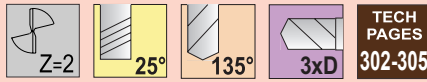


# Series 1520H

.0625" - .1575"  
(1.588mm - 4.000mm)

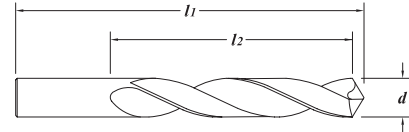
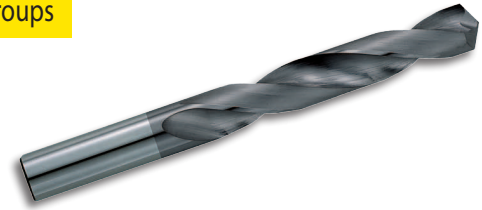


TOLERANCES		
$d$	+.0000" - .0005" (+.0000 - .0127mm)	
$l_1$	$\leq 1/8"$	+.125" - .062" (+3.175 - 1.588mm)
	$> 1/8"$	+.125" - .125" (+3.175 - 3.175mm)
$l_2$	$\leq 1/8"$	+.125" - .062" (+3.175 - 1.588mm)
	$> 1/8"$	+.125" - .125" (+3.175 - 3.175mm)

General purpose for all material groups

## Hardlube Coating

- Solid submicron grain carbide drill
- Excellent heat resistance and lubricity
- No spotting required in most applications
- 4-facet self-centering point
- Live tooling recommended on lathe processes
- Uncoated - page 65



EDP#	$d$ † Diameter		$l_1$ Overall Length	$l_2$ Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
77166	.0625	1/16"	1.588	1-3/4"	5/8"	9.14	8.75	8.35	7.95
77171	.0635	#52	1.613	1-3/4"	11/16"	9.26	8.86	8.45	8.05
77176	.0670	#51	1.702	1-3/4"	11/16"	9.37	8.97	8.56	8.15
77181	.0700	#50	1.778	1-3/4"	11/16"	9.52	9.11	8.69	8.28
77186	.0730	#49	1.854	1-3/4"	11/16"	9.73	9.31	8.88	8.46
77191	.0760	#48	1.930	1-3/4"	11/16"	9.98	9.55	9.11	8.68
77196	.0781	5/64"	1.984	1-3/4"	11/16"	10.28	9.83	9.39	8.94
77201	.0785	#47	1.994	1-3/4"	3/4"	10.56	10.10	9.64	9.18
77206	.0787		2.000	45	19	10.71	10.24	9.78	9.31
77211	.0810	#46	2.057	1-3/4"	3/4"	10.83	10.36	9.89	9.42
77216	.0820	#45	2.083	1-3/4"	3/4"	11.10	10.62	10.13	9.65
77221	.0860	#44	2.184	1-3/4"	3/4"	11.40	10.90	10.41	9.91
77226	.0890	#43	2.261	1-3/4"	3/4"	11.65	11.14	10.64	10.13
77231	.0935	#42	2.375	1-3/4"	3/4"	11.81	11.30	10.78	10.27
77236	.0938	3/32"	2.383	1-3/4"	3/4"	12.03	11.51	10.98	10.46
77241	.0960	#41	2.438	1-13/16"	13/16"	12.11	11.58	11.06	10.53
77246	.0980	#40	2.489	1-13/16"	13/16"	12.26	11.73	11.19	10.66
77251	.0984		2.500	46	21	12.31	11.77	11.24	10.70
77256	.0995	#39	2.527	1-13/16"	13/16"	12.36	11.83	11.29	10.75
77261	.1015	#38	2.578	1-13/16"	13/16"	12.48	11.94	11.39	10.85
77266	.1040	#37	2.642	1-13/16"	13/16"	12.52	11.98	11.43	10.89
77271	.1065	#36	2.705	1-13/16"	13/16"	12.60	12.06	11.51	10.96
77276	.1094	7/64"	2.779	1-13/16"	13/16"	12.66	12.11	11.56	11.01
77281	.1100	#35	2.794	1-7/8"	7/8"	12.74	12.19	11.63	11.08
77286	.1110	#34	2.819	1-7/8"	7/8"	12.87	12.31	11.75	11.19
77291	.1130	#33	2.870	1-7/8"	7/8"	12.95	12.39	11.82	11.26
77296	.1160	#32	2.946	1-7/8"	7/8"	13.03	12.46	11.90	11.33
77301	.1181		3.000	48	22	13.13	12.56	11.99	11.42
77306	.1200	#31	3.048	1-7/8"	7/8"	13.23	12.65	12.08	11.50
77311	.1250	1/8"	3.175	1-7/8"	7/8"	13.35	12.77	12.19	11.61
77316	.1285	#30	3.264	1-15/16"	15/16"	13.65	13.06	12.46	11.87
77321	.1360	#29	3.454	1-15/16"	15/16"	13.96	13.35	12.75	12.14
77326	.1378		3.500	49	24	14.35	13.73	13.10	12.48
77331	.1405	#28	3.569	1-15/16"	15/16"	14.50	13.87	13.24	12.61
77336	.1406	9/64"	3.571	1-15/16"	15/16"	14.64	14.00	13.37	12.73
77341	.1440	#27	3.658	2-1/16"	1"	15.74	15.06	14.37	13.69
77346	.1470	#26	3.734	2-1/16"	1"	15.90	15.21	14.52	13.83
77351	.1495	#25	3.797	2-1/16"	1"	16.04	15.35	14.65	13.95
77356	.1520	#24	3.861	2-1/16"	1"	16.10	15.40	14.70	14.00
77361	.1540	#23	3.912	2-1/16"	1"	16.19	15.49	14.78	14.08
77366	.1562	5/32"	3.967	2-1/16"	1"	16.27	15.57	14.86	14.15
77371	.1570	#22	3.988	2-1/8"	1-1/16"	17.18	16.43	15.69	14.94
77376	.1575		4.000	54	27	17.37	16.61	15.86	15.10

EDP#	$d^+$ Diameter		$l_1$ Overall Length	$l_2$ Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
77381	.1590	#21	4.039	2-1/8"	1-1/16"	17.57	16.81	16.04	15.28
77386	.1610	#20	4.089	2-1/8"	1-1/16"	17.68	16.91	16.14	15.37
77391	.1660	#19	4.216	2-1/8"	1-1/16"	18.31	17.51	16.72	15.92
77396	.1695	#18	4.305	2-1/8"	1-1/16"	18.50	17.70	16.89	16.09
77401	.1719	11/64"	4.366	2-1/8"	1-1/16"	18.83	18.01	17.19	16.37
77406	.1730	#17	4.394	2-3/16"	1-1/8"	19.08	18.25	17.42	16.59
77411	.1770	#16	4.496	2-3/16"	1-1/8"	19.26	18.43	17.59	16.75
77416	.1772		4.500	56	29	19.35	18.51	17.67	16.83
77421	.1800	#15	4.572	2-3/16"	1-1/8"	19.45	18.60	17.76	16.91
77426	.1820	#14	4.623	2-3/16"	1-1/8"	19.83	18.96	18.10	17.24
77431	.1850	#13	4.700	2-3/16"	1-1/8"	19.96	19.10	18.23	17.36
77436	.1875	3/16"	4.763	2-3/16"	1-1/8"	20.02	19.15	18.28	17.41
77441	.1890	#12	4.801	2-1/4"	1-3/16"	22.10	21.14	20.18	19.22
77446	.1910	#11	4.851	2-1/4"	1-3/16"	22.30	21.33	20.36	19.39
77451	.1935	#10	4.915	2-1/4"	1-3/16"	23.17	22.17	21.16	20.15
77456	.1960	#9	4.978	2-1/4"	1-3/16"	23.69	22.66	21.63	20.60
77461	.1969		5.000	57	30	23.81	22.77	21.74	20.70
77466	.1990	#8	5.055	2-1/4"	1-3/16"	23.92	22.88	21.84	20.80
77471	.2010	#7	5.105	2-1/4"	1-3/16"	24.55	23.49	22.42	21.35
77476	.2031	13/64"	5.159	2-1/4"	1-3/16"	24.69	23.62	22.54	21.47
77481	.2040	#6	5.182	2-3/8"	1-1/4"	25.14	24.05	22.95	21.86
77486	.2055	#5	5.220	2-3/8"	1-1/4"	25.58	24.46	23.35	22.24
77491	.2090	#4	5.309	2-3/8"	1-1/4"	25.99	24.86	23.73	22.60
77496	.2130	#3	5.410	2-3/8"	1-1/4"	26.36	25.21	24.07	22.92
77501	.2165		5.500	60	32	26.55	25.40	24.24	23.09
77506	.2188	7/32"	5.558	2-3/8"	1-1/4"	26.70	25.54	24.38	23.22
77511	.2210	#2	5.613	2-7/16"	1-5/16"	27.28	26.09	24.91	23.72
77516	.2280	#1	5.791	2-7/16"	1-5/16"	27.43	26.24	25.04	23.85
77521	.2340	A	5.944	2-7/16"	1-5/16"	27.47	26.28	25.08	23.89
77526	.2344	15/64"	5.954	2-7/16"	1-5/16"	27.52	26.32	25.13	23.93
77531	.2362		6.000	64	35	27.59	26.39	25.19	23.99
77536	.2380	B	6.045	2-1/2"	1-3/8"	27.69	26.49	25.28	24.08
77541	.2420	C	6.147	2-1/2"	1-3/8"	27.86	26.65	25.44	24.23
77546	.2460	D	6.248	2-1/2"	1-3/8"	28.05	26.83	25.61	24.39
77551	.2500	1/4" / E	6.350	2-1/2"	1-3/8"	28.22	26.99	25.77	24.54
77556	.2559		6.500	67	37	31.50	30.13	28.76	27.39
77561	.2570	F	6.528	2-5/8"	1-7/16"	32.04	30.65	29.25	27.86
77566	.2610	G	6.629	2-5/8"	1-7/16"	32.56	31.14	29.73	28.31
77571	.2656	17/64"	6.746	2-5/8"	1-7/16"	33.11	31.67	30.23	28.79
77576	.2660	H	6.756	2-11/16"	1-1/2"	33.87	32.40	30.92	29.45
77581	.2720	I	6.909	2-11/16"	1-1/2"	34.19	32.70	31.22	29.73
77586	.2756		7.000	68	38	34.42	32.92	31.43	29.93
77591	.2770	J	7.036	2-11/16"	1-1/2"	34.68	33.18	31.67	30.16
77596	.2810	K	7.137	2-11/16"	1-1/2"	34.93	33.41	31.89	30.37
77601	.2812	9/32"	7.142	2-11/16"	1-1/2"	35.08	33.55	32.03	30.50
77606	.2900	L	7.366	2-3/4"	1-9/16"	36.13	34.56	32.99	31.42
77611	.2950	M	7.493	2-3/4"	1-9/16"	38.23	36.56	34.90	33.24
77616	.2953		7.500	70	40	38.23	36.56	34.90	33.24
77621	.2969	19/64"	7.541	2-3/4"	1-9/16"	38.41	36.74	35.07	33.40
77626	.3020	N	7.671	2-15/16"	1-5/8"	40.15	38.40	36.66	34.91
77631	.3125	5/16"	7.938	2-15/16"	1-5/8"	40.28	38.53	36.78	35.03
77636	.3150		8.000	75	43	42.75	40.89	39.03	37.17
77641	.3160	O	8.026	2-15/16"	1-11/16"	42.75	40.89	39.03	37.17
77646	.3230	P	8.204	2-15/16"	1-11/16"	43.06	41.18	39.31	37.44
77651	.3281	21/64"	8.334	2-15/16"	1-11/16"	43.30	41.42	39.53	37.65
77656	.3320	Q	8.433	3"	1-11/16"	44.16	42.24	40.32	38.40
77661	.3346		8.500	76	43	44.51	42.57	40.64	38.70

continued →

Series 1520H (continued)

.3390" - .5000"  
(8.611mm - 12.700mm)

EDP#	$d^{\dagger}$ Diameter		$l_1$ Overall Length	$l_2$ Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
77666	.3390	R	8.611	3"	1-11/16"	45.72	43.74	41.75	39.76
77671	.3438	11/32"	8.733	3"	1-11/16"	47.33	45.28	43.22	41.16
77676	.3480	S	8.839	3-1/16"	1-3/4"	50.07	47.89	45.72	43.54
77681	.3543		9.000	78	44	50.32	48.14	45.95	43.76
77686	.3580	T	9.093	3-1/16"	1-3/4"	50.49	48.29	46.10	43.90
77691	.3594	23/64"	9.129	3-1/16"	1-3/4"	50.80	48.59	46.38	44.17
77696	.3680	U	9.347	3-1/8"	1-13/16"	54.82	52.44	50.05	47.67
77701	.3740		9.500	79	46	55.26	52.86	50.45	48.05
77706	.3750	3/8"	9.525	3-1/8"	1-13/16"	55.61	53.20	50.78	48.36
77711	.3770	V	9.576	3-1/4"	1-7/8"	57.75	55.24	52.73	50.22
77716	.3860	W	9.804	3-1/4"	1-7/8"	58.77	56.21	53.66	51.10
77721	.3906	25/64"	9.921	3-1/4"	1-7/8"	59.49	56.90	54.32	51.73
77726	.3937		10.000	84	49	61.30	58.63	55.97	53.30
77731	.3970	X	10.084	3-5/16"	1-15/16"	62.79	60.06	57.33	54.60
77736	.4040	Y	10.262	3-5/16"	1-15/16"	63.23	60.48	57.73	54.98
77741	.4062	13/32"	10.317	3-5/16"	1-15/16"	65.18	62.35	59.51	56.68
77746	.4130	Z	10.490	3-3/8"	2"	65.76	62.90	60.04	57.18
77751	.4134		10.500	86	51	65.76	62.90	60.04	57.18
77756	.4219	27/64"	10.716	3-3/8"	2"	66.39	63.50	60.62	57.73
77761	.4331		11.000	87	52	71.27	68.17	65.07	61.97
77766	.4375	7/16"	11.113	3-7/16"	2-1/16"	71.27	68.17	65.07	61.97
77771	.4528		11.500	91	54	76.50	73.17	69.85	66.52
77776	.4531	29/64"	11.509	3-9/16"	2-1/8"	76.50	73.17	69.85	66.52
77781	.4688	15/32"	11.908	3-5/8"	2-1/8"	80.37	76.88	73.38	69.89
77786	.4724		12.000	94	56	80.62	77.11	73.61	70.10
77791	.4844	31/64"	12.304	3-11/16"	2-3/16"	81.17	77.64	74.11	70.58
77796	.4921		12.500	95	56	81.96	78.40	74.83	71.27
77801	.5000	1/2"	12.700	3-3/4"	2-1/4"	82.49	78.90	75.32	71.73

