

**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 1500H**

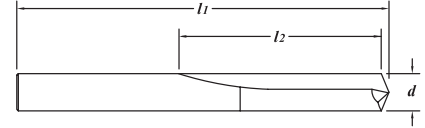
.0625" - .1660"  
(1.588mm - 4.216mm)

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

**Hard Metal**

**Hardlube Coating**

- Solid submicron grain carbide drill
- Straight flute design provides excellent rigidity
- Materials 40 Rc and higher
- Excellent heat resistance and lubricity
- Live tooling recommended on lathe processes
- Uncoated - page 51



DRILLS

EDP#	<i>d</i> <sup>†</sup> Diameter		<i>l1</i> Overall Length	<i>l2</i> Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
59166	.0625	1/16"	1.588	1-3/4"	5/8"	11.66	11.15	10.65	10.14
59181	.0700	#50	1.778	1-3/4"	3/4"	11.66	11.15	10.65	10.14
59186	.0730	#49	1.854	1-3/4"	3/4"	11.66	11.15	10.65	10.14
59191	.0760	#48	1.930	1-3/4"	3/4"	11.66	11.15	10.65	10.14
59196	.0781	5/64"	1.984	1-3/4"	3/4"	11.66	11.15	10.65	10.14
59201	.0785	#47	1.994	1-3/4"	7/8"	11.66	11.15	10.65	10.14
39001	.0787		2.000	50	22	11.66	11.15	10.65	10.14
59211	.0810	#46	2.057	2"	7/8"	11.66	11.15	10.65	10.14
59216	.0820	#45	2.083	2"	7/8"	11.66	11.15	10.65	10.14
59221	.0860	#44	2.184	2"	7/8"	11.66	11.15	10.65	10.14
59226	.0890	#43	2.261	2"	7/8"	11.66	11.15	10.65	10.14
59231	.0935	#42	2.375	2"	7/8"	11.66	11.15	10.65	10.14
59236	.0938	3/32"	2.383	2"	7/8"	11.66	11.15	10.65	10.14
59241	.0960	#41	2.438	2"	7/8"	12.98	12.42	11.85	11.29
59246	.0980	#40	2.489	2"	7/8"	12.98	12.42	11.85	11.29
39051	.0984		2.500	50	22	12.98	12.42	11.85	11.29
59256	.0995	#39	2.527	2"	7/8"	12.98	12.42	11.85	11.29
59261	.1015	#38	2.578	2"	7/8"	12.98	12.42	11.85	11.29
59266	.1040	#37	2.642	2"	7/8"	12.98	12.42	11.85	11.29
59271	.1065	#36	2.705	2"	7/8"	12.98	12.42	11.85	11.29
59276	.1094	7/64"	2.779	2"	1"	12.98	12.42	11.85	11.29
59281	.1100	#35	2.794	2"	1"	13.46	12.87	12.29	11.70
59286	.1110	#34	2.819	2"	1"	13.46	12.87	12.29	11.70
59291	.1130	#33	2.870	2"	1"	13.46	12.87	12.29	11.70
59296	.1160	#32	2.946	2"	1"	13.46	12.87	12.29	11.70
39101	.1181		3.000	50	25	13.46	12.87	12.29	11.70
59306	.1200	#31	3.048	2"	1"	13.46	12.87	12.29	11.70
59311	.1250	1/8"	3.175	2"	1"	12.54	11.99	11.45	10.90
59316	.1285	#30	3.264	2"	1"	14.44	13.82	13.19	12.56
59321	.1360	#29	3.454	2"	1"	14.44	13.82	13.19	12.56
39151	.1378		3.500	50	25	14.44	13.82	13.19	12.56
59331	.1405	#28	3.569	2"	1"	14.44	13.82	13.19	12.56
59336	.1406	9/64"	3.571	2"	1"	14.44	13.82	13.19	12.56
59341	.1440	#27	3.658	2"	1"	14.78	14.14	13.49	12.85
59346	.1470	#26	3.734	2"	1"	15.46	14.78	14.11	13.44
59351	.1495	#25	3.797	2"	1"	15.46	14.78	14.11	13.44
59356	.1520	#24	3.861	2"	1"	15.46	14.78	14.11	13.44
59361	.1540	#23	3.912	2"	1"	15.46	14.78	14.11	13.44
59366	.1562	5/32"	3.967	2-1/2"	1-1/8"	15.46	14.78	14.11	13.44
59371	.1570	#22	3.988	2-1/2"	1-1/8"	16.56	15.84	15.12	14.40
39201	.1575		4.000	63	28	16.56	15.84	15.12	14.40
59381	.1590	#21	4.039	2-1/2"	1-1/8"	16.91	16.17	15.44	14.70
59386	.1610	#20	4.089	2-1/2"	1-1/8"	16.91	16.17	15.44	14.70
59391	.1660	#19	4.216	2-1/2"	1-1/8"	17.47	16.71	15.95	15.19

continued →

# Series 1500H (continued)

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

EDP#	$d^{\dagger}$ Diameter		$l_1$ Overall Length	$l_2$ Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
59396	.1695	#18	4.305	2-1/2"	1-3/16"	17.47	16.71	15.95	15.19
59401	.1719	11/64"	4.366	2-1/2"	1-3/16"	17.47	16.71	15.95	15.19
59406	.1730	#17	4.394	2-1/2"	1-3/16"	17.81	17.04	16.26	15.49
59411	.1770	#16	4.496	2-1/2"	1-3/16"	17.81	17.04	16.26	15.49
39251	.1772		4.500	63	28	17.81	17.04	16.26	15.49
59421	.1800	#15	4.572	2-1/2"	1-3/16"	17.81	17.04	16.26	15.49
59426	.1820	#14	4.623	2-1/2"	1-3/16"	18.68	17.86	17.05	16.24
59431	.1850	#13	4.700	2-1/2"	1-3/16"	18.68	17.86	17.05	16.24
59436	.1875	3/16"	4.763	2-1/2"	1-3/16"	18.02	17.24	16.45	15.67
59441	.1890	#12	4.801	2-1/2"	1-3/16"	19.94	19.07	18.21	17.34
59446	.1910	#11	4.851	2-1/2"	1-3/16"	19.94	19.07	18.21	17.34
59451	.1935	#10	4.915	2-1/2"	1-1/4"	20.95	20.04	19.13	18.22
59456	.1960	#9	4.978	2-1/2"	1-1/4"	20.95	20.04	19.13	18.22
39301	.1969		5.000	63	32	20.95	20.04	19.13	18.22
59466	.1990	#8	5.055	2-1/2"	1-1/4"	21.52	20.58	19.65	18.71
59471	.2010	#7	5.105	2-1/2"	1-1/4"	21.52	20.58	19.65	18.71
59476	.2031	13/64"	5.159	2-1/2"	1-1/4"	21.52	20.58	19.65	18.71
59481	.2040	#6	5.182	2-1/2"	1-1/4"	22.54	21.56	20.58	19.60
59486	.2055	#5	5.220	2-1/2"	1-1/4"	22.54	21.56	20.58	19.60
59491	.2090	#4	5.309	2-1/2"	1-1/4"	22.54	21.56	20.58	19.60
59496	.2130	#3	5.410	2-1/2"	1-1/4"	22.54	21.56	20.58	19.60
39351	.2165		5.500	63	32	22.54	21.56	20.58	19.60
59506	.2188	7/32"	5.558	2-1/2"	1-1/2"	22.54	21.56	20.58	19.60
59511	.2210	#2	5.613	2-1/2"	1-1/2"	23.89	22.85	21.81	20.77
59516	.2280	#1	5.791	2-1/2"	1-1/2"	23.89	22.85	21.81	20.77
59526	.2344	15/64"	5.954	2-1/2"	1-1/2"	26.21	25.07	23.93	22.79
39401	.2362		6.000	63	38	26.21	25.07	23.93	22.79
59551	.2500	1/4"	6.350	2-1/2"	1-1/2"	24.87	23.79	22.71	21.63
39451	.2559		6.500	63	38	32.04	30.65	29.25	27.86
59571	.2656	17/64"	6.746	2-1/2"	1-1/2"	32.04	30.65	29.25	27.86
39501	.2756		7.000	63	38	34.65	33.14	31.64	30.13
59601	.2812	9/32"	7.142	2-1/2"	1-1/2"	34.65	33.14	31.64	30.13
39521	.2953		7.500	63	41	34.05	32.57	31.09	29.61
59621	.2969	19/64"	7.541	2-1/2"	1-5/8"	34.05	32.57	31.09	29.61
59631	.3125	5/16"	7.938	2-1/2"	1-5/8"	34.05	32.57	31.09	29.61
39541	.3150		8.000	63	41	35.52	33.98	32.43	30.89
59651	.3281	21/64"	8.334	3"	1-5/8"	36.39	34.80	33.22	31.64
39561	.3346		8.500	76	41	39.96	38.23	36.49	34.75
59671	.3438	11/32"	8.733	3"	1-5/8"	39.96	38.23	36.49	34.75
39581	.3543		9.000	76	41	43.25	41.37	39.49	37.61
59691	.3594	23/64"	9.129	3"	1-3/4"	43.25	41.37	39.49	37.61
39601	.3740		9.500	76	41	46.62	44.59	42.57	40.54
59706	.3750	3/8"	9.525	3"	1-3/4"	46.62	44.59	42.57	40.54
59721	.3906	25/64"	9.921	3"	1-3/4"	52.37	50.09	47.82	45.54
39621	.3937		10.000	76	44	52.37	50.09	47.82	45.54
59741	.4062	13/32"	10.317	3"	1-3/4"	61.20	58.54	55.88	53.22
59756	.4219	27/64"	10.716	3"	1-3/4"	62.92	60.18	57.45	54.71
39661	.4331		11.000	76	44	63.91	61.13	58.35	55.57
59766	.4375	7/16"	11.113	3"	1-3/4"	63.91	61.13	58.35	55.57
39681	.4528		11.500	76	44	65.56	62.71	59.86	57.01
59776	.4531	29/64"	11.509	3"	1-3/4"	66.68	63.78	60.88	57.98
59781	.4688	15/32"	11.908	3"	1-3/4"	66.68	63.78	60.88	57.98
39701	.4724		12.000	76	44	66.68	63.78	60.88	57.98
59791	.4844	31/64"	12.304	3"	1-3/4"	66.68	63.78	60.88	57.98
39721	.4921		12.500	76	44	68.01	65.05	62.10	59.14
59801	.5000	1/2"	12.700	3"	1-3/4"	68.01	65.05	62.10	59.14