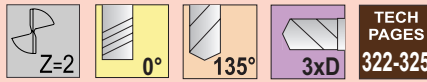


**TOLERANCES**

<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)

**Series 1500H**

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

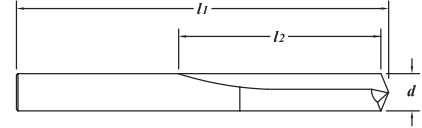


Recommended for high nickel, cobalt-based, and powdered metals

**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 57



**GENERAL PURPOSE 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"	12.74	12.19	11.63	11.08
59181	.0700	#50	1.778	1-3/4"	3/4"	12.74	12.19	11.63	11.08
59186	.0730	#49	1.854	1-3/4"	3/4"	12.74	12.19	11.63	11.08
59191	.0760	#48	1.930	1-3/4"	3/4"	12.74	12.19	11.63	11.08
59196	.0781	5/64"	1.984	1-3/4"	3/4"	12.74	12.19	11.63	11.08
59201	.0785	#47	1.994	1-3/4"	7/8"	12.74	12.19	11.63	11.08
39001	.0787		2.000	50	22	12.74	12.19	11.63	11.08
59211	.0810	#46	2.057	2"	7/8"	12.74	12.19	11.63	11.08
59216	.0820	#45	2.083	2"	7/8"	12.74	12.19	11.63	11.08
59221	.0860	#44	2.184	2"	7/8"	12.74	12.19	11.63	11.08
59226	.0890	#43	2.261	2"	7/8"	12.74	12.19	11.63	11.08
59231	.0935	#42	2.375	2"	7/8"	12.74	12.19	11.63	11.08
59236	.0938	3/32"	2.383	2"	7/8"	12.74	12.19	11.63	11.08
59241	.0960	#41	2.438	2"	7/8"	14.17	13.55	12.94	12.32
59246	.0980	#40	2.489	2"	7/8"	14.17	13.55	12.94	12.32
39051	.0984		2.500	50	22	14.17	13.55	12.94	12.32
59256	.0995	#39	2.527	2"	7/8"	14.17	13.55	12.94	12.32
59261	.1015	#38	2.578	2"	7/8"	14.17	13.55	12.94	12.32
59266	.1040	#37	2.642	2"	7/8"	14.17	13.55	12.94	12.32
59271	.1065	#36	2.705	2"	7/8"	14.17	13.55	12.94	12.32
59276	.1094	7/64"	2.779	2"	1"	14.17	13.55	12.94	12.32
59281	.1100	#35	2.794	2"	1"	14.70	14.06	13.42	12.78
59286	.1110	#34	2.819	2"	1"	14.70	14.06	13.42	12.78
59291	.1130	#33	2.870	2"	1"	14.70	14.06	13.42	12.78
59296	.1160	#32	2.946	2"	1"	14.70	14.06	13.42	12.78
39101	.1181		3.000	50	25	14.70	14.06	13.42	12.78
59306	.1200	#31	3.048	2"	1"	14.70	14.06	13.42	12.78
59311	.1250	1/8"	3.175	2"	1"	13.70	13.10	12.51	11.91
59316	.1285	#30	3.264	2"	1"	15.78	15.09	14.41	13.72
59321	.1360	#29	3.454	2"	1"	15.78	15.09	14.41	13.72
39151	.1378		3.500	50	25	15.78	15.09	14.41	13.72
59331	.1405	#28	3.569	2"	1"	15.78	15.09	14.41	13.72
59336	.1406	9/64"	3.571	2"	1"	15.78	15.09	14.41	13.72
59341	.1440	#27	3.658	2"	1"	16.13	15.43	14.73	14.03
59346	.1470	#26	3.734	2"	1"	16.87	16.14	15.40	14.67
59351	.1495	#25	3.797	2"	1"	16.87	16.14	15.40	14.67
59356	.1520	#24	3.861	2"	1"	16.87	16.14	15.40	14.67
59361	.1540	#23	3.912	2"	1"	16.87	16.14	15.40	14.67
59366	.1562	5/32"	3.967	2-1/2"	1-1/8"	16.87	16.14	15.40	14.67
59371	.1570	#22	3.988	2-1/2"	1-1/8"	18.08	17.29	16.51	15.72
39201	.1575		4.000	63	28	18.08	17.29	16.51	15.72
59381	.1590	#21	4.039	2-1/2"	1-1/8"	18.47	17.67	16.86	16.06
59386	.1610	#20	4.089	2-1/2"	1-1/8"	18.47	17.67	16.86	16.06
59391	.1660	#19	4.216	2-1/2"	1-1/8"	19.08	18.25	17.42	16.59

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"	19.08	18.25	17.42	16.59
59401	.1719	11/64"	4.366	2-1/2"	1-3/16"	19.08	18.25	17.42	16.59
59406	.1730	#17	4.394	2-1/2"	1-3/16"	19.45	18.60	17.76	16.91
59411	.1770	#16	4.496	2-1/2"	1-3/16"	19.45	18.60	17.76	16.91
39251	.1772		4.500	63	28	19.45	18.60	17.76	16.91
59421	.1800	#15	4.572	2-1/2"	1-3/16"	19.45	18.60	17.76	16.91
59426	.1820	#14	4.623	2-1/2"	1-3/16"	20.39	19.50	18.62	17.73
59431	.1850	#13	4.700	2-1/2"	1-3/16"	20.39	19.50	18.62	17.73
59436	.1875	3/16"	4.763	2-1/2"	1-3/16"	19.68	18.82	17.97	17.11
59441	.1890	#12	4.801	2-1/2"	1-3/16"	21.78	20.83	19.89	18.94
59446	.1910	#11	4.851	2-1/2"	1-3/16"	21.78	20.83	19.89	18.94
59451	.1935	#10	4.915	2-1/2"	1-1/4"	22.89	21.89	20.90	19.90
59456	.1960	#9	4.978	2-1/2"	1-1/4"	22.89	21.89	20.90	19.90
39301	.1969		5.000	63	32	22.89	21.89	20.90	19.90
59466	.1990	#8	5.055	2-1/2"	1-1/4"	23.51	22.48	21.46	20.44
59471	.2010	#7	5.105	2-1/2"	1-1/4"	23.51	22.48	21.46	20.44
59476	.2031	13/64"	5.159	2-1/2"	1-1/4"	23.51	22.48	21.46	20.44
59481	.2040	#6	5.182	2-1/2"	1-1/4"	24.61	23.54	22.47	21.40
59486	.2055	#5	5.220	2-1/2"	1-1/4"	24.61	23.54	22.47	21.40
59491	.2090	#4	5.309	2-1/2"	1-1/4"	24.61	23.54	22.47	21.40
59496	.2130	#3	5.410	2-1/2"	1-1/4"	24.61	23.54	22.47	21.40
39351	.2165		5.500	63	32	24.61	23.54	22.47	21.40
59506	.2188	7/32"	5.558	2-1/2"	1-1/2"	24.61	23.54	22.47	21.40
59511	.2210	#2	5.613	2-1/2"	1-1/2"	26.08	24.95	23.81	22.68
59516	.2280	#1	5.791	2-1/2"	1-1/2"	26.08	24.95	23.81	22.68
59526	.2344	15/64"	5.954	2-1/2"	1-1/2"	28.62	27.38	26.13	24.89
39401	.2362		6.000	63	38	28.62	27.38	26.13	24.89
59551	.2500	1/4"	6.350	2-1/2"	1-1/2"	27.16	25.98	24.80	23.62
39451	.2559		6.500	63	38	34.98	33.46	31.94	30.42
59571	.2656	17/64"	6.746	2-1/2"	1-1/2"	34.98	33.46	31.94	30.42
39501	.2756		7.000	63	38	35.70	34.14	32.59	31.04
59601	.2812	9/32"	7.142	2-1/2"	1-1/2"	35.70	34.14	32.59	31.04
39521	.2953		7.500	63	41	37.18	35.56	33.95	32.33
59621	.2969	19/64"	7.541	2-1/2"	1-5/8"	37.18	35.56	33.95	32.33
59631	.3125	5/16"	7.938	2-1/2"	1-5/8"	37.18	35.56	33.95	32.33
39541	.3150		8.000	63	41	38.79	37.10	35.42	33.73
59651	.3281	21/64"	8.334	3"	1-5/8"	39.73	38.01	36.28	34.55
39561	.3346		8.500	76	41	43.64	41.75	39.85	37.95
59671	.3438	11/32"	8.733	3"	1-5/8"	43.64	41.75	39.85	37.95
39581	.3543		9.000	76	41	47.23	45.18	43.12	41.07
59691	.3594	23/64"	9.129	3"	1-3/4"	47.23	45.18	43.12	41.07
39601	.3740		9.500	76	41	50.91	48.70	46.48	44.27
59706	.3750	3/8"	9.525	3"	1-3/4"	50.91	48.70	46.48	44.27
59721	.3906	25/64"	9.921	3"	1-3/4"	57.19	54.70	52.22	49.73
39621	.3937		10.000	76	44	57.19	54.70	52.22	49.73
59741	.4062	13/32"	10.317	3"	1-3/4"	63.05	60.31	57.57	54.83
59756	.4219	27/64"	10.716	3"	1-3/4"	68.71	65.73	62.74	59.75
39661	.4331		11.000	76	44	69.78	66.75	63.71	60.68
59766	.4375	7/16"	11.113	3"	1-3/4"	69.78	66.75	63.71	60.68
39681	.4528		11.500	76	44	71.59	68.48	65.36	62.25
59776	.4531	29/64"	11.509	3"	1-3/4"	72.82	69.65	66.49	63.32
59781	.4688	15/32"	11.908	3"	1-3/4"	72.82	69.65	66.49	63.32
39701	.4724		12.000	76	44	72.82	69.65	66.49	63.32
59791	.4844	31/64"	12.304	3"	1-3/4"	72.82	69.65	66.49	63.32
39721	.4921		12.500	76	44	74.27	71.04	67.81	64.58
59801	.5000	1/2"	12.700	3"	1-3/4"	74.27	71.04	67.81	64.58