

TOLERANCES

<i>d</i>	+.0000" - .0005" (+.0000 - .0127mm)	
<i>l1</i>	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)
<i>l2</i>	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)



TECH
PAGES
294-297

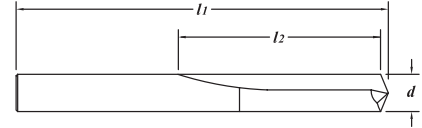
Series 1500

.0625" - .1660"
(1.588mm - 4.216mm)

Recommended for high nickel, cobalt-based, and powdered metals

Hard Metal

- Solid submicron grain carbide drill
- Straight flute design provides excellent rigidity
- Materials 40 Rc and higher
- Live tooling recommended on lathe processes
- Hardlube Coating - page 53



EDP#	<i>d</i> [†] Diameter		<i>l1</i> Overall Length	<i>l2</i> Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
59165	.0625	1/16"	1.588	1-3/4"	5/8"	9.72	9.30	8.87	8.45
59180	.0700	#50	1.778	1-3/4"	3/4"	9.72	9.30	8.87	8.45
59185	.0730	#49	1.854	1-3/4"	3/4"	9.72	9.30	8.87	8.45
59190	.0760	#48	1.930	1-3/4"	3/4"	9.72	9.30	8.87	8.45
59195	.0781	5/64"	1.984	1-3/4"	3/4"	9.72	9.30	8.87	8.45
59200	.0785	#47	1.994	1-3/4"	7/8"	9.72	9.30	8.87	8.45
39000	.0787		2.000	50	22	9.72	9.30	8.87	8.45
59210	.0810	#46	2.057	2"	7/8"	9.72	9.30	8.87	8.45
59215	.0820	#45	2.083	2"	7/8"	9.72	9.30	8.87	8.45
59220	.0860	#44	2.184	2"	7/8"	9.72	9.30	8.87	8.45
59225	.0890	#43	2.261	2"	7/8"	9.72	9.30	8.87	8.45
59230	.0935	#42	2.375	2"	7/8"	9.72	9.30	8.87	8.45
59235	.0938	3/32"	2.383	2"	7/8"	9.72	9.30	8.87	8.45
59240	.0960	#41	2.438	2"	7/8"	11.07	10.59	10.11	9.63
59245	.0980	#40	2.489	2"	7/8"	11.07	10.59	10.11	9.63
39050	.0984		2.500	50	22	11.07	10.59	10.11	9.63
59255	.0995	#39	2.527	2"	7/8"	11.07	10.59	10.11	9.63
59260	.1015	#38	2.578	2"	7/8"	11.07	10.59	10.11	9.63
59265	.1040	#37	2.642	2"	7/8"	11.07	10.59	10.11	9.63
59270	.1065	#36	2.705	2"	7/8"	11.07	10.59	10.11	9.63
59275	.1094	7/64"	2.779	2"	1"	11.07	10.59	10.11	9.63
59280	.1100	#35	2.794	2"	1"	11.51	11.01	10.51	10.01
59285	.1110	#34	2.819	2"	1"	11.51	11.01	10.51	10.01
59290	.1130	#33	2.870	2"	1"	11.51	11.01	10.51	10.01
59295	.1160	#32	2.946	2"	1"	11.51	11.01	10.51	10.01
39100	.1181		3.000	50	25	11.51	11.01	10.51	10.01
59305	.1200	#31	3.048	2"	1"	11.51	11.01	10.51	10.01
59310	.1250	1/8"	3.175	2"	1"	10.61	10.15	9.69	9.23
59315	.1285	#30	3.264	2"	1"	12.52	11.98	11.43	10.89
59320	.1360	#29	3.454	2"	1"	12.52	11.98	11.43	10.89
39150	.1378		3.500	50	25	12.52	11.98	11.43	10.89
59330	.1405	#28	3.569	2"	1"	12.52	11.98	11.43	10.89
59335	.1406	9/64"	3.571	2"	1"	12.52	11.98	11.43	10.89
59340	.1440	#27	3.658	2"	1"	12.86	12.30	11.74	11.18
59345	.1470	#26	3.734	2"	1"	13.51	12.93	12.34	11.75
59350	.1495	#25	3.797	2"	1"	13.51	12.93	12.34	11.75
59355	.1520	#24	3.861	2"	1"	13.51	12.93	12.34	11.75
59360	.1540	#23	3.912	2"	1"	13.51	12.93	12.34	11.75
59365	.1562	5/32"	3.967	2-1/2"	1-1/8"	13.51	12.93	12.34	11.75
59370	.1570	#22	3.988	2-1/2"	1-1/8"	14.64	14.00	13.37	12.73
39200	.1575		4.000	63	28	14.64	14.00	13.37	12.73
59380	.1590	#21	4.039	2-1/2"	1-1/8"	14.98	14.33	13.68	13.03
59385	.1610	#20	4.089	2-1/2"	1-1/8"	14.98	14.33	13.68	13.03
59390	.1660	#19	4.216	2-1/2"	1-1/8"	15.54	14.86	14.19	13.51

continued →

Series 1500 (continued)

.1695" - .5000"
(4.305mm - 12.700mm)

DRILLS

EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
59395	.1695	#18	4.305	2-1/2"	1-3/16"	15.54	14.86	14.19	13.51
59400	.1719	11/64"	4.366	2-1/2"	1-3/16"	15.54	14.86	14.19	13.51
59405	.1730	#17	4.394	2-1/2"	1-3/16"	15.88	15.19	14.50	13.81
59410	.1770	#16	4.496	2-1/2"	1-3/16"	15.88	15.19	14.50	13.81
39250	.1772		4.500	63	28	15.88	15.19	14.50	13.81
59420	.1800	#15	4.572	2-1/2"	1-3/16"	15.88	15.19	14.50	13.81
59425	.1820	#14	4.623	2-1/2"	1-3/16"	16.77	16.04	15.31	14.58
59430	.1850	#13	4.700	2-1/2"	1-3/16"	16.77	16.04	15.31	14.58
59435	.1875	3/16"	4.763	2-1/2"	1-3/16"	16.11	15.41	14.71	14.01
59440	.1890	#12	4.801	2-1/2"	1-3/16"	16.65	15.93	15.20	14.48
59445	.1910	#11	4.851	2-1/2"	1-3/16"	16.65	15.93	15.20	14.48
59450	.1935	#10	4.915	2-1/2"	1-1/4"	17.64	16.87	16.11	15.34
59455	.1960	#9	4.978	2-1/2"	1-1/4"	17.64	16.87	16.11	15.34
39300	.1969		5.000	63	32	17.64	16.87	16.11	15.34
59465	.1990	#8	5.055	2-1/2"	1-1/4"	18.23	17.44	16.64	15.85
59470	.2010	#7	5.105	2-1/2"	1-1/4"	18.23	17.44	16.64	15.85
59475	.2031	13/64"	5.159	2-1/2"	1-1/4"	18.23	17.44	16.64	15.85
59480	.2040	#6	5.182	2-1/2"	1-1/4"	19.23	18.39	17.56	16.72
59485	.2055	#5	5.220	2-1/2"	1-1/4"	19.23	18.39	17.56	16.72
59490	.2090	#4	5.309	2-1/2"	1-1/4"	19.23	18.39	17.56	16.72
59495	.2130	#3	5.410	2-1/2"	1-1/4"	19.23	18.39	17.56	16.72
39350	.2165		5.500	63	32	19.23	18.39	17.56	16.72
59505	.2188	7/32"	5.558	2-1/2"	1-1/2"	19.23	18.39	17.56	16.72
59510	.2210	#2	5.613	2-1/2"	1-1/2"	20.57	19.68	18.78	17.89
59515	.2280	#1	5.791	2-1/2"	1-1/2"	20.57	19.68	18.78	17.89
59525	.2344	15/64"	5.954	2-1/2"	1-1/2"	22.92	21.92	20.93	19.93
39400	.2362		6.000	63	38	22.92	21.92	20.93	19.93
59550	.2500	1/4"	6.350	2-1/2"	1-1/2"	21.59	20.65	19.71	18.77
39450	.2559		6.500	63	38	26.16	25.03	23.89	22.75
59570	.2656	17/64"	6.746	2-1/2"	1-1/2"	26.16	25.03	23.89	22.75
39500	.2756		7.000	63	38	26.82	25.65	24.49	23.32
59600	.2812	9/32"	7.142	2-1/2"	1-1/2"	26.82	25.65	24.49	23.32
39520	.2953		7.500	63	41	28.18	26.95	25.73	24.50
59620	.2969	19/64"	7.541	2-1/2"	1-5/8"	28.18	26.95	25.73	24.50
59630	.3125	5/16"	7.938	2-1/2"	1-5/8"	28.18	26.95	25.73	24.50
39540	.3150		8.000	63	41	29.64	28.35	27.06	25.77
59650	.3281	21/64"	8.334	3"	1-5/8"	30.51	29.18	27.86	26.53
39560	.3346		8.500	76	41	34.09	32.60	31.12	29.64
59670	.3438	11/32"	8.733	3"	1-5/8"	34.09	32.60	31.12	29.64
39580	.3543		9.000	76	41	37.01	35.40	33.79	32.18
59690	.3594	23/64"	9.129	3"	1-3/4"	37.01	35.40	33.79	32.18
59705	.3750	3/8"	9.525	3"	1-3/4"	40.35	38.60	36.84	35.09
59720	.3906	25/64"	9.921	3"	1-3/4"	45.60	43.62	41.63	39.65
39620	.3937		10.000	76	44	45.60	43.62	41.63	39.65
59740	.4062	13/32"	10.317	3"	1-3/4"	50.96	48.74	46.53	44.31
39640	.4134		10.500	76	44	53.33	51.01	48.69	46.37
59755	.4219	27/64"	10.716	3"	1-3/4"	56.11	53.67	51.23	48.79
39660	.4331		11.000	76	44	57.12	54.64	52.15	49.67
59765	.4375	7/16"	11.113	3"	1-3/4"	57.12	54.64	52.15	49.67
59775	.4531	29/64"	11.509	3"	1-3/4"	59.89	57.29	54.68	52.08
59780	.4688	15/32"	11.908	3"	1-3/4"	59.89	57.29	54.68	52.08
39700	.4724		12.000	76	44	59.89	57.29	54.68	52.08
59790	.4844	31/64"	12.304	3"	1-3/4"	59.89	57.29	54.68	52.08
39720	.4921		12.500	76	44	61.25	58.59	55.92	53.26
59800	.5000	1/2"	12.700	3"	1-3/4"	61.25	58.59	55.92	53.26