

Series 1510H

**NEW
ITEM**.0625" - .1575"
(1.588mm - 4.000mm)**TECH
PAGES
324-327****TOLERANCES**

d	+.0000" - .0005" (+.0000 - .0127mm)	
l ₁	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)
l ₂	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)

Recommended for titanium, inconel, hastelloy, waspaloy, and stainless steel

Slow Helix**BALINIT® Durana Coating**

Solid submicron grain carbide drill

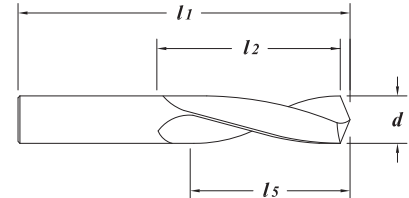
Excellent heat resistance and lubricity

Heavy web for extra rigidity and added strength

Thinned point

Live tooling recommended on lathe processes

Bright Finish - page 63



EDP#	d †		l ₁	l ₂	l ₅	1-11	12-24	25-49	50-100
	Decimal	Metric							
19071	.0625	1/16"	1-3/4"	5/8"	.200"	9.89	9.46	9.03	8.60
19076	.0635	#52	1-3/4"	11/16"	.204"	10.03	9.59	9.16	8.72
19081	.0670	#51	1-3/4"	11/16"	.215"	10.13	9.69	9.25	8.81
19086	.0700	#50	1-3/4"	11/16"	.224"	10.34	9.89	9.44	8.99
19091	.0730	#49	1-3/4"	11/16"	.234"	10.55	10.09	9.63	9.17
19096	.0760	#48	1-3/4"	11/16"	.244"	10.81	10.34	9.87	9.40
19101	.0781	5/64"	1-3/4"	11/16"	.250"	11.14	10.66	10.17	9.69
19106	.0785	#47	1-3/4"	3/4"	.252"	11.44	10.95	10.45	9.95
19116	.0787		45	19	6	11.59	11.09	10.58	10.08
19121	.0810	#46	1-3/4"	3/4"	.260"	11.74	11.23	10.72	10.21
19126	.0820	#45	1-3/4"	3/4"	.263"	12.04	11.52	10.99	10.47
NEW 19128	.0827		45	19	7	12.13	11.61	11.08	10.55
19131	.0860	#44	1-3/4"	3/4"	.276"	12.35	11.81	11.28	10.74
19136	.0890	#43	1-3/4"	3/4"	.285"	12.66	12.11	11.56	11.01
19138	.0906		45	19	7	12.70	12.14	11.59	11.04
19141	.0935	#42	1-3/4"	3/4"	.300"	12.80	12.24	11.69	11.13
19146	.0938	3/32"	1-3/4"	3/4"	.301"	13.06	12.50	11.93	11.36
19148	.0945		46	21	8	13.11	12.54	11.97	11.40
19151	.0960	#41	1-13/16"	13/16"	.308"	13.14	12.57	12.00	11.43
19156	.0980	#40	1-13/16"	13/16"	.314"	13.29	12.72	12.14	11.56
19161	.0984		46	21	8	13.37	12.79	12.21	11.63
19166	.0995	#39	1-13/16"	13/16"	.319"	13.44	12.86	12.27	11.69
19171	.1015	#38	1-13/16"	13/16"	.326"	13.51	12.93	12.34	11.75
19176	.1040	#37	1-13/16"	13/16"	.334"	13.59	13.00	12.41	11.82
19181	.1065	#36	1-13/16"	13/16"	.342"	13.70	13.10	12.51	11.91
19186	.1094	7/64"	1-13/16"	13/16"	.351"	13.78	13.18	12.58	11.98
19191	.1100	#35	1-7/8"	7/8"	.353"	13.83	13.23	12.63	12.03
19196	.1110	#34	1-7/8"	7/8"	.356"	13.97	13.37	12.76	12.15
19201	.1130	#33	1-7/8"	7/8"	.362"	14.05	13.44	12.83	12.22
19206	.1160	#32	1-7/8"	7/8"	.372"	14.15	13.53	12.92	12.30
19211	.1181		48	22	10	14.27	13.65	13.03	12.41
19216	.1200	#31	1-7/8"	7/8"	.385"	14.36	13.74	13.11	12.49
19218	.1220		48	22	10	14.43	13.81	13.18	12.55
19221	.1250	1/8"	1-7/8"	7/8"	.401"	14.52	13.89	13.26	12.63
19226	.1285	#30	1-15/16"	15/16"	.412"	14.85	14.20	13.56	12.91
19231	.1360	#29	1-15/16"	15/16"	.436"	15.17	14.51	13.85	13.19
19236	.1378		49	24	11	15.59	14.92	14.24	13.56
19241	.1405	#28	1-15/16"	15/16"	.451"	15.78	15.09	14.41	13.72
19246	.1406	9/64"	1-15/16"	15/16"	.451"	15.89	15.20	14.51	13.82
19251	.1440	#27	2-1/16"	1"	.462"	17.14	16.39	15.65	14.90
19256	.1470	#26	2-1/16"	1"	.471"	17.30	16.54	15.79	15.04
19261	.1495	#25	2-1/16"	1"	.479"	17.50	16.74	15.98	15.22
19266	.1520	#24	2-1/16"	1"	.487"	17.53	16.76	16.00	15.24
19271	.1540	#23	2-1/16"	1"	.494"	17.62	16.85	16.09	15.32
19276	.1562	5/32"	2-1/16"	1"	.501"	17.71	16.94	16.17	15.40
19281	.1570	#22	2-1/8"	1-1/16"	.504"	18.68	17.86	17.05	16.24
19286	.1575	4.000	54	27	13	18.88	18.06	17.24	16.42

EDP#	d^+ Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	1-11	12-24	25-49	50-100
	Decimal	Metric							
19291	.1590	#21	4.039	2-1/8"	1-1/16"	.510"	19.10	18.27	17.44
19296	.1610	#20	4.089	2-1/8"	1-1/16"	.516"	19.24	18.40	17.57
19301	.1660	#19	4.216	2-1/8"	1-1/16"	.532"	19.93	19.06	18.20
19306	.1695	#18	4.305	2-1/8"	1-1/16"	.544"	20.14	19.26	18.39
19311	.1719	11/64"	4.366	2-1/8"	1-1/16"	.551"	20.52	19.62	18.73
19316	.1730	#17	4.394	2-3/16"	1-1/8"	.555"	20.77	19.87	18.96
19321	.1770	#16	4.496	2-3/16"	1-1/8"	.568"	20.99	20.08	19.16
19326	.1772		4.500	56	29	14	21.07	20.15	19.24
19331	.1800	#15	4.572	2-3/16"	1-1/8"	.577"	21.16	20.24	19.32
19336	.1820	#14	4.623	2-3/16"	1-1/8"	.584"	21.60	20.66	19.72
19341	.1850	#13	4.700	2-3/16"	1-1/8"	.593"	21.76	20.81	19.87
19346	.1875	3/16"	4.763	2-3/16"	1-1/8"	.601"	21.82	20.87	19.92
19351	.1890	#12	4.801	2-1/4"	1-3/16"	.606"	23.99	22.95	21.90
19356	.1910	#11	4.851	2-1/4"	1-3/16"	.613"	24.24	23.19	22.13
19361	.1935	#10	4.915	2-1/4"	1-3/16"	.621"	25.19	24.09	23.00
19366	.1960	#9	4.978	2-1/4"	1-3/16"	.629"	25.75	24.63	23.51
19371	.1969		5.000	57	30	16	25.88	24.75	23.63
19376	.1990	#8	5.055	2-1/4"	1-3/16"	.638"	26.01	24.88	23.75
19381	.2010	#7	5.105	2-1/4"	1-3/16"	.645"	26.68	25.52	24.36
19386	.2031	13/64"	5.159	2-1/4"	1-3/16"	.651"	26.84	25.67	24.51
19391	.2040	#6	5.182	2-3/8"	1-1/4"	.654"	27.32	26.14	24.95
19396	.2055	#5	5.220	2-3/8"	1-1/4"	.659"	27.82	26.61	25.40
19401	.2090	#4	5.309	2-3/8"	1-1/4"	.670"	28.22	26.99	25.77
19406	.2130	#3	5.410	2-3/8"	1-1/4"	.683"	28.67	27.42	26.18
19411	.2165		5.500	60	32	18	28.88	27.62	26.37
19416	.2188	7/32"	5.558	2-3/8"	1-1/4"	.702"	29.05	27.79	26.52
19421	.2210	#2	5.613	2-7/16"	1-5/16"	.709"	29.66	28.37	27.08
19426	.2280	#1	5.791	2-7/16"	1-5/16"	.731"	29.83	28.53	27.24
19431	.2340	A	5.944	2-7/16"	1-5/16"	.750"	29.90	28.60	27.30
19436	.2344	15/64"	5.954	2-7/16"	1-5/16"	.752"	29.93	28.63	27.33
19441	.2362		6.000	64	35	19	30.03	28.72	27.42
19446	.2380	B	6.045	2-1/2"	1-3/8"	.763"	30.13	28.82	27.51
19451	.2420	C	6.147	2-1/2"	1-3/8"	.776"	30.31	29.00	27.68
19456	.2460	D	6.248	2-1/2"	1-3/8"	.789"	30.52	29.19	27.87
19461	.2500	1/4" / E	6.350	2-1/2"	1-3/8"	.802"	30.71	29.37	28.04
19466	.2559		6.500	67	37	21	34.16	32.67	31.19
19471	.2570	F	6.528	2-5/8"	1-7/16"	.824"	34.74	33.23	31.72
19476	.2610	G	6.629	2-5/8"	1-7/16"	.837"	35.32	33.78	32.25
19481	.2656	17/64"	6.746	2-5/8"	1-7/16"	.852"	35.90	34.34	32.78
19486	.2660	H	6.756	2-11/16"	1-1/2"	.853"	36.74	35.15	33.55
19491	.2720	I	6.909	2-11/16"	1-1/2"	.872"	37.09	35.48	33.86
19496	.2756		7.000	68	38	22	37.34	35.72	34.09
19501	.2770	J	7.036	2-11/16"	1-1/2"	.888"	37.63	35.99	34.36
19506	.2810	K	7.137	2-11/16"	1-1/2"	.901"	37.90	36.26	34.61
19511	.2812	9/32"	7.142	2-11/16"	1-1/2"	.902"	38.03	36.38	34.72
19516	.2900	L	7.366	2-3/4"	1-9/16"	.930"	39.22	37.51	35.81
19521	.2950	M	7.493	2-3/4"	1-9/16"	.946"	41.53	39.72	37.92
19526	.2953		7.500	70	40	24	41.53	39.72	37.92
19531	.2969	19/64"	7.541	2-3/4"	1-9/16"	.952"	41.70	39.89	38.07
19536	.3020	N	7.671	2-15/16"	1-5/8"	.989"	43.62	41.72	39.83
19541	.3125	5/16"	7.938	2-15/16"	1-5/8"	1.002"	43.76	41.86	39.95
19546	.3150		8.000	75	43	26	46.47	44.45	42.43
19551	.3160	O	8.026	2-15/16"	1-11/16"	1.013"	46.47	44.45	42.43
19556	.3230	P	8.204	2-15/16"	1-11/16"	1.036"	46.82	44.78	42.75
19561	.3281	21/64"	8.334	2-15/16"	1-11/16"	1.052"	47.06	45.01	42.97
19566	.3320	Q	8.433	3"	1-11/16"	1.065"	48.01	45.93	43.84
19571	.3346		8.500	76	43	27	48.40	46.30	44.19

continued →

Series 1510H (continued)

.3390" - .6299"
(8.611mm - 16.000mm)

EDP#	$d^{\dagger}$ Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	1-11	12-24	25-49	50-100
	Decimal	Metric							
19576	.3390	R	8.611	3"	1-11/16"	1.087"	49.70	47.54	45.38
19581	.3438	11/32"	8.733	3"	1-11/16"	1.103"	51.47	49.24	47.00
19586	.3480	S	8.839	3-1/16"	1-3/4"	1.116"	54.36	52.00	49.63
19591	.3543		9.000	78	44	29	54.67	52.29	49.92
19596	.3580	T	9.093	3-1/16"	1-3/4"	1.148"	54.80	52.42	50.03
19601	.3594	23/64"	9.129	3-1/16"	1-3/4"	1.153"	55.14	52.75	50.35
19606	.3680	U	9.347	3-1/8"	1-13/16"	1.180"	59.56	56.97	54.38
19611	.3740		9.500	79	46	30	60.04	57.43	54.82
19616	.3750	3/8"	9.525	3-1/8"	1-13/16"	1.203"	60.44	57.82	55.19
19621	.3770	V	9.576	3-1/4"	1-7/8"	1.209"	62.71	59.98	57.26
19626	.3860	W	9.804	3-1/4"	1-7/8"	1.238"	63.80	61.03	58.25
19631	.3906	25/64"	9.921	3-1/4"	1-7/8"	1.253"	64.60	61.79	58.98
19636	.3937		10.000	84	49	32	66.56	63.67	60.77
19641	.3970	X	10.084	3-5/16"	1-15/16"	1.273"	68.24	65.27	62.31
19646	.4040	Y	10.262	3-5/16"	1-15/16"	1.296"	68.71	65.73	62.74
19651	.4062	13/32"	10.317	3-5/16"	1-15/16"	1.303"	70.81	67.73	64.65
19656	.4130	Z	10.490	3-3/8"	2"	1.325"	71.47	68.37	65.26
19661	.4134		10.500	86	51	34	71.47	68.37	65.26
19666	.4219	27/64"	10.716	3-3/8"	2"	1.353"	72.14	69.00	65.87
19671	.4331		11.000	87	52	35	77.50	74.13	70.76
19676	.4375	7/16"	11.113	3-7/16"	2-1/16"	1.403"	77.50	74.13	70.76
19681	.4528		11.500	91	54	37	83.21	79.60	75.98
19686	.4531	29/64"	11.509	3-9/16"	2-1/8"	1.453"	83.21	79.60	75.98
19691	.4688	15/32"	11.908	3-5/8"	2-1/8"	1.503"	87.43	83.63	79.83
19696	.4724		12.000	94	56	38	87.72	83.91	80.09
19701	.4844	31/64"	12.304	3-11/16"	2-3/16"	1.554"	88.32	84.48	80.64
19706	.4921		12.500	95	56	40	89.22	85.34	81.46
19711	.5000	1/2"	12.700	3-3/4"	2-1/4"	1.604"	89.79	85.89	81.98
19716	.5118		13.000	107	60	42	118.91	113.74	108.57
19721	.5156	33/64"	13.096	4-1/4"	2-3/8"	1.654"	121.70	116.41	111.12
19726	.5312	17/32"	13.492	4-1/4"	2-3/8"	1.704"	124.50	119.09	113.67
19731	.5315		13.500	107	60	43	127.31	121.77	116.24
19736	.5469	35/64"	13.891	4-1/4"	2-3/8"	1.754"	130.09	124.43	118.78
19741	.5512		14.000	107	60	45	132.93	127.15	121.37
19746	.5625	9/16"	14.287	4-1/2"	2-1/2"	1.804"	143.65	137.40	131.16
19751	.5709		14.500	115	65	47	146.34	139.98	133.61
19756	.5781	37/64"	14.683	4-1/2"	2-1/2"	1.854"	149.03	142.55	136.07
19761	.5906		15.000	115	65	48	151.77	145.17	138.57
19766	.5938	19/32"	15.082	4-1/2"	2-1/2"	1.904"	152.56	145.93	139.29
19771	.6094	39/64"	15.478	4-1/2"	2-1/2"	1.954"	153.34	146.67	140.01
19776	.6102		15.500	115	65	50	154.12	147.42	140.72
19781	.6250	5/8"	15.875	4-1/2"	2-1/2"	2.004"	154.92	148.18	141.45
19786	.6299		16.000	115	65	51	158.67	151.77	144.87