

TOLERANCES

d1*	3mm - 6mm	+0.016 +0.004mm (+.00063" +.00015")
	> 6mm - 10mm	+0.021 +0.006mm (+.00082" +.00023")
	> 10mm - 18mm	+0.025 +0.007mm (+.00098" +.00027")
	> 18mm - 20mm	+0.029 +0.008mm (+.00114" +.00031")
d2	6mm	+0.000 -0.008mm (+.00000" - .00030")
	8mm - 10mm	+0.000 -0.009mm (+.00000" - .00035")
	12mm - 18mm	+0.000 -0.011mm (+.00000" - .00040")
	20mm	+0.000 -0.013mm (+.00000" - .00050")



Series 1580HD

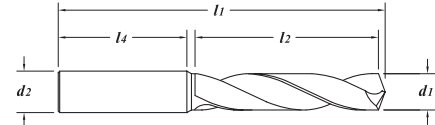
.1181" - .2342"
(3.000mm - 5.950mm)

HIGH PERFORMANCE DRILLS

Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

- High performance solid submicron grain carbide drill with reinforced shank
- Up to 50% faster than standard carbide drills
- 30° helix for better chip evacuation
- Honed cutting edge
- Can be used as a pilot drill
- Live tooling recommended on lathe processes



** Note - These drills are made to a plus/plus tolerance on the drill diameter. If you are in need of a minus tolerance drill, please refer to our other high performance drills.*

EDP#	d1 Diameter		d2 Shank Diameter	l1 Overall Length	l2 Flute Length	l4 Shank Length	1-11	12-24	25-49	50-100
	Decimal	Metric								
20085	.1181	3.000	6.0	62	20	36	43.25	41.37	39.49	37.61
20095	.1220	3.100	6.0	62	20	36	43.25	41.37	39.49	37.61
20105	.1248	3.170	6.0	62	20	36	43.25	41.37	39.49	37.61
20115	.1260	3.200	6.0	62	20	36	43.25	41.37	39.49	37.61
20125	.1280	3.250	6.0	62	20	36	43.25	41.37	39.49	37.61
20135	.1299	3.300	6.0	62	20	36	43.25	41.37	39.49	37.61
20145	.1339	3.400	6.0	62	20	36	43.25	41.37	39.49	37.61
20155	.1378	3.500	6.0	62	20	36	43.25	41.37	39.49	37.61
20165	.1417	3.600	6.0	62	20	36	43.25	41.37	39.49	37.61
20175	.1457	3.700	6.0	62	20	36	43.25	41.37	39.49	37.61
20185	.1476	3.750	6.0	62	20	36	43.25	41.37	39.49	37.61
20195	.1496	3.800	6.0	66	24	36	43.25	41.37	39.49	37.61
20205	.1535	3.900	6.0	66	24	36	43.25	41.37	39.49	37.61
20215	.1575	4.000	6.0	66	24	36	43.25	41.37	39.49	37.61
20225	.1614	4.100	6.0	66	24	36	43.25	41.37	39.49	37.61
20235	.1654	4.200	6.0	66	24	36	43.25	41.37	39.49	37.61
20245	.1673	4.250	6.0	66	24	36	43.25	41.37	39.49	37.61
20255	.1693	4.300	6.0	66	24	36	43.25	41.37	39.49	37.61
20265	.1732	4.400	6.0	66	24	36	43.25	41.37	39.49	37.61
20275	.1772	4.500	6.0	66	24	36	43.25	41.37	39.49	37.61
20285	.1811	4.600	6.0	66	24	36	43.25	41.37	39.49	37.61
20295	.1831	4.650	6.0	66	24	36	43.25	41.37	39.49	37.61
20305	.1850	4.700	6.0	66	24	36	43.25	41.37	39.49	37.61
20315	.1870	4.750	6.0	66	24	36	43.25	41.37	39.49	37.61
20325	.1890	4.800	6.0	66	28	36	43.25	41.37	39.49	37.61
20335	.1929	4.900	6.0	66	28	36	43.25	41.37	39.49	37.61
20345	.1969	5.000	6.0	66	28	36	43.25	41.37	39.49	37.61
20355	.2008	5.100	6.0	66	28	36	43.25	41.37	39.49	37.61
20365	.2027	5.150	6.0	66	28	36	43.25	41.37	39.49	37.61
20375	.2047	5.200	6.0	66	28	36	43.25	41.37	39.49	37.61
20385	.2087	5.300	6.0	66	28	36	43.25	41.37	39.49	37.61
20395	.2165	5.500	6.0	66	28	36	43.25	41.37	39.49	37.61
20405	.2185	5.550	6.0	66	28	36	43.25	41.37	39.49	37.61
20408	.2205	5.600	6.0	66	28	36	43.25	41.37	39.49	37.61
20412	.2244	5.700	6.0	66	28	36	43.25	41.37	39.49	37.61
20415	.2283	5.800	6.0	66	28	36	43.25	41.37	39.49	37.61
20425	.2323	5.900	6.0	66	28	36	43.25	41.37	39.49	37.61
20435	.2342	5.950	6.0	66	28	36	43.25	41.37	39.49	37.61

continued →

Series 1580HD (continued)

.2362" - .4252"
(6.000mm - 10.800mm)

EDP#	d1 Diameter		d2 Shank Diameter	l1 Overall Length	l2 Flute Length	l4 Shank Length	1-11	12-24	25-49	50-100
	Decimal	Metric								
20445	.2362	6.000	6.0	66	28	36	43.25	41.37	39.49	37.61
20448	.2402	6.100	8.0	79	34	36	59.50	56.91	54.33	51.74
20452	.2441	6.200	8.0	79	34	36	59.50	56.91	54.33	51.74
20454	.2480	6.300	8.0	79	34	36	59.50	56.91	54.33	51.74
20455	.2500	6.350	8.0	79	34	36	59.50	56.91	54.33	51.74
20462	.2520	6.400	8.0	79	34	36	59.50	56.91	54.33	51.74
20465	.2559	6.500	8.0	79	34	36	59.50	56.91	54.33	51.74
20468	.2571	6.530	8.0	79	34	36	59.50	56.91	54.33	51.74
20472	.2598	6.600	8.0	79	34	36	59.50	56.91	54.33	51.74
20473	.2638	6.700	8.0	79	34	36	59.50	56.91	54.33	51.74
20475	.2657	6.750	8.0	79	34	36	59.50	56.91	54.33	51.74
20485	.2677	6.800	8.0	79	34	36	59.50	56.91	54.33	51.74
20495	.2717	6.900	8.0	79	34	36	59.50	56.91	54.33	51.74
20505	.2756	7.000	8.0	79	34	36	59.50	56.91	54.33	51.74
20515	.2795	7.100	8.0	79	41	36	59.50	56.91	54.33	51.74
20525	.2815	7.150	8.0	79	41	36	59.50	56.91	54.33	51.74
20535	.2835	7.200	8.0	79	41	36	59.50	56.91	54.33	51.74
20542	.2874	7.300	8.0	79	41	36	59.50	56.91	54.33	51.74
20545	.2913	7.400	8.0	79	41	36	59.50	56.91	54.33	51.74
20555	.2953	7.500	8.0	79	41	36	59.50	56.91	54.33	51.74
20565	.2972	7.550	8.0	79	41	36	59.50	56.91	54.33	51.74
20575	.2992	7.600	8.0	79	41	36	59.50	56.91	54.33	51.74
20585	.3031	7.700	8.0	79	41	36	59.50	56.91	54.33	51.74
20595	.3071	7.800	8.0	79	41	36	59.50	56.91	54.33	51.74
20605	.3130	7.950	8.0	79	41	36	59.50	56.91	54.33	51.74
20615	.3150	8.000	8.0	79	41	36	59.50	56.91	54.33	51.74
20622	.3189	8.100	10.0	89	47	40	82.79	79.19	75.59	71.99
20625	.3228	8.200	10.0	89	47	40	82.79	79.19	75.59	71.99
20635	.3268	8.300	10.0	89	47	40	82.79	79.19	75.59	71.99
20645	.3287	8.350	10.0	89	47	40	82.79	79.19	75.59	71.99
20652	.3307	8.400	10.0	89	47	40	82.79	79.19	75.59	71.99
20655	.3346	8.500	10.0	89	47	40	82.79	79.19	75.59	71.99
20665	.3386	8.600	10.0	89	47	40	82.79	79.19	75.59	71.99
20675	.3425	8.700	10.0	89	47	40	82.79	79.19	75.59	71.99
20685	.3445	8.750	10.0	89	47	40	82.79	79.19	75.59	71.99
20695	.3465	8.800	10.0	89	47	40	82.79	79.19	75.59	71.99
20705	.3504	8.900	10.0	89	47	40	82.79	79.19	75.59	71.99
20715	.3543	9.000	10.0	89	47	40	82.79	79.19	75.59	71.99
20725	.3583	9.100	10.0	89	47	40	82.79	79.19	75.59	71.99
20735	.3602	9.150	10.0	89	47	40	82.79	79.19	75.59	71.99
20745	.3622	9.200	10.0	89	47	40	82.79	79.19	75.59	71.99
20755	.3661	9.300	10.0	89	47	40	82.79	79.19	75.59	71.99
20762	.3701	9.400	10.0	89	47	40	82.79	79.19	75.59	71.99
20765	.3740	9.500	10.0	89	47	40	82.79	79.19	75.59	71.99
20775	.3760	9.550	10.0	89	47	40	82.79	79.19	75.59	71.99
20778	.3780	9.600	10.0	89	47	40	82.79	79.19	75.59	71.99
20782	.3819	9.700	10.0	89	47	40	82.79	79.19	75.59	71.99
20785	.3858	9.800	10.0	89	47	40	82.79	79.19	75.59	71.99
20795	.3898	9.900	10.0	89	47	40	82.79	79.19	75.59	71.99
20805	.3937	10.000	10.0	89	47	40	82.79	79.19	75.59	71.99
20812	.3976	10.100	12.0	102	55	45	107.71	103.03	98.34	93.66
20815	.4016	10.200	12.0	102	55	45	107.71	103.03	98.34	93.66
20825	.4055	10.300	12.0	102	55	45	107.71	103.03	98.34	93.66
20835	.4134	10.500	12.0	102	55	45	107.71	103.03	98.34	93.66
20842	.4173	10.600	12.0	102	55	45	107.71	103.03	98.34	93.66
20845	.4213	10.700	12.0	102	55	45	107.71	103.03	98.34	93.66
20855	.4252	10.800	12.0	102	55	45	107.71	103.03	98.34	93.66

Series 1580HD (continued)

.4331" - .7590"
(11.000mm - 19.280mm)

HIGH PERFORMANCE
DRILLS

EDP#	<i>d1</i> Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>l4</i> Shank Length	1-11	12-24	25-49	50-100
	Decimal	Metric								
20865	.4331	11.000	12.0	102	55	45	107.71	103.03	98.34	93.66
20875	.4370	11.100	12.0	102	55	45	107.71	103.03	98.34	93.66
20885	.4409	11.200	12.0	102	55	45	107.71	103.03	98.34	93.66
20892	.4488	11.400	12.0	102	55	45	107.71	103.03	98.34	93.66
20895	.4528	11.500	12.0	102	55	45	107.71	103.03	98.34	93.66
20905	.4606	11.700	12.0	102	55	45	107.71	103.03	98.34	93.66
20915	.4685	11.900	12.0	102	55	45	107.71	103.03	98.34	93.66
20925	.4724	12.000	12.0	102	55	45	107.71	103.03	98.34	93.66
20935	.4764	12.100	14.0	107	60	45	135.08	129.21	123.33	117.46
20941	.4803	12.200	14.0	107	60	45	135.08	129.21	123.33	117.46
20945	.4842	12.300	14.0	107	60	45	135.08	129.21	123.33	117.46
20955	.4921	12.500	14.0	107	60	45	135.08	129.21	123.33	117.46
20961	.4961	12.600	14.0	107	60	45	135.08	129.21	123.33	117.46
20965	.5000	12.700	14.0	107	60	45	135.08	129.21	123.33	117.46
20975	.5039	12.800	14.0	107	60	45	135.08	129.21	123.33	117.46
20978	.5051	12.830	14.0	107	60	45	135.08	129.21	123.33	117.46
20981	.5079	12.900	14.0	107	60	45	135.08	129.21	123.33	117.46
20982	.5098	12.950	14.0	107	60	45	135.08	129.21	123.33	117.46
20985	.5118	13.000	14.0	107	60	45	135.08	129.21	123.33	117.46
20998	.5236	13.300	14.0	107	60	45	135.08	129.21	123.33	117.46
21005	.5315	13.500	14.0	107	60	45	135.08	129.21	123.33	117.46
21015	.5394	13.700	14.0	107	60	45	135.08	129.21	123.33	117.46
21025	.5433	13.800	14.0	107	60	45	135.08	129.21	123.33	117.46
21035	.5512	14.000	14.0	107	60	45	135.08	129.21	123.33	117.46
21045	.5551	14.100	16.0	115	65	48	160.55	153.57	146.59	139.61
21053	.5591	14.200	16.0	115	65	48	160.55	153.57	146.59	139.61
21055	.5610	14.250	16.0	115	65	48	160.55	153.57	146.59	139.61
21065	.5630	14.300	16.0	115	65	48	160.55	153.57	146.59	139.61
21075	.5709	14.500	16.0	115	65	48	160.55	153.57	146.59	139.61
21085	.5787	14.700	16.0	115	65	48	160.55	153.57	146.59	139.61
21105	.5906	15.000	16.0	115	65	48	160.55	153.57	146.59	139.61
21115	.5945	15.100	16.0	115	65	48	160.55	153.57	146.59	139.61
21125	.6102	15.500	16.0	115	65	48	160.55	153.57	146.59	139.61
21135	.6181	15.700	16.0	115	65	48	160.55	153.57	146.59	139.61
21145	.6220	15.800	16.0	115	65	48	160.55	153.57	146.59	139.61
21155	.6299	16.000	16.0	115	65	48	160.55	153.57	146.59	139.61
21159	.6331	16.080	18.0	123	73	48	213.10	203.83	194.57	185.30
21161	.6339	16.100	18.0	123	73	48	213.10	203.83	194.57	185.30
21163	.6378	16.200	18.0	123	73	48	213.10	203.83	194.57	185.30
21175	.6496	16.500	18.0	123	73	48	213.10	203.83	194.57	185.30
21185	.6555	16.650	18.0	123	73	48	213.10	203.83	194.57	185.30
21195	.6693	17.000	18.0	123	73	48	213.10	203.83	194.57	185.30
21215	.6870	17.450	18.0	123	73	48	213.10	203.83	194.57	185.30
21225	.6890	17.500	18.0	123	73	48	213.10	203.83	194.57	185.30
21235	.7027	17.850	18.0	123	73	48	213.10	203.83	194.57	185.30
21245	.7087	18.000	18.0	123	73	48	213.10	203.83	194.57	185.30
21255	.7185	18.250	20.0	131	79	50	291.82	279.14	266.45	253.76
21265	.7283	18.500	20.0	131	79	50	291.82	279.14	266.45	253.76
21275	.7342	18.650	20.0	131	79	50	291.82	279.14	266.45	253.76
21295	.7500	19.050	20.0	131	79	50	291.82	279.14	266.45	253.76
21297	.7520	19.100	20.0	131	79	50	291.82	279.14	266.45	253.76
21298	.7539	19.150	20.0	131	79	50	291.82	279.14	266.45	253.76
21299	.7559	19.200	20.0	131	79	50	291.82	279.14	266.45	253.76
21303	.7590	19.280	20.0	131	79	50	291.82	279.14	266.45	253.76

continued →

Series 1580HD (continued)

.7598" - .7874"
(19.300mm - 20.000mm)

EDP#	$d1$		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	$l4$ Shank Length	1-11	12-24	25-49	50-100
	Decimal Diameter	Metric Diameter								
21304	.7598	19.300	20.0	131	79	50	291.82	279.14	266.45	253.76
21305	.7638	19.400	20.0	131	79	50	291.82	279.14	266.45	253.76
21315	.7677	19.500	20.0	131	79	50	291.82	279.14	266.45	253.76
21323	.7795	19.800	20.0	131	79	50	291.82	279.14	266.45	253.76
21325	.7815	19.850	20.0	131	79	50	291.82	279.14	266.45	253.76
21335	.7874	20.000	20.0	131	79	50	291.82	279.14	266.45	253.76



Blank Prep