

HPC COBALT HIGH PERFORMANCE WIDE LAND PARABOLIC FLUTE DRILLS



130° Self-Centering Point • 38° Helix Angle
Special Web Thinning • Heavy-Duty Web

AVAILABLE IN: **M35** Cobalt High Speed Steel
 TiN — Titanium Nitride Coated
 TiALN — Titanium Aluminum Nitride Coated

PARABOLIC FLUTE DRILLS

Feature a unique flute design that greatly enhances chip flow, coolant flow to the drill point and heat dissipation. Recommended for Deep Hole Drilling greater than three diameters deep without the need to reduce feed rate or withdraw the drill to clear chips (a constant heavy feed rate is recommended).

WIDE LAND PARABOLIC FLUTE DRILLS

The next generation in parabolic flute design, are effective in a wider range of materials and applications than standard parabolic flute drills. An Enhanced Flute Design with reinforced web provides increased drill strength and rigidity, straighter closer tolerance holes, improved chip formation and evacuation, improved coolant flow to the drill point and higher speeds and feeds for increased productivity.

PREMIUM M35 COBALT STEEL

Offers increased hardness, toughness, wear resistance and heat resistance. Highly recommended for drilling tough, high tensile strength materials up to 35 Rc hardness and materials that generate higher cutting temperatures. Applications include high alloy steels, ferrous castings, titanium, inconel, stainless steels and other difficult-to-drill materials.

TiN — TITANIUM NITRIDE COATING

An excellent all around coating, offers increased hardness and wear resistance, improved heat resistance, high lubricity, reduced edge build-up, improved surface finish and higher speeds and feeds. Increase productivity and tool life.

TiALN — TITANIUM ALUMINUM NITRIDE COATING

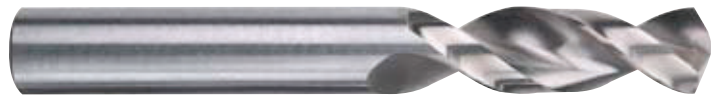
Is especially recommended for high thermal stress applications including dry machining, abrasive materials and hard-to-machine materials which generate higher cutting temperatures. TiALN actually forms a hard aluminum oxide layer in hot dry machining applications which reflects heat back into the chip and away from the tool while allowing higher speeds and feeds. High productivity with increased tool life.

Screw Machine Length HPC Cobalt High Performance Wide Land Parabolic Flute Drills

Short flute length and short overall length for maximum rigidity

Foret à haut rendement

Broca de alto rendimiento



List No. 1360 Bright Finish

List No. 1360G TiN — Titanium Nitride Coated

List No. 1360T TiAlN — Titanium Aluminum Nitride Coated

Speeds & Feeds: Page 27

Fract.	Size			Dec. Equiv.	Flute Length MM	OAL MM	List No. 1360	List No. 1360G	List No. 1360T
	Wire	Letter	Metric				Bright Finish	TiN Coated	TiAlN Coated
							EDP No.	EDP No.	EDP No.
5/64	—	—	—	0.0780	12	38	12185	91500	60000
—	47	—	—	0.0783	12	38	12186	91501	60001
—	—	—	2.00	0.0787	12	38	12187	91502	60002
—	46	—	—	0.0810	12	38	12188	91503	60003
—	45	—	—	0.0820	12	38	12189	91504	60004
—	—	—	2.10	0.0827	12	38	12190	91505	60005
—	44	—	—	0.0860	13	40	12191	91506	60006
—	—	—	2.20	0.0866	13	40	12192	91507	60007
—	43	—	—	0.0890	13	40	12193	91508	60008
—	—	—	2.30	0.0906	13	40	12194	91509	60009
—	42	—	—	0.0935	14	43	12195	91510	60010
3/32	—	—	—	0.0938	14	43	12196	91511	60011
—	—	—	2.40	0.0945	14	43	12197	91512	60012
—	41	—	—	0.0960	14	43	12198	91513	60013
—	40	—	—	0.0980	14	43	12199	91514	60014
—	—	—	2.50	0.0984	14	43	12200	91515	60015
—	39	—	—	0.0995	14	43	12201	91516	60016
—	38	—	—	0.1015	14	43	12202	91517	60017
—	—	—	2.60	0.1024	14	43	12203	91518	60018
—	37	—	—	0.1040	14	43	12204	91519	60019
—	—	—	2.70	0.1063	16	46	12205	91520	60020
—	36	—	—	0.1067	16	46	12206	91521	60021
7/64	—	—	—	0.1094	16	46	12207	91522	60022
—	35	—	—	0.1100	16	46	12208	91523	60023
—	—	—	2.80	0.1102	16	46	12209	91524	60024
—	34	—	—	0.1110	16	46	12210	91525	60025
—	33	—	—	0.1130	16	46	12211	91526	60026
—	—	—	2.90	0.1142	16	46	12212	91527	60027
—	32	—	—	0.1160	16	46	12213	91528	60028
—	—	—	3.00	0.1181	16	46	12214	91529	60029
—	31	—	—	0.1200	18	49	12215	91530	60030
—	—	—	3.10	0.1220	18	49	12216	91531	60031
1/8	—	—	—	0.1250	18	49	12217	91532	60032
—	—	—	3.20	0.1260	18	49	12218	91533	60033
—	30	—	—	0.1285	18	49	12219	91534	60034
—	—	—	3.30	0.1299	18	49	12220	91535	60035
—	—	—	3.40	0.1339	20	52	12221	91536	60036
—	29	—	—	0.1360	20	52	12222	91537	60037
—	—	—	3.50	0.1378	20	52	12223	91538	60038
9/64	—	—	—	0.1406	20	52	12224	91539	60039
—	28	—	—	0.1405	20	52	12225	91540	60040
—	—	—	3.60	0.1417	20	52	12226	91541	60041
—	27	—	—	0.1440	20	52	12227	91542	60042
—	—	—	3.70	0.1457	20	52	12228	91543	60043
—	26	—	—	0.1470	20	52	12229	91544	60044
—	25	—	—	0.1495	22	55	12230	91545	60045

HPC High Performance Drills

Screw Machine Length HPC Cobalt High Performance Wide Land Parabolic Flute Drills

Short flute length and short overall length for maximum rigidity

Foret à haut rendement

Broca de alto rendimiento



- List No. 1360 Bright Finish
- List No. 1360G TiN — Titanium Nitride Coated
- List No. 1360T TiALN — Titanium Aluminum Nitride Coated

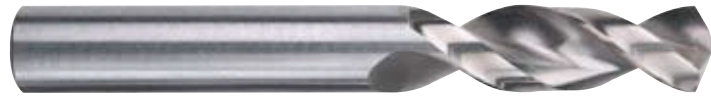
Fract.	Size			Dec. Equiv.	Flute Length MM	OAL MM	List No. 1360	List No. 1360G	List No. 1360T
	Wire	Letter	Metric				Bright Finish	TiN Coated	TiALN Coated
							EDP No.	EDP No.	EDP No.
—	24	—	—	0.1520	22	55	12231	91546	60046
—	—	—	3.90	0.1535	22	55	12232	91547	60047
—	23	—	—	0.1540	22	55	12233	91548	60048
5/32	—	—	—	0.1562	22	55	12234	91549	60049
—	22	—	—	0.1570	22	55	12235	91550	60050
—	—	—	4.00	0.1575	22	55	12236	91551	60051
—	21	—	—	0.1590	22	55	12237	91552	60052
—	20	—	—	0.1610	22	55	12238	91553	60053
—	—	—	4.10	0.1614	22	55	12239	91554	60054
—	—	—	4.20	0.1654	22	55	12240	91555	60055
—	19	—	—	0.1660	22	55	12241	91556	60056
—	—	—	4.30	0.1693	24	58	12242	91557	60057
—	18	—	—	0.1695	24	58	12243	91558	60058
11/64	—	—	—	0.1719	24	58	12244	91559	60059
—	17	—	—	0.1730	24	58	12245	91560	60060
—	—	—	4.40	0.1732	24	58	12246	91561	60061
—	16	—	—	0.1770	24	58	12247	91562	60062
—	—	—	4.50	0.1772	24	58	12248	91563	60063
—	15	—	—	0.1800	24	58	12249	91564	60064
—	—	—	4.60	0.1811	24	58	12250	91565	60065
—	14	—	—	0.1820	24	58	12251	91566	60066
—	13	—	—	0.1850	24	58	12252	91567	60067
—	—	—	4.70	0.1850	24	58	12253	91568	60068
3/16	—	—	—	0.1875	26	62	12254	91569	60069
—	—	—	4.80	0.1890	26	62	12255	91570	60070
—	12	—	—	0.1890	26	62	12256	91571	60071
—	11	—	—	0.1910	26	62	12257	91572	60072
—	—	—	4.90	0.1929	26	62	12258	91573	60073
—	10	—	—	0.1935	26	62	12259	91574	60074
—	9	—	—	0.1960	26	62	12260	91575	60075
—	—	—	5.00	0.1969	26	62	12261	91576	60076
—	8	—	—	0.1990	26	62	12262	91577	60077
—	—	—	5.10	0.2008	26	62	12263	91578	60078
—	7	—	—	0.2010	26	62	12264	91579	60079
13/64	—	—	—	0.2031	26	62	12265	91580	60080
—	6	—	—	0.2040	26	62	12266	91581	60081
—	—	—	5.20	0.2047	26	62	12267	91582	60082
—	5	—	—	0.2055	26	62	12268	91583	60083
—	—	—	5.30	0.2087	26	62	12269	91584	60084
—	4	—	—	0.2090	28	66	12270	91585	60085
—	—	—	5.40	0.2126	28	66	12271	91586	60086
—	3	—	—	0.2130	28	66	12272	91587	60087
—	—	—	5.50	0.2165	28	66	12273	91588	60088
7/32	—	—	—	0.2188	28	66	12274	91589	60089
—	—	—	5.60	0.2205	28	66	12275	91590	60090
—	2	—	—	0.2210	28	66	12276	91591	60091

Screw Machine Length HPC Cobalt High Performance Wide Land Parabolic Flute Drills

Short flute length and short overall length for maximum rigidity

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List No. 1360G TiN — Titanium Nitride Coated

List No. 1360T TiALN — Titanium Aluminum Nitride Coated

Speeds & Feeds: Page 27

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							EDP No.	EDP No.	EDP No.
—	—	—	5.70	0.2244	28	66	12277	91592	60092
—	1	—	—	0.2280	28	66	12278	91593	60093
—	—	—	5.80	0.2283	28	66	12279	91594	60094
—	—	—	5.90	0.2323	28	66	12280	91595	60095
15/64	—	—	—	0.2344	28	66	12281	91596	60096
—	—	—	6.00	0.2362	28	66	12282	91597	60097
—	—	—	6.10	0.2402	31	70	12283	91598	60098
—	—	—	6.20	0.2441	31	70	12284	91599	60099
—	—	—	6.30	0.2480	31	70	12285	91600	60100
1/4	—	—	—	0.2500	31	70	12286	91601	60101
—	—	—	6.40	0.2520	31	70	12287	91602	60102
—	—	—	6.50	0.2559	31	70	12288	91603	60103
—	—	—	6.60	0.2598	31	70	12289	91604	60104
—	—	—	6.70	0.2638	31	70	12290	91605	60105
17/64	—	—	—	0.2656	34	74	12291	91606	60106
—	—	—	6.80	0.2677	34	74	12292	91607	60107
—	—	—	6.90	0.2717	34	74	12293	91608	60108
—	—	—	7.00	0.2756	34	74	12294	91609	60109
—	—	—	7.10	0.2795	34	74	12295	91610	60110
9/32	—	—	—	0.2812	34	74	12296	91611	60111
—	—	—	7.20	0.2835	34	74	12297	91612	60112
—	—	—	7.30	0.2874	34	74	12298	91613	60113
—	—	—	7.40	0.2913	34	74	12299	91614	60114
—	—	—	7.50	0.2953	34	74	12300	91615	60115
19/64	—	—	—	0.2969	37	79	12301	91616	60116
—	—	—	7.60	0.2992	37	79	12302	91617	60117
—	—	—	7.70	0.3031	37	79	12303	91618	60118
—	—	—	7.80	0.3071	37	79	12304	91619	60119
—	—	—	7.90	0.3110	37	79	12305	91620	60120
5/16	—	—	—	0.3125	37	79	12306	91621	60121
—	—	—	8.00	0.3150	37	79	12307	91622	60122
—	—	—	8.10	0.3189	37	79	12308	91623	60123
—	—	—	8.20	0.3228	37	79	12309	91624	60124
—	—	—	8.30	0.3268	37	79	12310	91625	60125
21/64	—	—	—	0.3281	37	79	12311	91626	60126
—	—	—	8.40	0.3307	37	79	12312	91627	60127
—	—	—	8.50	0.3346	37	79	12313	91628	60128
—	—	—	8.60	0.3386	40	84	12314	91629	60129
—	—	—	8.70	0.3425	40	84	12315	91630	60130
11/32	—	—	—	0.3438	40	84	12316	91631	60131
—	—	—	8.80	0.3465	40	84	12317	91632	60132
—	—	—	8.90	0.3504	40	84	12318	91633	60133
—	—	—	9.00	0.3543	40	84	12319	91634	60134
—	—	—	9.10	0.3583	40	84	12320	91635	60135
23/64	—	—	—	0.3594	40	84	12321	91636	60136
—	—	—	9.20	0.3622	40	84	12322	91637	60137

HPC High Performance Drills

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—	—	—	9.30	0.3661	40	84	12323	91638	60138
—	—	—	9.40	0.3701	40	84	12324	91639	60139
—	—	—	9.50	0.3740	40	84	12325	91640	60140
3/8	—	—	—	0.3750	43	89	12326	91641	60141
—	—	—	9.60	0.3780	43	89	12327	91642	60142
—	—	—	9.70	0.3819	43	89	12328	91643	60143
—	—	—	9.80	0.3858	43	89	12329	91644	60144
—	—	—	9.90	0.3898	43	89	12330	91645	60145
25/64	—	—	—	0.3906	43	89	12331	91646	60146
—	—	—	10.00	0.3937	43	89	12332	91647	60147
13/32	—	—	—	0.4062	43	89	12333	91648	60148
27/64	—	—	—	0.4219	47	95	12334	91649	60149
7/16	—	—	—	0.4375	47	95	12335	91650	60150
29/64	—	—	—	0.4531	47	95	12336	91651	60151
15/32	—	—	—	0.4688	51	102	12337	91652	60152
31/64	—	—	—	0.4844	51	102	12338	91653	60153
1/2	—	—	—	0.5000	51	102	12339	91654	60154

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