875	5/8"	4"	1-3/4"	.060"	-	-	156.71	149.90	143.08	136.27
64177	.6250	5/8"	15.875	5/8"	4"	1-3/4"	.120"	-	-	156.71	149.90	143.08	136.27
64250	.6250	5/8"	15.875	5/8"	4"	2"	.120"	-	-	156.71	149.90	143.08	136.27
64178	.6299		16.000	16.0	88	32	-	-	-	145.51	139.18	132.86	126.53
64180	.6299		16.000	16.0	88	32	0.50	-	-	158.64	151.75	144.85	137.95
64182	.6299		16.000	16.0	88	32	1.00	-	-	158.64	151.75	144.85	137.95
64230	.6299		16.000	16.0	88	32	2.00	-	-	158.64	151.75	144.85	137.95
64231	.6299		16.000	16.0	100	40	1.00	-	-	166.49	159.25	152.01	144.77
64232	.6299		16.000	16.0	100	40	1.50	-	-	166.49	159.25	152.01	144.77
64234	.6299		16.000	16.0	125	65	0.50	-	-	209.33	200.23	191.13	182.03
64236	.6299		16.000	16.0	125	65	3.00	-	-	209.33	200.23	191.13	182.03
64252	.7500	3/4"	19.050	3/4"	3"	1"	-	-	-	176.90	169.21	161.52	153.83
64254	.7500	3/4"	19.050	3/4"	3"	1"	.030"	-	-	195.07	186.59	178.11	169.63
64184	.7500	3/4"	19.050	3/4"	4"	1-1/2"	-	-	-	186.22	178.12	170.03	161.93
64186	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.030"	-	-	204.72	195.82	186.92	178.02
64188	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.060"	-	-	204.72	195.82	186.92	178.02
64190	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.120"	-	-	204.72	195.82	186.92	178.02
64256	.7500	3/4"	19.050	3/4"	4"	1-3/4"	-	-	-	186.23	178.13	170.04	161.94
64258	.7500	3/4"	19.050	3/4"	4"	1-3/4"	.030"	-	-	204.72	195.82	186.92	178.02
64260	.7500	3/4"	19.050	3/4"	5"	1"	.030"	3"	.730"	288.37	275.84	263.30	250.76

70

35

MATERIAL HARDNESS (Rc)

0

continued →

Series VX-7 (continued)

.7500" - 1.0000"
(19.050mm - 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										
64192	.7500	3/4"	19.050	3/4"	5"	2-1/4"	-	-	245.23	234.56	223.90	213.24
64194	.7500	3/4"	19.050	3/4"	5"	2-1/4"	.030"	-	277.27	265.21	253.16	241.10
64238	.7500	3/4"	19.050	3/4"	5"	2-1/4"	.060"	-	277.27	265.21	253.16	241.10
NEW 64262	.7500	3/4"	19.050	3/4"	5"	2-1/4"	.120"	-	277.27	265.21	253.16	241.10
NEW 64264	.7500	3/4"	19.050	3/4"	5"	2-1/2"	.060"	-	277.27	265.21	253.16	241.10
64266	.7500	3/4"	19.050	3/4"	6"	1-1/8"	.120"	3-5/8"	336.93	322.28	307.63	292.98
64196	.7500	3/4"	19.050	3/4"	6"	3-1/4"	-	-	287.04	274.56	262.08	249.60
64198	.7500	3/4"	19.050	3/4"	6"	3-1/4"	.030"	-	325.81	311.64	297.48	283.31
64200	.7874	20.000	20.0	100	38	-	-	-	249.19	238.36	227.52	216.69
64202	.7874	20.000	20.0	100	38	0.50	-	-	285.07	272.68	260.28	247.89
64204	.7874	20.000	20.0	100	38	1.00	-	-	285.07	272.68	260.28	247.89
64206	1.000	1"	25.400	1"	4"	1-1/2"	-	-	270.81	259.04	247.26	235.49
64208	1.000	1"	25.400	1"	4"	1-1/2"	.030"	-	334.04	319.52	304.99	290.47
64240	1.000	1"	25.400	1"	4"	1-1/2"	.125"	-	334.05	319.53	305.00	290.48
64210	1.000	1"	25.400	1"	5"	2"	-	-	353.38	338.02	322.65	307.29
64212	1.000	1"	25.400	1"	5"	2-1/2"	-	-	353.38	338.02	322.65	307.29
64213	1.000	1"	25.400	1"	5"	2-1/2"	.030"	-	406.56	388.88	371.21	353.53
64214	1.000	1"	25.400	1"	6"	3-1/4"	-	-	450.47	430.88	411.30	391.71
64216	1.000	1"	25.400	1"	6"	3-1/4"	.030"	-	515.95	493.52	471.08	448.65

