

220MC - 2 Flute
223MC - 3 Flute
230MC - 4 Flute

Technical information:
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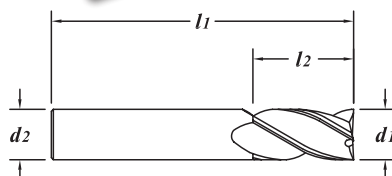


TOLERANCES

$d1$		+0.000" -0.002" (+0.000 -0.050mm)
$d2$	3mm - 6mm	+0.0000" -0.0003" (-0.0000 -0.0075mm)
	1/4" - 1-1/4"	-0.0001" -0.0004" (-0.0025 -0.0100mm)

Standard Length - TiCN Coated

- Solid submicron grain carbide end mill - center cutting
- Improved abrasion resistance and lubricity
- Up to 25% faster than uncoated
- Extremely versatile
- Uncoated - page 127
- TiN Coated - page 129
- TiALN Coated - page 131



2 Flute EDP#	3 Flute EDP#	4 Flute EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	1-11	12-24	25-49	50-100	
			Decimal	Metric								
11014	12014	13014	.0312	1/32"	0.79	1/8"	1-1/2"	3/32"	10.82	10.35	9.88	9.40
11024	12024	13024	.0469	3/64"	1.19	1/8"	1-1/2"	1/8"	10.82	10.35	9.88	9.40
11034	12034	13034	.0625	1/16"	1.59	1/8"	1-1/2"	1/4"	10.17	9.72	9.29	8.84
11044	12044	13044	.0781	5/64"	1.98	1/8"	1-1/2"	1/4"	10.17	9.72	9.29	8.84
11054	12054	13054	.0938	3/32"	2.38	1/8"	1-1/2"	3/8"	9.71	9.29	8.87	8.44
11064	12064	13064	.1094	7/64"	2.78	1/8"	1-1/2"	3/8"	9.71	9.29	8.87	8.44
11074	12074	13074	.1250	1/8"	3.17	1/8"	1-1/2"	1/2"	9.11	8.72	8.32	7.92
11084	12084	13084	.1406	9/64"	3.57	3/16"	2"	9/16"	12.56	12.01	11.47	10.92
11094	12094	13094	.1562	5/32"	3.97	3/16"	2"	9/16"	12.56	12.01	11.47	10.92
11104	12104	13104	.1719	11/64"	4.37	3/16"	2"	9/16"	12.56	12.01	11.47	10.92
11114	12114	13114	.1875	3/16"	4.76	3/16"	2"	5/8"	12.01	11.49	10.97	10.44
11124	12124	13124	.2031	13/64"	5.16	1/4"	2-1/2"	5/8"	17.24	16.49	15.75	15.00
11134	12134	13134	.2188	7/32"	5.56	1/4"	2-1/2"	5/8"	17.24	16.49	15.75	15.00
11144	12144	13144	.2344	15/64"	5.95	1/4"	2-1/2"	3/4"	17.24	16.49	15.75	15.00
11154	12154	13154	.2500	1/4"	6.35	1/4"	2-1/2"	3/4"	16.04	15.34	14.64	13.95
11164	12164	13164	.2656	17/64"	6.75	5/16"	2-1/2"	7/8"	26.53	25.38	24.22	23.07
11174	12174	13174	.2812	9/32"	7.14	5/16"	2-1/2"	7/8"	26.53	25.38	24.22	23.07
11184	12184	13184	.2969	19/64"	7.54	5/16"	2-1/2"	7/8"	26.53	25.38	24.22	23.07
11194	12194	13194	.3125	5/16"	7.94	5/16"	2-1/2"	7/8"	22.25	21.28	20.31	19.34
11204	12204	13204	.3281	21/64"	8.33	3/8"	2-1/2"	7/8"	30.47	29.15	27.82	26.50
11214	12214	13214	.3438	11/32"	8.73	3/8"	2-1/2"	7/8"	30.47	29.15	27.82	26.50
11224	12224	13224	.3594	23/64"	9.13	3/8"	2-1/2"	7/8"	30.47	29.15	27.82	26.50
11234	12234	13234	.3750	3/8"	9.52	3/8"	2-1/2"	7/8"	26.45	25.29	24.15	22.99
11244	12244	13244	.3906	25/64"	9.92	7/16"	2-1/2"	7/8"	36.46	34.88	33.29	31.71
11254	12254	13254	.4062	13/32"	10.32	7/16"	2-1/2"	7/8"	36.46	34.88	33.29	31.71
11264	12264	13264	.4219	27/64"	10.72	7/16"	2-1/2"	7/8"	36.46	34.88	33.29	31.71
11274	12274	13274	.4375	7/16"	11.11	7/16"	2-3/4"	1"	32.18	30.77	29.38	27.98
11284	12284	13284	.4531	29/64"	11.51	1/2"	3"	1"	46.98	44.94	42.89	40.85
11294	12294	13294	.4688	15/32"	11.91	1/2"	3"	1"	46.98	44.94	42.89	40.85
11304	12304	13304	.4844	31/64"	12.30	1/2"	3"	1"	46.98	44.94	42.89	40.85
11314	12314	13314	.5000	1/2"	12.70	1/2"	3"	1"	40.31	38.55	36.81	35.05
11324	12324	13324	.5625	9/16"	14.29	9/16"	3-1/2"	1-1/4"	67.91	64.96	62.00	59.05
11334	12334	13334	.6250	5/8"	15.87	5/8"	3-1/2"	1-1/4"	75.43	72.16	68.87	65.59
11344	12344	13344	.6875	11/16"	17.46	3/4"	4"	1-1/2"	120.61	115.37	110.13	104.87
11354	12354	13354	.7500	3/4"	19.05	3/4"	4"	1-1/2"	107.49	102.82	98.14	93.48
11364	12364	13364	.8750	7/8"	22.22	7/8"	4"	1-1/2"	155.39	148.63	141.88	135.12
11374	12374	13374	1.000	1"	25.40	1"	4"	1-1/2"	160.89	153.89	146.90	139.90
-	-	13394	1.250	1-1/4"	31.75	1-1/4"	4-1/2"	2"	448.26	428.77	409.28	389.79