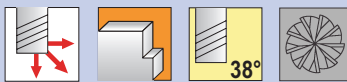


Series TMS

.2362" - .5000"
(6.000mm - 12.700mm)



TOLERANCES

$d1$	+0.000" - .002" (+.000mm - .050mm)
$d2$	h6

Recommended for Titanium and Steels under 40Rc

Multi-Flute Finishing End Mill - Square End

AlCrN Coated

Solid submicron grain carbide end mill - non-center cutting

Engineered for Titanium

Multiple flutes for increased feed rates

Odd number of flutes to naturally break up harmonics

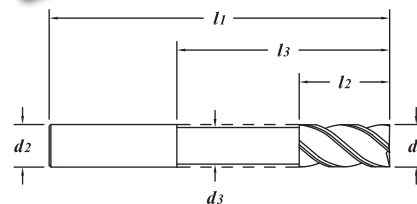
Edge treatment for increased tool life

Designed and tested for 2% Radial (ap) engagement

Can be used to finish most steels under 40Rc

Conventional grind for better finish cutting and less push off

Regrindable



MATERIAL HARDNESS (Rc)

70

35

0

EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	$l3$ Reach Length	$d3$ Neck Diameter	Number Flutes	1-11	12-24	25-49	50-100
	Decimal	Metric										
98390	.2362	6.000	6.0	50	12	-	-	7	23.51	22.49	21.47	20.44
98392	.2362	6.000	6.0	65	19	-	-	7	26.50	25.35	24.20	23.04
98394	.2362	6.000	6.0	100	38	-	-	7	44.15	42.23	40.31	38.39
98396	.2362	6.000	6.0	100	10	60	5.4	7	47.43	45.37	43.31	41.24
98398	.2500	1/4"	6.350	1/4"	2"	3/8"	-	7	22.55	21.57	20.59	19.61
98400	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	-	7	25.58	24.47	23.36	22.24
98402	.2500	1/4"	6.350	1/4"	4"	1-1/2"	-	7	42.35	40.51	38.67	36.83
98404	.3125	5/16"	7.938	5/16"	2"	7/16"	-	7	33.48	32.02	30.57	29.11
98406	.3125	5/16"	7.938	5/16"	2-1/2"	13/16"	-	7	36.48	34.89	33.31	31.72
98408	.3125	5/16"	7.938	5/16"	4"	1-1/2"	-	7	57.80	55.29	52.77	50.26
98410	.3150	8.000	8.0	50	12	-	-	7	33.93	32.45	30.98	29.50
98412	.3150	8.000	8.0	65	22	-	-	7	37.80	36.16	34.51	32.87
98414	.3150	8.000	8.0	100	38	-	-	7	60.17	57.55	54.94	52.32
98416	.3150	8.000	8.0	100	12	60	7.4	7	63.45	60.69	57.93	55.17
98418	.3750	3/8"	9.525	3/8"	2"	1/2"	-	7	40.28	38.53	36.78	35.03
98420	.3750	3/8"	9.525	3/8"	2-1/2"	7/8"	-	7	43.04	41.17	39.30	37.43
98422	.3750	3/8"	9.525	3/8"	3"	1-1/4"	-	7	55.42	53.01	50.60	48.19
98424	.3750	3/8"	9.525	3/8"	4"	2"	-	7	62.11	59.41	56.71	54.01
98426	.3937	10.000	10.0	50	16	-	-	7	46.92	44.88	42.84	40.80
98428	.3937	10.000	10.0	70	22	-	-	7	51.62	49.38	47.13	44.89
98430	.3937	10.000	10.0	100	38	-	-	7	78.26	74.86	71.45	68.05
98432	.3937	10.000	10.0	100	50	-	-	7	78.26	74.86	71.45	68.05
98434	.3937	10.000	10.0	100	16	60	9.4	7	81.54	77.99	74.45	70.90
98436	.4724	12.000	12.0	75	26	-	-	9	67.05	64.13	61.22	58.30
98438	.4724	12.000	12.0	75	32	-	-	9	67.05	64.13	61.22	58.30
98440	.4724	12.000	12.0	100	42	-	-	9	92.01	88.01	84.01	80.01
98442	.4724	12.000	12.0	100	52	-	-	9	92.01	88.01	84.01	80.01
98444	.4724	12.000	12.0	150	19	105	11.4	9	129.71	124.07	118.43	112.79
98446	.5000	1/2"	12.700	1/2"	3"	1"	-	9	64.38	61.58	58.78	55.98
98448	.5000	1/2"	12.700	1/2"	3"	1-1/4"	-	9	64.38	61.58	58.78	55.98
98450	.5000	1/2"	12.700	1/2"	4"	5/8"	2-1/8"	9	90.39	86.46	82.53	78.60
98452	.5000	1/2"	12.700	1/2"	4"	1-1/2"	-	9	87.11	83.32	79.53	75.75
98454	.5000	1/2"	12.700	1/2"	4"	2-1/8"	-	9	87.11	83.32	79.53	75.75

EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	$l3$ Reach Length	$d3$ Neck Diameter	Number Flutes	1-11	12-24	25-49	50-100	
	Decimal	Metric											
98456	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	-	-	9	132.57	126.81	121.04	115.28
98458	.6250	5/8"	15.875	5/8"	4"	1-5/8"	-	-	9	141.58	135.42	129.27	123.11
98460	.6250	5/8"	15.875	5/8"	6"	3-1/4"	-	-	9	194.81	186.34	177.87	169.40
98462	.6250	5/8"	15.875	5/8"	6"	3/4"	4-1/8"	.590"	9	198.09	189.48	180.86	172.25
98464	.6299		16.000	16.0	88	32	-	-	9	138.30	132.29	126.27	120.26
98466	.6299		16.000	16.0	100	42	-	-	9	147.63	141.21	134.79	128.37
98468	.6299		16.000	16.0	150	60	-	-	9	203.14	194.31	185.47	176.64
98470	.6299		16.000	16.0	150	80	-	-	9	203.14	194.31	185.47	176.64
98472	.6299		16.000	16.0	150	22	102	15.4	9	206.41	197.44	188.46	179.49
98474	.7500	3/4"	19.050	3/4"	4"	1-1/2"	-	-	11	196.80	188.24	179.69	171.13
98476	.7500	3/4"	19.050	3/4"	4"	1-5/8"	-	-	11	196.80	188.24	179.69	171.13
98478	.7500	3/4"	19.050	3/4"	5"	2-1/8"	-	-	11	264.17	252.68	241.20	229.71
98480	.7500	3/4"	19.050	3/4"	6"	3-1/4"	-	-	11	309.12	295.68	282.24	268.80
98482	.7500	3/4"	19.050	3/4"	6"	1"	4-1/8"	.720"	11	312.40	298.82	285.23	271.65
98484	.7874		20.000	20.0	100	26	-	-	11	255.66	244.54	233.43	222.31
98486	.7874		20.000	20.0	100	38	-	-	11	255.66	244.54	233.43	222.31
98488	.7874		20.000	20.0	150	60	-	-	11	322.00	308.00	294.00	280.00
98490	.7874		20.000	20.0	150	80	-	-	11	322.00	308.00	294.00	280.00
98492	.7874		20.000	20.0	150	26	102	19.4	11	325.28	311.14	296.99	282.85
98494	1.000	1"	25.400	1"	4"	1-1/2"	-	-	13	271.39	259.59	247.79	235.99
98496	1.000	1"	25.400	1"	5"	2-1/4"	-	-	13	363.26	347.47	331.67	315.88
98498	1.000	1"	25.400	1"	6"	3-1/4"	-	-	13	473.21	452.63	432.06	411.49
98500	1.000	1"	25.400	1"	7"	4-1/4"	-	-	13	636.32	608.65	580.99	553.32

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MATERIAL HARDNESS (Rc)

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