Series VX-7 NEW ITEMS HIGH EFFICIENCY MILLING

.3150" - .5000"
(8.000mm - 12.700mm)

Z=7 | 38° | TECH PAGES 302-303

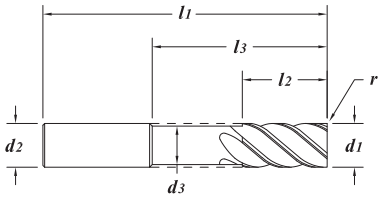
TOLERANCES	
d_1	+.000" –.002" (+.000mm –.050mm)
d_2	h6
r	+.001" –.001" (+.025 –.025mm)

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



MATERIAL HARDNESS (Rc) 70 35 0

	EDP#	d_1 † Diameter Decimal	Diameter	Metric	d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	r Corner Radius	l_3 Reach Length	d_3 Neck Diameter	1-11	12-24	25-49	50-100
	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
NEW	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
	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"	.355"	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
	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

† *Metric equivalents are for reference only*

	EDP#	d_1 † Diameter Decimal	Diameter	Metric	d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	r Corner Radius	l_3 Reach Length	d_3 Neck Diameter	1-11	12-24	25-49	50-100
	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
	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"	.730"	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

continued →

Series VX-7 *(continued)*

.7874" - 1.0000"
(20.000mm - 25.400mm)

EDP#	d_1 † Diameter Decimal	Metric	d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	r Corner Radius	l_3 Reach Length	d_3 Neck Diameter	1-11	12-24	25-49	50-100
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

MATERIAL HARDNESS (Rc)
70
35
0

† *Metric equivalents are for reference only*