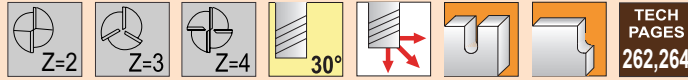


**TOLERANCES**

$d_1$	+0.000" - .002" (+.000 - .050mm)
$d_2$	h6
ball radius	+0.000" - .001" (+.000 - .025mm)

**Series 720M, 723M, 730M, 740M, 743M, 750M**

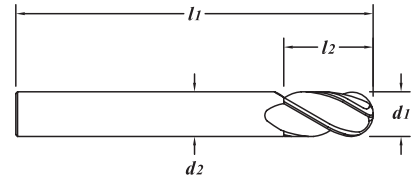


.1181" - .3150"  
(3.000mm - 8.000mm)

END MILLS

**Extra Length - Ball End**

- Solid submicron grain carbide end mill - center cutting
- Extended reach
- Can be modified with a neck within 48 hours
- Extremely versatile
- TiCN Coating - page 233
- TiALN Coating - page 234
- Stub Length - page 188
- Standard length - page 205



(720M/740M) 2 Flute EDP#	(723M/743M) 3 Flute EDP#	(730M/750M) 4 Flute EDP#	$d_1$ † Diameter		$d_2$ Shank Diameter	$l_1$ Overall Length	$l_2$ Flute Length	1-11	12-24	25-49	50-100	
			Decimal	Metric								
97010	98010	99010	.1181	3.000	3.0	50	16	14.13	13.52	12.90	12.29	
97020	98020	99020	.1181	3.000	3.0	75	20	23.28	22.26	21.25	20.24	
97030	98030	99030	.1181	3.000	3.0	75	25	23.28	22.26	21.25	20.24	
43010	55510	44010	.1250	1/8"	3.175	1/8"	2"	5/8"	14.34	13.72	13.09	12.47
43020	55520	44020	.1250	1/8"	3.175	1/8"	3"	3/4"	22.11	21.15	20.19	19.23
43030	55530	44030	.1250	1/8"	3.175	1/8"	3"	1"	22.11	21.15	20.19	19.23
97040	98040	99040	.1575	4.000	4.0	50	16	14.73	14.09	13.45	12.81	
97050	98050	99050	.1575	4.000	4.0	75	20	23.77	22.74	21.70	20.67	
97060	98060	99060	.1575	4.000	4.0	75	25	23.77	22.74	21.70	20.67	
43040	55540	44040	.1875	3/16"	4.763	3/16"	3"	1"	24.39	23.33	22.27	21.21
43050	55550	44050	.1875	3/16"	4.763	3/16"	3"	1-1/8"	24.39	23.33	22.27	21.21
43060	55560	44060	.1875	3/16"	4.763	3/16"	4"	1"	26.25	25.11	23.97	22.83
97070	98070	99070	.1969	5.000	5.0	50	16	17.04	16.30	15.56	14.82	
97080	98080	99080	.1969	5.000	5.0	75	20	25.67	24.55	23.44	22.32	
97090	98090	99090	.1969	5.000	5.0	75	25	25.67	24.55	23.44	22.32	
97100	98100	99100	.2362	6.000	6.0	75	25	29.72	28.42	27.13	25.84	
97110	98110	99110	.2362	6.000	6.0	100	25	31.28	29.92	28.56	27.20	
97120	98120	99120	.2362	6.000	6.0	100	32	31.28	29.92	28.56	27.20	
97130	98130	99130	.2362	6.000	6.0	150	38	40.65	38.89	37.12	35.35	
43070	55570	44070	.2500	1/4"	6.350	1/4"	3"	1"	28.23	27.01	25.78	24.55
43080	55580	44080	.2500	1/4"	6.350	1/4"	4"	1"	29.70	28.41	27.12	25.83
43090	55590	44090	.2500	1/4"	6.350	1/4"	4"	1-1/2"	29.70	28.41	27.12	25.83
43100	55600	44100	.2500	1/4"	6.350	1/4"	6"	1-1/2"	38.62	36.94	35.26	33.58
43110	55610	44110	.3125	5/16"	7.938	5/16"	3"	1"	34.88	33.36	31.85	30.33
43120	55620	44120	.3125	5/16"	7.938	5/16"	4"	1"	38.92	37.22	35.53	33.84
43130	55630	44130	.3125	5/16"	7.938	5/16"	4"	1-5/8"	38.92	37.22	35.53	33.84
43140	55640	44140	.3125	5/16"	7.938	5/16"	6"	1-1/2"	57.74	55.23	52.72	50.21
97140	98140	99140	.3150	8.000	8.0	75	25	36.71	35.11	33.52	31.92	
97150	98150	99150	.3150	8.000	8.0	100	25	40.97	39.19	37.41	35.63	
97160	98160	99160	.3150	8.000	8.0	100	41	40.97	39.19	37.41	35.63	
97170	98170	99170	.3150	8.000	8.0	150	50	59.25	56.67	54.10	51.52	

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MATERIAL HARDNESS (Rc)

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continued →

# Series 720M, 723M, 730M, 740M, 743M, 750M (continued)

.3750" - 1.000"  
(9.525mm - 25.400mm)

END MILLS

(720M/740M) 2 Flute EDP#	(723M/743M) 3 Flute EDP#	(730M/750M) 4 Flute EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	1-11	12-24	25-49	50-100	
			Decimal	Metric								
43150	55650	44150	.3750	3/8"	9.525	3/8"	3"	1"	39.24	37.53	35.83	34.12
43160	55660	44160	.3750	3/8"	9.525	3/8"	4"	1"	43.06	41.18	39.31	37.44
43170	55670	44170	.3750	3/8"	9.525	3/8"	4"	2"	43.06	41.18	39.31	37.44
43180	55680	44180	.3750	3/8"	9.525	3/8"	6"	1-1/2"	59.77	57.17	54.57	51.97
43190	55690	44190	.3750	3/8"	9.525	3/8"	6"	3"	59.77	57.17	54.57	51.97
97180	98180	99180	.3937		10.000	10.0	75	25	42.40	40.56	38.71	36.87
97190	98190	99190	.3937		10.000	10.0	100	25	55.57	53.15	50.74	48.32
97200	98200	99200	.3937		10.000	10.0	100	50	55.57	53.15	50.74	48.32
97210	98210	99210	.3937		10.000	10.0	150	38	71.48	68.38	65.27	62.16
97220	98220	99220	.3937		10.000	10.0	150	75	71.48	68.38	65.27	62.16
43200	55700	44200	.4375	7/16"	11.113	7/16"	4"	1"	59.27	56.69	54.12	51.54
43210	55710	44210	.4375	7/16"	11.113	7/16"	4"	2"	59.27	56.69	54.12	51.54
43220	55720	44220	.4375	7/16"	11.113	7/16"	6"	1-1/2"	77.05	73.70	70.35	67.00
43230	-	44230	.4375	7/16"	11.113	7/16"	6"	3"	77.05	73.70	70.35	67.00
97230	98230	99230	.4724		12.000	12.0	100	25	63.80	61.03	58.25	55.48
97240	98240	99240	.4724		12.000	12.0	100	50	63.80	61.03	58.25	55.48
97250	98250	99250	.4724		12.000	12.0	150	50	85.73	82.01	78.28	74.55
97260	98260	99260	.4724		12.000	12.0	150	75	85.73	82.01	78.28	74.55
43240	55740	44240	.5000	1/2"	12.700	1/2"	4"	1"	60.55	57.92	55.28	52.65
43250	55750	44250	.5000	1/2"	12.700	1/2"	4"	2"	60.55	57.92	55.28	52.65
43260	55760	44260	.5000	1/2"	12.700	1/2"	6"	1-1/2"	85.76	82.03	78.30	74.57
43270	55770	44270	.5000	1/2"	12.700	1/2"	6"	3"	85.76	82.03	78.30	74.57
97270	98270	99270	.5512		14.000	14.0	100	25	88.16	84.33	80.49	76.66
97280	98280	99280	.5512		14.000	14.0	100	50	88.16	84.33	80.49	76.66
97290	98290	99290	.5512		14.000	14.0	150	50	119.67	114.47	109.26	104.06
97300	98300	99300	.5512		14.000	14.0	150	75	119.67	114.47	109.26	104.06
43280	55780	44280	.5625	9/16"	14.288	9/16"	6"	2"	119.66	114.46	109.25	104.05
-	55790	44290	.5625	9/16"	14.288	9/16"	6"	3"	119.66	114.46	109.25	104.05
43300	55800	44300	.6250	5/8"	15.875	5/8"	6"	2"	126.10	120.62	115.13	109.65
43310	55810	44310	.6250	5/8"	15.875	5/8"	6"	3"	126.10	120.62	115.13	109.65
97310	98310	99310	.6299		16.000	16.0	150	50	126.09	120.60	115.12	109.64
97320	98320	99320	.6299		16.000	16.0	150	75	126.09	120.60	115.12	109.64
97330	98330	99330	.7087		18.000	18.0	150	50	193.96	185.53	177.09	168.66
97340	98340	99340	.7087		18.000	18.0	150	75	193.96	185.53	177.09	168.66
43320	55820	44320	.7500	3/4"	19.050	3/4"	6"	2"	206.93	197.93	188.94	179.94
43330	55830	44330	.7500	3/4"	19.050	3/4"	6"	3"	206.93	197.93	188.94	179.94
97350	98350	99350	.7874		20.000	20.0	150	50	213.26	203.98	194.71	185.44
97360	98360	99360	.7874		20.000	20.0	150	75	213.26	203.98	194.71	185.44
97370	98370	99370	.9843		25.000	25.0	150	50	338.39	323.68	308.96	294.25
97380	98380	99380	.9843		25.000	25.0	150	75	338.39	323.68	308.96	294.25
43340	55840	44340	1.000	1"	25.400	1"	6"	2"	351.89	336.59	321.29	305.99
43350	55850	44350	1.000	1"	25.400	1"	6"	3"	351.89	336.59	321.29	305.99

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MATERIAL HARDNESS (Rc)

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