

TOLERANCES

d_1	+0.000" -0.002" (+0.000 -0.050mm)
d_2	h6
ball radius	+0.000" -0.001" (+0.000 -0.025mm)



TECH
PAGES
282-283

Series 320MC, 323MC, 330MC

GENERAL PURPOSE
END MILLS

Standard Length - Ball End

TiCN Coating

Solid submicron grain carbide end mill - center cutting

Improved abrasion resistance and lubricity

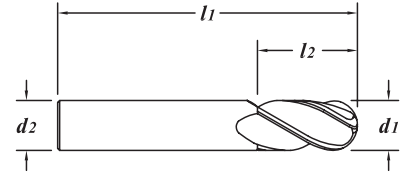
Extremely versatile

Uncoated - page 228

TiN Coating - page 230

TiALN Coating - page 232

Extended length - page 249



(320MC) 2 Flute EDP#	(323MC) 3 Flute EDP#	(330MC) 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								
16014	17014	18014	.0312	1/32"	0.792	1/8"	1-1/2"	3/32"	16.56	15.84	15.12	14.40
16024	17024	18024	.0469	3/64"	1.191	1/8"	1-1/2"	1/8"	16.56	15.84	15.12	14.40
16034	17034	18034	.0625	1/16"	1.588	1/8"	1-1/2"	1/4"	15.78	15.09	14.41	13.72
16044	17044	18044	.0781	5/64"	1.984	1/8"	1-1/2"	1/4"	15.78	15.09	14.41	13.72
16054	17054	18054	.0938	3/32"	2.383	1/8"	1-1/2"	3/8"	15.18	14.52	13.86	13.20
16064	17064	18064	.1094	7/64"	2.779	1/8"	1-1/2"	3/8"	15.18	14.52	13.86	13.20
16074	17074	18074	.1250	1/8"	3.175	1/8"	1-1/2"	1/2"	14.00	13.39	12.78	12.17
16084	17084	18084	.1406	9/64"	3.571	3/16"	2"	9/16"	19.45	18.60	17.76	16.91
16094	17094	18094	.1562	5/32"	3.967	3/16"	2"	9/16"	19.45	18.60	17.76	16.91
16104	-	18104	.1719	11/64"	4.366	3/16"	2"	9/16"	19.45	18.60	17.76	16.91
16114	17114	18114	.1875	3/16"	4.763	3/16"	2"	5/8"	17.69	16.92	16.15	15.38
16124	17124	18124	.2031	13/64"	5.159	1/4"	2-1/2"	5/8"	24.64	23.57	22.50	21.43
16134	17134	18134	.2188	7/32"	5.558	1/4"	2-1/2"	5/8"	24.64	23.57	22.50	21.43
16144	17144	18144	.2344	15/64"	5.954	1/4"	2-1/2"	3/4"	24.64	23.57	22.50	21.43
16154	17154	18154	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	23.84	22.80	21.77	20.73
-	17164	18164	.2656	17/64"	6.746	5/16"	2-1/2"	7/8"	36.21	34.64	33.06	31.49
16174	17174	18174	.2812	9/32"	7.142	5/16"	2-1/2"	7/8"	36.21	34.64	33.06	31.49
-	-	18184	.2969	19/64"	7.541	5/16"	2-1/2"	7/8"	36.21	34.64	33.06	31.49
16194	17194	18194	.3125	5/16"	7.938	5/16"	2-1/2"	7/8"	31.42	30.05	28.69	27.32
16204	-	-	.3281	21/64"	8.334	3/8"	2-1/2"	7/8"	42.10	40.27	38.44	36.61
-	17214	18214	.3438	11/32"	8.733	3/8"	2-1/2"	7/8"	42.10	40.27	38.44	36.61
16224	-	18224	.3594	23/64"	9.129	3/8"	2-1/2"	7/8"	42.10	40.27	38.44	36.61
16234	17234	18234	.3750	3/8"	9.525	3/8"	2-1/2"	7/8"	36.97	35.37	33.76	32.15
16244	-	18244	.3906	25/64"	9.921	7/16"	2-3/4"	7/8"	51.57	49.32	47.08	44.84
16254	17254	18254	.4062	13/32"	10.317	7/16"	2-3/4"	7/8"	51.57	49.32	47.08	44.84
-	-	18264	.4219	27/64"	10.716	7/16"	2-3/4"	7/8"	51.57	49.32	47.08	44.84
16274	17274	18274	.4375	7/16"	11.113	7/16"	2-3/4"	1"	45.31	43.34	41.37	39.40
-	-	18284	.4531	29/64"	11.509	1/2"	3"	1"	70.58	67.51	64.44	61.37
-	17294	18294	.4688	15/32"	11.908	1/2"	3"	1"	70.58	67.51	64.44	61.37
16304	17304	18304	.4844	31/64"	12.304	1/2"	3"	1"	70.58	67.51	64.44	61.37
16314	17314	18314	.5000	1/2"	12.700	1/2"	3"	1"	64.58	61.78	58.97	56.16
16324	17324	18324	.5625	9/16"	14.288	9/16"	3-1/2"	1-1/4"	94.79	90.67	86.55	82.43
16334	17334	18334	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	103.97	99.45	94.93	90.41
-	17344	-	.6875	11/16"	17.463	3/4"	4"	1-1/2"	166.77	159.52	152.27	145.02
16354	17354	18354	.7500	3/4"	19.050	3/4"	4"	1-1/2"	149.03	142.55	136.07	129.59
16364	17364	18364	.8750	7/8"	22.225	7/8"	4"	1-1/2"	237.39	227.07	216.75	206.43
16374	17374	18374	1.000	1"	25.400	1"	4"	1-1/2"	255.33	244.23	233.13	222.03

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MATERIAL HARDNESS (Rc)