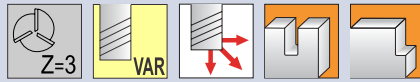


# Series A3

.1575" - .2500"  
(4.000mm - 6.350mm)



TOLERANCES	
$d1$	+0.000" - .001" (+.000mm - .025mm)
$d2$	h6
$r$	+0.001" - .001" (+.025 - .025mm)

Recommended for aluminum

## Variable Helix End Mill

Solid submicron grain carbide end mill - center cutting

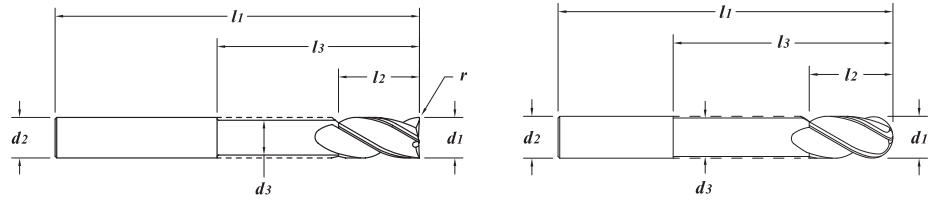
Engineered for High Velocity Machining of Aluminum

Proprietary geometry with polished flutes breaks up harmonics

Improved end geometry provides superior floor finishes and increased plunge rates

Capable of running up to 40,000 RPM - reduces vibration and balance issues

Chip splitters and necks can be added within 48 hours



MATERIAL HARDNESS (Rc)

70

35

0

EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	$r$ Corner Radius	$l3$ Reach Length	$d3$ Neck Diameter	1-11	12-24	25-49	50-100	
	Decimal	Metric											
07000	.1575	4.000	6.0	50	12	-	14	3.70	25.45	24.34	23.24	22.13	
07001	.1575	4.000	6.0	50	12	0.20	14	3.70	29.01	27.75	26.49	25.23	
07002	.1575	4.000	6.0	50	12	0.50	14	3.70	29.01	27.75	26.49	25.23	
07003	.1575	4.000	6.0	50	12	1.00	14	3.70	29.01	27.75	26.49	25.23	
07004	.1875	3/16"	4.763	3/16"	2"	1/2"	-	9/16"	.170"	18.43	17.63	16.83	16.03
07005	.1875	3/16"	4.763	3/16"	2"	1/2"	.015"	9/16"	.170"	20.77	19.87	18.96	18.06
07006	.1875	3/16"	4.763	3/16"	2"	1/2"	.030"	9/16"	.170"	20.77	19.87	18.96	18.06
07007	.1875	3/16"	4.763	3/16"	2"	1/2"	.060"	9/16"	.170"	20.77	19.87	18.96	18.06
07008	.1875	3/16"	4.763	3/16"	2"	1/2"	BALL	9/16"	.170"	20.77	19.87	18.96	18.06
07009	.1969	5.000	6.0	65	16	-	26	4.70	25.84	24.72	23.59	22.47	
07010	.1969	5.000	6.0	65	16	0.20	26	4.70	30.83	29.49	28.15	26.81	
07011	.1969	5.000	6.0	65	16	0.50	26	4.70	30.83	29.49	28.15	26.81	
07012	.1969	5.000	6.0	65	16	1.00	26	4.70	30.83	29.49	28.15	26.81	
07013	.2362	6.000	6.0	65	19	-	26	5.70	24.81	23.73	22.65	21.57	
07014	.2362	6.000	6.0	65	19	0.20	26	5.70	29.56	28.27	26.99	25.70	
07015	.2362	6.000	6.0	65	19	0.50	26	5.70	29.56	28.27	26.99	25.70	
07016	.2362	6.000	6.0	65	19	1.00	26	5.70	29.56	28.27	26.99	25.70	
07017	.2362	6.000	6.0	65	19	1.50	26	5.70	29.56	28.27	26.99	25.70	
07018	.2362	6.000	6.0	65	19	2.00	26	5.70	29.56	28.27	26.99	25.70	
07019	.2362	6.000	6.0	65	19	BALL	26	5.70	29.56	28.27	26.99	25.70	
07020	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	-	-	18.70	17.89	17.07	16.26	
07021	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	.015"	-	23.22	22.21	21.20	20.19	
07022	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	.030"	-	23.22	22.21	21.20	20.19	
07023	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	.060"	-	23.22	22.21	21.20	20.19	
07024	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	.090"	-	23.22	22.21	21.20	20.19	
07025	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	BALL	-	23.22	22.21	21.20	20.19	
07026	.2500	1/4"	6.350	1/4"	3"	1"	-	-	32.00	30.61	29.22	27.83	
07027	.2500	1/4"	6.350	1/4"	3"	1"	.030"	-	37.61	35.97	34.34	32.70	
07028	.2500	1/4"	6.350	1/4"	3"	1"	.060"	-	37.61	35.97	34.34	32.70	
07029	.2500	1/4"	6.350	1/4"	3"	3/8"	-	1-1/8"	.235"	37.18	35.56	33.95	32.33
07030	.2500	1/4"	6.350	1/4"	3"	3/8"	.015"	1-1/8"	.235"	42.78	40.92	39.06	37.20
07031	.2500	1/4"	6.350	1/4"	3"	3/8"	.030"	1-1/8"	.235"	42.78	40.92	39.06	37.20
07032	.2500	1/4"	6.350	1/4"	3"	3/8"	.060"	1-1/8"	.235"	42.78	40.92	39.06	37.20

EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	$r$ Corner Radius	$l3$ Reach Length	$d3$ Neck Diameter	1-11	12-24	25-49	50-100	
	Decimal	Metric											
07033	.3150	8.000	8.0	65	19	-	26	7.40	33.17	31.73	30.29	28.84	
07034	.3150	8.000	8.0	65	19	0.20	26	7.40	37.49	35.86	34.23	32.60	
07035	.3150	8.000	8.0	65	19	0.50	26	7.40	37.49	35.86	34.23	32.60	
07036	.3150	8.000	8.0	65	19	1.00	26	7.40	37.49	35.86	34.23	32.60	
07037	.3150	8.000	8.0	65	19	1.50	26	7.40	37.49	35.86	34.23	32.60	
07038	.3150	8.000	8.0	65	19	2.00	26	7.40	37.49	35.86	34.23	32.60	
07039	.3150	8.000	8.0	65	19	3.00	26	7.40	37.49	35.86	34.23	32.60	
07040	.3150	8.000	8.0	65	19	BALL	26	7.40	37.49	35.86	34.23	32.60	
07041	.3750	3/8"	9.525	3/8"	2-1/2"	1"	-	-	32.38	30.97	29.56	28.16	
07042	.3750	3/8"	9.525	3/8"	2-1/2"	1"	.010"	-	36.85	35.25	33.65	32.04	
07043	.3750	3/8"	9.525	3/8"	2-1/2"	1"	.015"	-	36.85	35.25	33.65	32.04	
07044	.3750	3/8"	9.525	3/8"	2-1/2"	1"	.020"	-	36.85	35.25	33.65	32.04	
07045	.3750	3/8"	9.525	3/8"	2-1/2"	1"	.030"	-	36.85	35.25	33.65	32.04	
07046	.3750	3/8"	9.525	3/8"	2-1/2"	1"	.060"	-	36.85	35.25	33.65	32.04	
07047	.3750	3/8"	9.525	3/8"	2-1/2"	1"	.090"	-	36.85	35.25	33.65	32.04	
07048	.3750	3/8"	9.525	3/8"	2-1/2"	1"	.120"	-	36.85	35.25	33.65	32.04	
07049	.3750	3/8"	9.525	3/8"	2-1/2"	1"	BALL	-	36.85	35.25	33.65	32.04	
07050	.3750	3/8"	9.525	3/8"	3"	1-1/4"	-	-	44.61	42.67	40.73	38.79	
07051	.3750	3/8"	9.525	3/8"	3"	1-1/4"	.015"	-	50.37	48.18	45.99	43.80	
07052	.3750	3/8"	9.525	3/8"	3"	1-1/4"	.030"	-	50.37	48.18	45.99	43.80	
07053	.3750	3/8"	9.525	3/8"	3"	1-1/4"	.060"	-	50.37	48.18	45.99	43.80	
07054	.3750	3/8"	9.525	3/8"	3"	1-1/4"	.120"	-	50.37	48.18	45.99	43.80	
07055	.3750	3/8"	9.525	3/8"	3"	1/2"	-	1-1/8"	.355"	49.78	47.62	45.45	43.29
07056	.3750	3/8"	9.525	3/8"	3"	1/2"	.015"	1-1/8"	.355"	55.55	53.13	50.72	48.30
07057	.3750	3/8"	9.525	3/8"	3"	1/2"	.030"	1-1/8"	.355"	55.55	53.13	50.72	48.30
07058	.3750	3/8"	9.525	3/8"	3"	1/2"	.060"	1-1/8"	.355"	55.55	53.13	50.72	48.30
07059	.3750	3/8"	9.525	3/8"	3"	1/2"	.090"	1-1/8"	.355"	55.55	53.13	50.72	48.30
07060	.3750	3/8"	9.525	3/8"	3"	1/2"	.120"	1-1/8"	.355"	55.55	53.13	50.72	48.30
07061	.3750	3/8"	9.525	3/8"	4"	1/2"	-	2-1/8"	.355"	60.06	57.45	54.84	52.23
07062	.3750	3/8"	9.525	3/8"	4"	1/2"	.015"	2-1/8"	.355"	68.46	65.48	62.51	59.53
07063	.3750	3/8"	9.525	3/8"	4"	1/2"	.020"	2-1/8"	.355"	68.46	65.48	62.51	59.53
07064	.3750	3/8"	9.525	3/8"	4"	1/2"	.030"	2-1/8"	.355"	68.46	65.48	62.51	59.53
07065	.3750	3/8"	9.525	3/8"	4"	1/2"	.060"	2-1/8"	.355"	68.46	65.48	62.51	59.53
07066	.3750	3/8"	9.525	3/8"	4"	1/2"	.090"	2-1/8"	.355"	68.46	65.48	62.51	59.53
07067	.3750	3/8"	9.525	3/8"	4"	1/2"	.120"	2-1/8"	.355"	68.46	65.48	62.51	59.53
07068	.3937	10.000	10.0	70	22	-	30	9.40	54.31	51.95	49.59	47.23	
07069	.3937	10.000	10.0	70	22	0.20	30	9.40	62.38	59.67	56.96	54.24	
07070	.3937	10.000	10.0	70	22	0.50	30	9.40	62.38	59.67	56.96	54.24	
07071	.3937	10.000	10.0	70	22	1.00	30	9.40	62.38	59.67	56.96	54.24	
07072	.3937	10.000	10.0	70	22	1.50	30	9.40	62.38	59.67	56.96	54.24	
07073	.3937	10.000	10.0	70	22	2.00	30	9.40	62.38	59.67	56.96	54.24	
07074	.3937	10.000	10.0	70	22	3.00	30	9.40	62.38	59.67	56.96	54.24	
07075	.3937	10.000	10.0	70	22	BALL	30	9.40	62.38	59.67	56.96	54.24	
07076	.3937	10.000	10.0	100	40	-	-	-	62.99	60.25	57.51	54.77	
07077	.3937	10.000	10.0	100	22	-	55	9.40	73.86	70.65	67.44	64.23	
07078	.4724	12.000	12.0	88	26	-	38	11.40	80.19	76.70	73.22	69.73	
07079	.4724	12.000	12.0	88	26	0.20	38	11.40	94.68	90.56	86.45	82.33	
07212	.4724	12.000	12.0	88	26	0.50	38	11.40	94.68	90.56	86.45	82.33	
07081	.4724	12.000	12.0	88	26	1.00	38	11.40	94.68	90.56	86.45	82.33	
07082	.4724	12.000	12.0	88	26	1.50	38	11.40	94.68	90.56	86.45	82.33	
07083	.4724	12.000	12.0	88	26	2.00	38	11.40	94.68	90.56	86.45	82.33	
07084	.4724	12.000	12.0	88	26	3.00	38	11.40	94.68	90.56	86.45	82.33	
07085	.4724	12.000	12.0	88	26	4.00	38	11.40	94.68	90.56	86.45	82.33	
07086	.4724	12.000	12.0	88	26	BALL	38	11.40	94.68	90.56	86.45	82.33	

70

MATERIAL HARDNESS (RC)

35

0

continued →

Series A3 (continued)

.4724" - .6299"  
(12.000mm - 16.000mm)

MATERIAL HARDNESS (Rc) 70  
35  
0

EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	$r$ Corner Radius	$l3$ Reach Length	$d3$ Neck Diameter	1-11	12-24	25-49	50-100	
	Decimal	Metric											
07213	.4724	12.000	12.0	88	36	-	-	-	74.36	71.13	67.89	64.66	
07088	.4724	12.000	12.0	88	36	0.20	-	-	89.39	85.50	81.62	77.73	
07089	.4724	12.000	12.0	88	36	0.50	-	-	89.39	85.50	81.62	77.73	
07090	.4724	12.000	12.0	88	36	1.00	-	-	89.39	85.50	81.62	77.73	
07091	.4724	12.000	12.0	88	36	1.50	-	-	89.39	85.50	81.62	77.73	
07092	.4724	12.000	12.0	88	36	2.00	-	-	89.39	85.50	81.62	77.73	
07093	.4724	12.000	12.0	88	36	3.00	-	-	89.39	85.50	81.62	77.73	
07094	.4724	12.000	12.0	88	36	4.00	-	-	89.39	85.50	81.62	77.73	
07095	.4724	12.000	12.0	88	36	BALL	-	-	89.39	85.50	81.62	77.73	
07096	.5000	1/2"	12.700	1/2"	3"	1-1/4"	-	-	53.13	50.82	48.51	46.20	
07097	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.010"	-	69.76	66.73	63.69	60.66	
07098	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.015"	-	69.76	66.73	63.69	60.66	
07099	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.020"	-	69.76	66.73	63.69	60.66	
07100	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.030"	-	69.76	66.73	63.69	60.66	
07101	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.060"	-	69.76	66.73	63.69	60.66	
07102	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.090"	-	69.76	66.73	63.69	60.66	
07103	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.120"	-	69.76	66.73	63.69	60.66	
07104	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.190"	-	69.76	66.73	63.69	60.66	
07105	.5000	1/2"	12.700	1/2"	3"	1-1/4"	BALL	-	69.76	66.73	63.69	60.66	
07106	.5000	1/2"	12.700	1/2"	4"	2-1/16"	-	-	72.00	68.87	65.74	62.61	
07107	.5000	1/2"	12.700	1/2"	4"	2-1/16"	.015"	-	81.06	77.54	74.01	70.49	
07108	.5000	1/2"	12.700	1/2"	4"	2-1/16"	.030"	-	81.06	77.54	74.01	70.49	
07109	.5000	1/2"	12.700	1/2"	4"	2-1/16"	.060"	-	81.06	77.54	74.01	70.49	
07110	.5000	1/2"	12.700	1/2"	4"	2-1/16"	.120"	-	81.06	77.54	74.01	70.49	
07111	.5000	1/2"	12.700	1/2"	4"	5/8"	-	2-1/4"	.475"	82.87	79.27	75.66	72.06
07112	.5000	1/2"	12.700	1/2"	4"	5/8"	.015"	2-1/4"	.475"	91.92	87.92	83.93	79.93
07113	.5000	1/2"	12.700	1/2"	4"	5/8"	.030"	2-1/4"	.475"	91.92	87.92	83.93	79.93
07114	.5000	1/2"	12.700	1/2"	4"	5/8"	.060"	2-1/4"	.475"	91.92	87.92	83.93	79.93
07115	.5000	1/2"	12.700	1/2"	4"	5/8"	BALL	2-1/4"	.475"	91.92	87.92	83.93	79.93
07116	.6250	5/8"	15.875	5/8"	4"	1-5/8"	-	-	114.38	109.41	104.43	99.46	
07214	.6250	5/8"	15.875	5/8"	4"	1-5/8"	.030"	-	125.36	119.91	114.46	109.01	
07118	.6250	5/8"	15.875	5/8"	4"	1-5/8"	.060"	-	125.36	119.91	114.46	109.01	
07119	.6250	5/8"	15.875	5/8"	4"	1-5/8"	.090"	-	125.36	119.91	114.46	109.01	
07120	.6250	5/8"	15.875	5/8"	4"	1-5/8"	.120"	-	125.36	119.91	114.46	109.01	
07121	.6250	5/8"	15.875	5/8"	4"	3/4"	-	2-3/8"	.590"	124.73	119.31	113.88	108.46
07122	.6250	5/8"	15.875	5/8"	4"	3/4"	.030"	2-3/8"	.590"	135.71	129.81	123.91	118.01
07123	.6250	5/8"	15.875	5/8"	4"	3/4"	.060"	2-3/8"	.590"	135.71	129.81	123.91	118.01
07124	.6250	5/8"	15.875	5/8"	4"	3/4"	.120"	2-3/8"	.590"	135.71	129.81	123.91	118.01
07125	.6250	5/8"	15.875	5/8"	4"	3/4"	.190"	2-3/8"	.590"	135.71	129.81	123.91	118.01
07126	.6299	16.000	16.0	100	24	-	50	15.40	126.86	121.34	115.83	110.31	
07127	.6299	16.000	16.0	100	24	0.50	50	15.40	138.46	132.44	126.42	120.40	
07128	.6299	16.000	16.0	100	24	1.00	50	15.40	138.46	132.44	126.42	120.40	
07129	.6299	16.000	16.0	100	24	1.50	50	15.40	138.46	132.44	126.42	120.40	
07130	.6299	16.000	16.0	100	24	3.00	50	15.40	138.46	132.44	126.42	120.40	
07131	.6299	16.000	16.0	100	24	6.00	50	15.40	138.46	132.44	126.42	120.40	
07132	.6299	16.000	16.0	100	32	-	50	15.40	126.86	121.34	115.83	110.31	
07133	.6299	16.000	16.0	100	32	0.50	50	15.40	138.46	132.44	126.42	120.40	
07134	.6299	16.000	16.0	100	32	1.00	50	15.40	138.46	132.44	126.42	120.40	
07135	.6299	16.000	16.0	100	32	1.50	50	15.40	138.46	132.44	126.42	120.40	
07136	.6299	16.000	16.0	100	32	3.00	50	15.40	138.46	132.44	126.42	120.40	
07137	.6299	16.000	16.0	100	32	6.00	50	15.40	138.46	132.44	126.42	120.40	

EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	$r$ Corner Radius	$l3$ Reach Length	$d3$ Neck Diameter	1-11	12-24	25-49	50-100	
	Decimal	Metric											
07138	.7500	3/4"	19.050	3/4"	4"	1-3/4"	-	-	-	147.82	141.39	134.97	128.54
07139	.7500	3/4"	19.050	3/4"	4"	1-3/4"	.015"	-	-	164.58	157.42	150.27	143.11
07140	.7500	3/4"	19.050	3/4"	4"	1-3/4"	.030"	-	-	164.58	157.42	150.27	143.11
07141	.7500	3/4"	19.050	3/4"	4"	1-3/4"	.060"	-	-	164.58	157.42	150.27	143.11
07142	.7500	3/4"	19.050	3/4"	4"	1-3/4"	.078"	-	-	164.58	157.42	150.27	143.11
07143	.7500	3/4"	19.050	3/4"	4"	1-3/4"	.094"	-	-	164.58	157.42	150.27	143.11
07144	.7500	3/4"	19.050	3/4"	4"	1-3/4"	.120"	-	-	164.58	157.42	150.27	143.11
07145	.7500	3/4"	19.050	3/4"	4"	1-3/4"	.156"	-	-	164.58	157.42	150.27	143.11
07146	.7500	3/4"	19.050	3/4"	4"	1-3/4"	.190"	-	-	164.58	157.42	150.27	143.11
07147	.7500	3/4"	19.050	3/4"	4"	1-3/4"	.250"	-	-	164.58	157.42	150.27	143.11
07148	.7500	3/4"	19.050	3/4"	4"	1-3/4"	BALL	-	-	164.58	157.42	150.27	143.11
07149	.7500	3/4"	19.050	3/4"	4"	1"	-	2"	.715"	153.00	146.35	139.70	133.04
07150	.7500	3/4"	19.050	3/4"	4"	1"	.030"	2"	.715"	169.75	162.37	154.99	147.61
07151	.7500	3/4"	19.050	3/4"	4"	1"	.060"	2"	.715"	169.75	162.37	154.99	147.61
07152	.7500	3/4"	19.050	3/4"	4"	1"	.090"	2"	.715"	169.75	162.37	154.99	147.61
07153	.7500	3/4"	19.050	3/4"	4"	1"	.120"	2"	.715"	169.75	162.37	154.99	147.61
07154	.7500	3/4"	19.050	3/4"	4"	1"	.125"	2"	.715"	169.75	162.37	154.99	147.61
07155	.7500	3/4"	19.050	3/4"	4"	1"	.160"	2"	.715"	169.75	162.37	154.99	147.61
07156	.7500	3/4"	19.050	3/4"	4"	1"	.190"	2"	.715"	169.75	162.37	154.99	147.61
07157	.7500	3/4"	19.050	3/4"	5"	2-1/4"	-	-	-	196.88	188.32	179.76	171.20
07158	.7500	3/4"	19.050	3/4"	5"	2-1/4"	.030"	-	-	228.57	218.63	208.69	198.76
07159	.7500	3/4"	19.050	3/4"	5"	2-1/4"	.060"	-	-	228.57	218.63	208.69	198.76
07160	.7500	3/4"	19.050	3/4"	5"	2-1/4"	.120"	-	-	228.57	218.63	208.69	198.76
07161	.7500	3/4"	19.050	3/4"	5"	2-1/4"	.125"	-	-	228.57	218.63	208.69	198.76
07162	.7500	3/4"	19.050	3/4"	5"	2-1/4"	.190"	-	-	228.57	218.63	208.69	198.76
07163	.7500	3/4"	19.050	3/4"	5"	2-1/4"	.250"	-	-	228.57	218.63	208.69	198.76
07164	.7500	3/4"	19.050	3/4"	6"	1"	-	3-3/8"	.715"	212.91	203.65	194.40	185.14
07165	.7500	3/4"	19.050	3/4"	6"	1"	.030"	3-3/8"	.715"	247.15	236.40	225.66	214.91
07166	.7500	3/4"	19.050	3/4"	6"	1"	.060"	3-3/8"	.715"	247.15	236.40	225.66	214.91
07167	.7500	3/4"	19.050	3/4"	6"	1"	.090"	3-3/8"	.715"	247.15	236.40	225.66	214.91
07168	.7500	3/4"	19.050	3/4"	6"	1"	.125"	3-3/8"	.715"	247.15	236.40	225.66	214.91
07169	.7500	3/4"	19.050	3/4"	6"	1"	.250"	3-3/8"	.715"	247.15	236.40	225.66	214.91
07170	.7500	3/4"	19.050	3/4"	6"	1"	BALL	3-3/8"	.715"	247.15	236.40	225.66	214.91
07171	.7874		20.000	20.0	100	30	-	50	19.4	202.99	194.16	185.34	176.51
07172	.7874		20.000	20.0	100	30	0.50	50	19.4	237.03	226.72	216.42	206.11
07173	.7874		20.000	20.0	100	30	1.00	50	19.4	237.03	226.72	216.42	206.11
07174	.7874		20.000	20.0	100	30	1.50	50	19.4	237.03	226.72	216.42	206.11
07175	.7874		20.000	20.0	100	30	3.00	50	19.4	237.03	226.72	216.42	206.11
07176	.7874		20.000	20.0	100	30	4.00	50	19.4	237.03	226.72	216.42	206.11
07177	.7874		20.000	20.0	100	30	5.00	50	19.4	237.03	226.72	216.42	206.11
07178	.7874		20.000	20.0	100	30	6.00	50	19.4	237.03	226.72	216.42	206.11
07179	.7874		20.000	20.0	100	30	8.00	50	19.4	237.03	226.72	216.42	206.11

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MATERIAL HARDNESS (RC)

35

0

continued →

## Series A3 (continued)

.7874" - 1.000"  
(20.000mm - 25.400mm)

EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	$r$ Corner Radius	$l3$ Reach Length	$d3$ Neck Diameter	1-11	12-24	25-49	50-100
	Decimal	Metric										
07180	.7874	20.000	20.0	150	30	-	100	19.40	264.83	253.32	241.80	230.29
07181	.7874	20.000	20.0	150	30	0.50	100	19.40	315.72	301.99	288.26	274.54
07182	.7874	20.000	20.0	150	30	1.00	100	19.40	315.72	301.99	288.26	274.54
07183	.7874	20.000	20.0	150	30	1.50	100	19.40	315.72	301.99	288.26	274.54
07184	.7874	20.000	20.0	150	30	3.00	100	19.40	315.72	301.99	288.26	274.54
07185	.7874	20.000	20.0	150	30	4.00	100	19.40	315.72	301.99	288.26	274.54
07186	.7874	20.000	20.0	150	30	5.00	100	19.40	315.72	301.99	288.26	274.54
07187	.7874	20.000	20.0	150	30	6.00	100	19.40	315.72	301.99	288.26	274.54
07188	.7874	20.000	20.0	150	30	8.00	100	19.40	315.72	301.99	288.26	274.54
07189	1.000	1" 25.400	1" 25.400	4"	1-1/4"	-	2"	.950"	226.50	216.65	206.80	196.96
07190	1.000	1" 25.400	1" 25.400	4"	1-1/4"	.060"	2"	.950"	289.95	277.34	264.74	252.13
07191	1.000	1" 25.400	1" 25.400	4-1/2"	1-1/4"	-	2-1/2"	.950"	256.91	245.74	234.57	223.40
07192	1.000	1" 25.400	1" 25.400	4-1/2"	1-1/4"	.030"	2-1/2"	.950"	327.35	313.12	298.88	284.65
07193	1.000	1" 25.400	1" 25.400	4-1/2"	1-1/4"	.060"	2-1/2"	.950"	327.35	313.12	298.88	284.65
07194	1.000	1" 25.400	1" 25.400	4-1/2"	1-1/4"	.120"	2-1/2"	.950"	327.35	313.12	298.88	284.65
07195	1.000	1" 25.400	1" 25.400	4-1/2"	1-1/4"	.125"	2-1/2"	.950"	327.35	313.12	298.88	284.65
07196	1.000	1" 25.400	1" 25.400	5"	1"	-	2-5/8"	.950"	282.97	270.67	258.36	246.06
07197	1.000	1" 25.400	1" 25.400	5"	1"	.030"	2-5/8"	.950"	360.63	344.95	329.27	313.59
07198	1.000	1" 25.400	1" 25.400	5"	1"	.060"	2-5/8"	.950"	360.63	344.95	329.27	313.59
07199	1.000	1" 25.400	1" 25.400	5"	1"	.125"	2-5/8"	.950"	360.63	344.95	329.27	313.59
07200	1.000	1" 25.400	1" 25.400	5"	1"	.250"	2-5/8"	.950"	360.63	344.95	329.27	313.59
07201	1.000	1" 25.400	1" 25.400	5"	1"	BALL	2-5/8"	.950"	360.63	344.95	329.27	313.59
07202	1.000	1" 25.400	1" 25.400	5"	2-1/4"	-	-	-	272.62	260.77	248.91	237.06
07203	1.000	1" 25.400	1" 25.400	5"	2-1/4"	.030"	-	-	350.28	335.05	319.82	304.59
07204	1.000	1" 25.400	1" 25.400	5"	2-1/4"	.060"	-	-	350.28	335.05	319.82	304.59
07205	1.000	1" 25.400	1" 25.400	5"	2-1/4"	.120"	-	-	350.28	335.05	319.82	304.59
07206	1.000	1" 25.400	1" 25.400	5"	2-1/4"	.250"	-	-	350.28	335.05	319.82	304.59
07207	1.000	1" 25.400	1" 25.400	6"	3-1/4"	-	-	-	339.03	324.29	309.55	294.81
07208	1.000	1" 25.400	1" 25.400	6"	3-1/4"	.030"	-	-	397.27	380.00	362.72	345.45
07209	1.000	1" 25.400	1" 25.400	6"	3-1/4"	.060"	-	-	397.27	380.00	362.72	345.45
07210	1.000	1" 25.400	1" 25.400	6"	3-1/4"	.120"	-	-	397.27	380.00	362.72	345.45
07211	1.000	1" 25.400	1" 25.400	6"	3-1/4"	.250"	-	-	397.27	380.00	362.72	345.45

MATERIAL HARDNESS (Rc)

↕ 70

↕ 35

↕ 0