



Nirodrills

HAM Nirodrill



Precision - Quality - Progress

HAM Nirodrill – particularly suitable for machining of stainless steel materials.

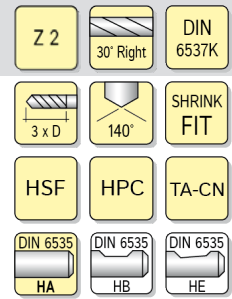
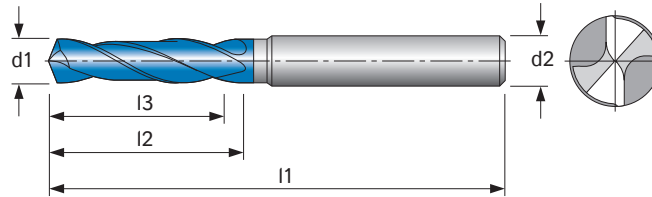
HAM 30-1891 Nirodrill

Solid Carbide Twist Drill

3 X D

Engineering Data

- special chip flute geometry
- special point ground for machining of stainless steel
- 30° RH helix



Material	Alu	Alu > 9% Silicon	Steel < 23 Rockwell	Steel < 38 Rockwell	Steel < 48 Rockwell	Steel < 55 Rockwell	Steel < 60 Rockwell	Steel < 66 Rockwell	Stain ST < 23 Rockwell	Stain ST > 23 Rockwell	Cast Iron	Nodular Ductile Cast Iron	Super Alloy Metals	Titanium	Copper & Nonferrous Metals	Graphit. & Fiber Composites	MMS	Max.	None	AIR
30-1891	●	●							●	●	○		○	●	●	○	●	●		

● very suitable ○ suitable

30-1891 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
2.00		0.0787	0.39	0.55	1.81	10.00	14.00	46.00	4
2.20		0.0866	0.39	0.55	1.81	10.00	14.00	46.00	4
2.30		0.0906	0.39	0.55	1.81	10.00	14.00	46.00	4
2.38	3/32	0.0937	0.39	0.55	1.81	10.00	14.00	46.00	4
2.40		0.0945	0.39	0.55	1.81	10.00	14.00	46.00	4
2.50		0.0984	0.39	0.55	1.81	10.00	14.00	46.00	4
2.55		0.1004	0.55	0.79	1.97	14.00	20.00	50.00	4
2.70		0.1063	0.55	0.79	1.97	14.00	20.00	50.00	4
2.78	7/64	0.1094	0.55	0.79	2.44	14.00	20.00	62.00	6
2.80		0.1102	0.55	0.79	2.44	14.00	20.00	62.00	6
2.90		0.1141	0.55	0.79	2.44	14.00	20.00	62.00	6
3.00		0.1181	0.55	0.79	2.44	14.00	20.00	62.00	6
3.10		0.1220	0.55	0.79	2.44	14.00	20.00	62.00	6
3.17	1/8	0.1250	0.55	0.79	2.44	14.00	20.00	62.00	6
3.20		0.1260	0.55	0.79	2.44	14.00	20.00	62.00	6
3.25		0.1280	0.55	0.79	2.44	14.00	20.00	62.00	6
3.30		0.1299	0.55	0.79	2.44	14.00	20.00	62.00	6
3.40		0.1339	0.55	0.79	2.44	14.00	20.00	62.00	6
3.50		0.1378	0.55	0.79	2.44	14.00	20.00	62.00	6
3.57	9/64	0.1406	0.55	0.79	2.44	14.00	20.00	62.00	6
3.60		0.1417	0.55	0.79	2.44	14.00	20.00	62.00	6
3.65		0.1437	0.55	0.79	2.44	14.00	20.00	62.00	6
3.70		0.1457	0.55	0.79	2.44	14.00	20.00	62.00	6
3.80		0.1496	0.67	0.94	2.60	17.00	24.00	66.00	6
3.90		0.1535	0.67	0.94	2.60	17.00	24.00	66.00	6
3.97	5/32	0.1562	0.67	0.94	2.60	17.00	24.00	66.00	6
4.00		0.1575	0.67	0.94	2.60	17.00	24.00	66.00	6
4.10		0.1614	0.67	0.94	2.60	17.00	24.00	66.00	6
4.20		0.1654	0.67	0.94	2.60	17.00	24.00	66.00	6
4.30		0.1693	0.67	0.94	2.60	17.00	24.00	66.00	6
4.37	11/64	0.1718	0.67	0.94	2.60	17.00	24.00	66.00	6
4.40		0.1732	0.67	0.94	2.60	17.00	24.00	66.00	6
4.50		0.1772	0.67	0.94	2.60	17.00	24.00	66.00	6
4.57		0.1799	0.67	0.94	2.60	17.00	24.00	66.00	6
4.60		0.1811	0.67	0.94	2.60	17.00	24.00	66.00	6
4.65		0.1831	0.67	0.94	2.60	17.00	24.00	66.00	6
4.70		0.1850	0.67	0.94	2.60	17.00	24.00	66.00	6
4.76	3/16	0.1875	0.79	1.10	2.60	20.00	28.00	66.00	6
4.80		0.1890	0.79	1.10	2.60	20.00	28.00	66.00	6
4.90		0.1929	0.79	1.10	2.60	20.00	28.00	66.00	6

30-1891 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
5.00		0.1969	0.79	1.10	2.60	20.00	28.00	66.00	6
5.10		0.2008	0.79	1.10	2.60	20.00	28.00	66.00	6
5.16	13/64	0.2031	0.79	1.10	2.60	20.00	28.00	66.00	6
5.20		0.2047	0.79	1.10	2.60	20.00	28.00	66.00	6
5.30		0.2087	0.79	1.10	2.60	20.00	28.00	66.00	6
5.40		0.2126	0.79	1.10	2.60	20.00	28.00	66.00	6
5.50		0.2165	0.79	1.10	2.60	20.00	28.00	66.00	6
5.55	7/32	0.2187	0.79	1.10	2.60	20.00	28.00	66.00	6
5.60		0.2205	0.79	1.10	2.60	20.00	28.00	66.00	6
5.70		0.2244	0.79	1.10	2.60	20.00	28.00	66.00	6
5.80		0.2283	0.79	1.10	2.60	20.00	28.00	66.00	6
5.90		0.2323	0.79	1.10	2.60	20.00	28.00	66.00	6
5.95	15/64	0.2343	0.79	1.10	2.60	20.00	28.00	66.00	6
6.00		0.2362	0.79	1.10	2.60	20.00	28.00	66.00	6
6.10		0.2402	0.94	1.34	3.11	24.00	34.00	79.00	8
6.20		0.2441	0.94	1.34	3.11	24.00	34.00	79.00	8
6.30		0.2480	0.94	1.34	3.11	24.00	34.00	79.00	8
6.35	1/4	0.2500	0.94	1.34	3.11	24.00	34.00	79.00	8
6.40		0.2520	0.94	1.34	3.11	24.00	34.00	79.00	8
6.50		0.2559	0.94	1.34	3.11	24.00	34.00	79.00	8
6.60		0.2598	0.94	1.34	3.11	24.00	34.00	79.00	8
6.70		0.2638	0.94	1.34	3.11	24.00	34.00	79.00	8
6.75	17/64	0.2656	0.94	1.34	3.11	24.00	34.00	79.00	8
6.80		0.2677	0.94	1.34	3.11	24.00	34.00	79.00	8
6.90		0.2717	0.94	1.34	3.11	24.00	34.00	79.00	8
7.00		0.2756	0.94	1.34	3.11	24.00	34.00	79.00	8
7.10		0.2795	1.14	1.61	3.11	29.00	41.00	79.00	8
7.14	9/32	0.2812	1.14	1.61	3.11	29.00	41.00	79.00	8
7.20		0.2835	1.14	1.61	3.11	29.00	41.00	79.00	8
7.30		0.2874	1.14	1.61	3.11	29.00	41.00	79.00	8
7.40		0.2913	1.14	1.61	3.11	29.00	41.00	79.00	8
7.50		0.2953	1.14	1.61	3.11	29.00	41.00	79.00	8
7.54	19/64	0.2968	1.14	1.61	3.11	29.00	41.00	79.00	8
7.60		0.2992	1.14	1.61	3.11	29.00	41.00	79.00	8
7.70		0.3031	1.14	1.61	3.11	29.00	41.00	79.00	8
7.80		0.3071	1.14	1.61	3.11	29.00	41.00	79.00	8
7.90		0.3110	1.14	1.61	3.11	29.00	41.00	79.00	8
7.94	5/16	0.3125	1.14	1.61	3.11	29.00	41.00	79.00	8
8.00		0.3150	1.14	1.61	3.11	29.00	41.00	79.00	8
8.10		0.3189	1.38	1.85	3.50	35.00	47.00	89.00	10

On request shank form DIN 6535HB or HE available without extra charge.
For cutting data, see page 79.

Order example: HA-Shank 30-1891-0800
HB-Shank 30-1891-0800-HB
HE-Shank 30-1891-0800-HE

30-1891 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
8.20		0.3228	1.38	1.85	3.50	35.00	47.00	89.00	10
8.30		0.3268	1.38	1.85	3.50	35.00	47.00	89.00	10
8.33	21/64	0.3281	1.38	1.85	3.50	35.00	47.00	89.00	10
8.40		0.3307	1.38	1.85	3.50	35.00	47.00	89.00	10
8.50		0.3346	1.38	1.85	3.50	35.00	47.00	89.00	10
8.60		0.3386	1.38	1.85	3.50	35.00	47.00	89.00	10
8.70		0.3425	1.38	1.85	3.50	35.00	47.00	89.00	10
8.73	11/32	0.3437	1.38	1.85	3.50	35.00	47.00	89.00	10
8.80		0.3465	1.38	1.85	3.50	35.00	47.00	89.00	10
8.90		0.3504	1.38	1.85	3.50	35.00	47.00	89.00	10
9.00		0.3543	1.38	1.85	3.50	35.00	47.00	89.00	10
9.10		0.3583	1.38	1.85	3.50	35.00	47.00	89.00	10
9.13	23/64	0.3593	1.38	1.85	3.50	35.00	47.00	89.00	10
9.20		0.3622	1.38	1.85	3.50	35.00	47.00	89.00	10
9.30		0.3661	1.38	1.85	3.50	35.00	47.00	89.00	10
9.40		0.3701	1.38	1.85	3.50	35.00	47.00	89.00	10
9.50		0.3740	1.38	1.85	3.50	35.00	47.00	89.00	10
9.52	3/8	0.3750	1.38	1.85	3.50	35.00	47.00	89.00	10
9.55		0.3760	1.38	1.85	3.50	35.00	47.00	89.00	10
9.60		0.3780	1.38	1.85	3.50	35.00	47.00	89.00	10
9.70		0.3819	1.38	1.85	3.50	35.00	47.00	89.00	10
9.80		0.3858	1.38	1.85	3.50	35.00	47.00	89.00	10
9.90		0.3898	1.38	1.85	3.50	35.00	47.00	89.00	10
9.92	25/64	0.3906	1.38	1.85	3.50	35.00	47.00	89.00	10
10.00		0.3937	1.38	1.85	3.50	35.00	47.00	89.00	10
10.10		0.3976	1.57	2.17	4.02	40.00	55.00	102.00	12
10.20		0.4016	1.57	2.17	4.02	40.00	55.00	102.00	12
10.30		0.4055	1.57	2.17	4.02	40.00	55.00	102.00	12
10.32	13/32	0.4062	1.57	2.17	4.02	40.00	55.00	102.00	12
10.40		0.4094	1.57	2.17	4.02	40.00	55.00	102.00	12
10.50		0.4134	1.57	2.17	4.02	40.00	55.00	102.00	12
10.60		0.4173	1.57	2.17	4.02	40.00	55.00	102.00	12
10.70		0.4213	1.57	2.17	4.02	40.00	55.00	102.00	12
10.72	27/64	0.4219	1.57	2.17	4.02	40.00	55.00	102.00	12
10.80		0.4252	1.57	2.17	4.02	40.00	55.00	102.00	12
10.90		0.4291	1.57	2.17	4.02	40.00	55.00	102.00	12
11.00		0.4331	1.57	2.17	4.02	40.00	55.00	102.00	12
11.10		0.4370	1.57	2.17	4.02	40.00	55.00	102.00	12
11.11	7/16	0.4375	1.57	2.17	4.02	40.00	55.00	102.00	12
11.20		0.4409	1.57	2.17	4.02	40.00	55.00	102.00	12
11.30		0.4449	1.57	2.17	4.02	40.00	55.00	102.00	12
11.40		0.4488	1.57	2.17	4.02	40.00	55.00	102.00	12
11.50		0.4528	1.57	2.17	4.02	40.00	55.00	102.00	12
11.51	29/64	0.4531	1.57	2.17	4.02	40.00	55.00	102.00	12
11.60		0.4567	1.57	2.17	4.02	40.00	55.00	102.00	12
11.70		0.4606	1.57	2.17	4.02	40.00	55.00	102.00	12
11.80		0.4646	1.57	2.17	4.02	40.00	55.00	102.00	12
11.90		0.4685	1.57	2.17	4.02	40.00	55.00	102.00	12
11.91	15/32	0.4687	1.57	2.17	4.02	40.00	55.00	102.00	12
12.00		0.4724	1.57	2.17	4.02	40.00	55.00	102.00	12
12.10		0.4764	1.69	2.36	4.21	43.00	60.00	107.00	14
12.20		0.4803	1.69	2.36	4.21	43.00	60.00	107.00	14
12.25		0.4823	1.69	2.36	4.21	43.00	60.00	107.00	14
12.30	31/64	0.4843	1.69	2.36	4.21	43.00	60.00	107.00	14
12.40		0.4882	1.69	2.36	4.21	43.00	60.00	107.00	14
12.50		0.4921	1.69	2.36	4.21	43.00	60.00	107.00	14
12.60		0.4961	1.69	2.36	4.21	43.00	60.00	107.00	14

30-1891 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
12.70	1/2	0.5000	1.69	2.36	4.21	43.00	60.00	107.00	14
12.75		0.5020	1.69	2.36	4.21	43.00	60.00	107.00	14
12.80		0.5039	1.69	2.36	4.21	43.00	60.00	107.00	14
12.90		0.5079	1.69	2.36	4.21	43.00	60.00	107.00	14
13.00		0.5118	1.69	2.36	4.21	43.00	60.00	107.00	14
13.10	33/64	0.5156	1.69	2.36	4.21	43.00	60.00	107.00	14
13.20		0.5197	1.69	2.36	4.21	43.00	60.00	107.00	14
13.30		0.5236	1.69	2.36	4.21	43.00	60.00	107.00	14
13.40		0.5276	1.69	2.36	4.21	43.00	60.00	107.00	14
13.49	17/32	0.5312	1.69	2.36	4.21	43.00	60.00	107.00	14
13.50		0.5315	1.69	2.36	4.21	43.00	60.00	107.00	14
13.60		0.5354	1.69	2.36	4.21	43.00	60.00	107.00	14
13.70		0.5394	1.69	2.36	4.21	43.00	60.00	107.00	14
13.80		0.5433	1.69	2.36	4.21	43.00	60.00	107.00	14
13.89	35/64	0.5468	1.69	2.36	4.21	43.00	60.00	107.00	14
13.90		0.5472	1.69	2.36	4.21	43.00	60.00	107.00	14
14.00		0.5512	1.69	2.36	4.21	43.00	60.00	107.00	14
14.10		0.5551	1.77	2.56	4.53	45.00	65.00	115.00	16
14.20		0.5591	1.77	2.56	4.53	45.00	65.00	115.00	16
14.25		0.5610	1.77	2.56	4.53	45.00	65.00	115.00	16
14.29	9/16	0.5625	1.77	2.56	4.53	45.00	65.00	115.00	16
14.30		0.5630	1.77	2.56	4.53	45.00	65.00	115.00	16
14.40		0.5669	1.77	2.56	4.53	45.00	65.00	115.00	16
14.50		0.5709	1.77	2.56	4.53	45.00	65.00	115.00	16
14.60		0.5748	1.77	2.56	4.53	45.00	65.00	115.00	16
14.68	37/64	0.5781	1.77	2.56	4.53	45.00	65.00	115.00	16
14.70		0.5787	1.77	2.56	4.53	45.00	65.00	115.00	16
14.80		0.5827	1.77	2.56	4.53	45.00	65.00	115.00	16
14.90		0.5866	1.77	2.56	4.53	45.00	65.00	115.00	16
15.00		0.5906	1.77	2.56	4.53	45.00	65.00	115.00	16
15.08	19/32	0.5937	1.77	2.56	4.53	45.00	65.00	115.00	16
15.10		0.5945	1.77	2.56	4.53	45.00	65.00	115.00	16
15.20		0.5984	1.77	2.56	4.53	45.00	65.00	115.00	16
15.30		0.6024	1.77	2.56	4.53	45.00	65.00	115.00	16
15.40		0.6063	1.77	2.56	4.53	45.00	65.00	115.00	16
15.48	39/64	0.6093	1.77	2.56	4.53	45.00	65.00	115.00	16
15.50		0.6102	1.77	2.56	4.53	45.00	65.00	115.00	16
15.60		0.6142	1.77	2.56	4.53	45.00	65.00	115.00	16
15.70		0.6181	1.77	2.56	4.53	45.00	65.00	115.00	16
15.80		0.6220	1.77	2.56	4.53	45.00	65.00	115.00	16
15.88	5/8	0.6250	1.77	2.56	4.53	45.00	65.00	115.00	16
15.90		0.6260	1.77	2.56	4.53	45.00	65.00	115.00	16
16.00		0.6299	1.77	2.56	4.53	45.00	65.00	115.00	16
16.27	41/64	0.6406	2.01	2.87	4.84	51.00	73.00	123.00	18
16.50		0.6496	2.01	2.87	4.84	51.00	73.00	123.00	18
16.67	21/32	0.6562	2.01	2.87	4.84	51.00	73.00	123.00	18
17.00		0.6693	2.01	2.87	4.84	51.00	73.00	123.00	18
17.46	11/16	0.6875	2.01	2.87	4.84	51.00	73.00	123.00	18
17.50		0.6890	2.01	2.87	4.84	51.00	73.00	123.00	18
18.00		0.7087	2.01	2.87	4.84	51.00	73.00	123.00	18
18.26	23/32	0.7187	2.17	3.11	5.16	55.00	79.00	131.00	20
18.50		0.7283	2.17	3.11	5.16	55.00	79.00	131.00	20
19.00		0.7480	2.17	3.11	5.16	55.00	79.00	131.00	20
19.05	3/4	0.7500	2.17	3.11	5.16	55.00	79.00	131.00	20
19.45	49/64	0.7656	2.17	3.11	5.16	55.00	79.00	131.00	20
19.50		0.7677	2.17	3.11	5.16	55.00	79.00	131.00	20
20.00		0.7874	2.17	3.11	5.16	55.00	79.00	131.00	20

On request shank form DIN 6535HB or HE available without extra charge.
For cutting data, see page 79.

Order example: HA-Shank 30-1891-0800
HB-Shank 30-1891-0800-HB
HE-Shank 30-1891-0800-HE

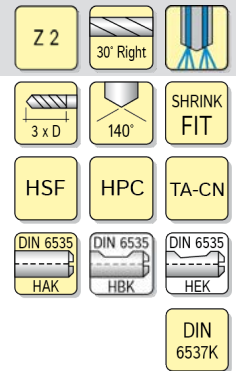
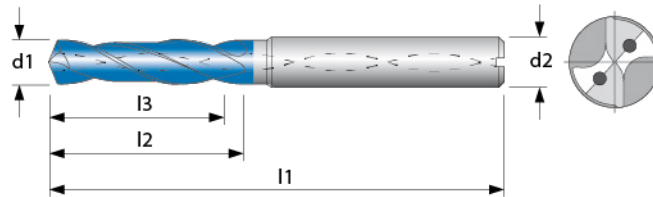
HAM 30-1881 Nirodrill

Solid Carbide Spiral Drill

3 X D

Engineering Data

- special chip flute geometry
- special point ground for machining of stainless steel
- 30° RH helix



Material	Alu	Alu > 9% Silicon	Steel < 23 Rockwell	Steel < 38 Rockwell	Steel < 48 Rockwell	Steel < 55 Rockwell	Steel < 60 Rockwell	Steel < 66 Rockwell	Stain ST < 23 Rockwell	Stain ST > 23 Rockwell	Cast Iron	Nodular Ductile Cast Iron	Super Alloy Metals	Titanium	Copper & Nonferrous Metals	Graphit. & Fiber Composites	MMS	Max.	None	AIR
30-1881	●	●							●	●	○		○	●	●	○	●	●		

● very suitable ○ suitable

30-1881 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
2.80		0.1102	0.55	0.79	2.44	14.00	20.00	62.00	6
2.90		0.1141	0.55	0.79	2.44	14.00	20.00	62.00	6
3.00		0.1181	0.55	0.79	2.44	14.00	20.00	62.00	6
3.10		0.1220	0.55	0.79	2.44	14.00	20.00	62.00	6
3.17	1/8	0.1250	0.55	0.79	2.44	14.00	20.00	62.00	6
3.20		0.1260	0.55	0.79	2.44	14.00	20.00	62.00	6
3.25		0.1280	0.55	0.79	2.44	14.00	20.00	62.00	6
3.30		0.1299	0.55	0.79	2.44	14.00	20.00	62.00	6
3.40		0.1339	0.55	0.79	2.44	14.00	20.00	62.00	6
3.50		0.1378	0.55	0.79	2.44	14.00	20.00	62.00	6
3.57	9/64	0.1406	0.55	0.79	2.44	14.00	20.00	62.00	6
3.60		0.1417	0.55	0.79	2.44	14.00	20.00	62.00	6
3.65		0.1437	0.55	0.79	2.44	14.00	20.00	62.00	6
3.70		0.1457	0.55	0.79	2.44	14.00	20.00	62.00	6
3.80		0.1496	0.67	0.94	2.60	17.00	24.00	66.00	6
3.90		0.1535	0.67	0.94	2.60	17.00	24.00	66.00	6
3.97	5/32	0.1562	0.67	0.94	2.60	17.00	24.00	66.00	6
4.00		0.1575	0.67	0.94	2.60	17.00	24.00	66.00	6
4.10		0.1614	0.67	0.94	2.60	17.00	24.00	66.00	6
4.20		0.1654	0.67	0.94	2.60	17.00	24.00	66.00	6
4.30		0.1693	0.67	0.94	2.60	17.00	24.00	66.00	6
4.37	11/64	0.1718	0.67	0.94	2.60	17.00	24.00	66.00	6
4.40		0.1732	0.67	0.94	2.60	17.00	24.00	66.00	6
4.50		0.1772	0.67	0.94	2.60	17.00	24.00	66.00	6
4.57		0.1799	0.67	0.94	2.60	17.00	24.00	66.00	6
4.60		0.1811	0.67	0.94	2.60	17.00	24.00	66.00	6
4.65		0.1831	0.67	0.94	2.60	17.00	24.00	66.00	6
4.70		0.1850	0.67	0.94	2.60	17.00	24.00	66.00	6
4.76	3/16	0.1875	0.79	1.10	2.60	20.00	28.00	66.00	6
4.80		0.1890	0.79	1.10	2.60	20.00	28.00	66.00	6
4.90		0.1929	0.79	1.10	2.60	20.00	28.00	66.00	6
5.00		0.1969	0.79	1.10	2.60	20.00	28.00	66.00	6
5.10		0.2008	0.79	1.10	2.60	20.00	28.00	66.00	6
5.16	13/64	0.2031	0.79	1.10	2.60	20.00	28.00	66.00	6
5.20		0.2047	0.79	1.10	2.60	20.00	28.00	66.00	6
5.30		0.2087	0.79	1.10	2.60	20.00	28.00	66.00	6
5.40		0.2126	0.79	1.10	2.60	20.00	28.00	66.00	6
5.50		0.2165	0.79	1.10	2.60	20.00	28.00	66.00	6
5.55	7/32	0.2187	0.79	1.10	2.60	20.00	28.00	66.00	6
5.60		0.2205	0.79	1.10	2.60	20.00	28.00	66.00	6

30-1881 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
5.70		0.2244	0.79	1.10	2.60	20.00	28.00	66.00	6
5.80		0.2283	0.79	1.10	2.60	20.00	28.00	66.00	6
5.90		0.2323	0.79	1.10	2.60	20.00	28.00	66.00	6
5.95	15/64	0.2343	0.79	1.10	2.60	20.00	28.00	66.00	6
6.00		0.2362	0.79	1.10	2.60	20.00	28.00	66.00	6
6.10		0.2402	0.94	1.34	3.11	24.00	34.00	79.00	8
6.20		0.2441	0.94	1.34	3.11	24.00	34.00	79.00	8
6.30		0.2480	0.94	1.34	3.11	24.00	34.00	79.00	8
6.35	1/4	0.2500	0.94	1.34	3.11	24.00	34.00	79.00	8
6.40		0.2520	0.94	1.34	3.11	24.00	34.00	79.00	8
6.50		0.2559	0.94	1.34	3.11	24.00	34.00	79.00	8
6.60		0.2598	0.94	1.34	3.11	24.00	34.00	79.00	8
6.70		0.2638	0.94	1.34	3.11	24.00	34.00	79.00	8
6.75	17/64	0.2657	0.94	1.34	3.11	24.00	34.00	79.00	8
6.80		0.2677	0.94	1.34	3.11	24.00	34.00	79.00	8
6.90		0.2717	0.94	1.34	3.11	24.00	34.00	79.00	8
7.00		0.2756	0.94	1.34	3.11	24.00	34.00	79.00	8
7.10		0.2795	1.14	1.61	3.11	29.00	41.00	79.00	8
7.14	9/32	0.2812	1.14	1.61	3.11	29.00	41.00	79.00	8
7.20		0.2835	1.14	1.61	3.11	29.00	41.00	79.00	8
7.30		0.2874	1.14	1.61	3.11	29.00	41.00	79.00	8
7.40		0.2913	1.14	1.61	3.11	29.00	41.00	79.00	8
7.50		0.2953	1.14	1.61	3.11	29.00	41.00	79.00	8
7.54	19/64	0.2968	1.14	1.61	3.11	29.00	41.00	79.00	8
7.60		0.2992	1.14	1.61	3.11	29.00	41.00	79.00	8
7.70		0.3031	1.14	1.61	3.11	29.00	41.00	79.00	8
7.80		0.3071	1.14	1.61	3.11	29.00	41.00	79.00	8
7.90		0.3110	1.14	1.61	3.11	29.00	41.00	79.00	8
7.94	5/16	0.3125	1.14	1.61	3.11	29.00	41.00	79.00	8
8.00		0.3150	1.14	1.61	3.11	29.00	41.00	79.00	8
8.10		0.3189	1.38	1.85	3.50	35.00	47.00	89.00	10
8.20		0.3228	1.38	1.85	3.50	35.00	47.00	89.00	10
8.30		0.3268	1.38	1.85	3.50	35.00	47.00	89.00	10
8.33	21/64	0.3280	1.38	1.85	3.50	35.00	47.00	89.00	10
8.40		0.3307	1.38	1.85	3.50	35.00	47.00	89.00	10
8.50		0.3346	1.38	1.85	3.50	35.00	47.00	89.00	10
8.60		0.3386	1.38	1.85	3.50	35.00	47.00	89.00	10
8.70		0.3425	1.38	1.85	3.50	35.00	47.00	89.00	10
8.73	11/32	0.3437	1.38	1.85	3.50	35.00	47.00	89.00	10
8.80		0.3465	1.38	1.85	3.50	35.00	47.00	89.00	10

On request shank form DIN 6535HB or HE available without extra charge.
For cutting data, see page 80.

Order example: HA-Shank 30-1881-0750
HB-Shank 30-1881-0750-HB
HE-Shank 30-1881-0750-HE

30-1881 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
8.90		0.3504	1.38	1.85	3.50	35.00	47.00	89.00	10
9.00		0.3543	1.38	1.85	3.50	35.00	47.00	89.00	10
9.10		0.3583	1.38	1.85	3.50	35.00	47.00	89.00	10
9.13	23/64	0.3593	1.38	1.85	3.50	35.00	47.00	89.00	10
9.20		0.3622	1.38	1.85	3.50	35.00	47.00	89.00	10
9.30		0.3661	1.38	1.85	3.50	35.00	47.00	89.00	10
9.40		0.3701	1.38	1.85	3.50	35.00	47.00	89.00	10
9.50		0.3740	1.38	1.85	3.50	35.00	47.00	89.00	10
9.52	3/8	0.3750	1.38	1.85	3.50	35.00	47.00	89.00	10
9.55		0.3760	1.38	1.85	3.50	35.00	47.00	89.00	10
9.60		0.3780	1.38	1.85	3.50	35.00	47.00	89.00	10
9.70		0.3819	1.38	1.85	3.50	35.00	47.00	89.00	10
9.80		0.3858	1.38	1.85	3.50	35.00	47.00	89.00	10
9.90		0.3898	1.38	1.85	3.50	35.00	47.00	89.00	10
9.92	25/64	0.3906	1.38	1.85	3.50	35.00	47.00	89.00	10
10.00		0.3937	1.38	1.85	3.50	35.00	47.00	89.00	10
10.10		0.3976	1.57	2.17	4.02	40.00	55.00	102.00	12
10.20		0.4016	1.57	2.17	4.02	40.00	55.00	102.00	12
10.30		0.4055	1.57	2.17	4.02	40.00	55.00	102.00	12
10.32	13/32	0.4062	1.57	2.17	4.02	40.00	55.00	102.00	12
10.40		0.4094	1.57	2.17	4.02	40.00	55.00	102.00	12
10.50		0.4134	1.57	2.17	4.02	40.00	55.00	102.00	12
10.60		0.4173	1.57	2.17	4.02	40.00	55.00	102.00	12
10.70		0.4213	1.57	2.17	4.02	40.00	55.00	102.00	12
10.72	27/64	0.4220	1.57	2.17	4.02	40.00	55.00	102.00	12
10.80		0.4252	1.57	2.17	4.02	40.00	55.00	102.00	12
10.90		0.4291	1.57	2.17	4.02	40.00	55.00	102.00	12
11.00		0.4331	1.57	2.17	4.02	40.00	55.00	102.00	12
11.10		0.4370	1.57	2.17	4.02	40.00	55.00	102.00	12
11.11	7/16	0.4375	1.57	2.17	4.02	40.00	55.00	102.00	12
11.20		0.4409	1.57	2.17	4.02	40.00	55.00	102.00	12
11.30		0.4449	1.57	2.17	4.02	40.00	55.00	102.00	12
11.40		0.4488	1.57	2.17	4.02	40.00	55.00	102.00	12
11.50		0.4528	1.57	2.17	4.02	40.00	55.00	102.00	12
11.51	29/64	0.4531	1.57	2.17	4.02	40.00	55.00	102.00	12
11.60		0.4567	1.57	2.17	4.02	40.00	55.00	102.00	12
11.70		0.4606	1.57	2.17	4.02	40.00	55.00	102.00	12
11.80		0.4646	1.57	2.17	4.02	40.00	55.00	102.00	12
11.90		0.4685	1.57	2.17	4.02	40.00	55.00	102.00	12
11.91	15/32	0.4687	1.57	2.17	4.02	40.00	55.00	102.00	12
12.00		0.4724	1.57	2.17	4.02	40.00	55.00	102.00	12
12.10		0.4764	1.57	2.17	4.02	40.00	55.00	102.00	12
12.20		0.4803	1.57	2.17	4.02	40.00	55.00	102.00	12
12.25		0.4823	1.57	2.17	4.02	40.00	55.00	102.00	12
12.30	31/64	0.4843	1.57	2.17	4.02	40.00	55.00	102.00	12
12.40		0.4882	1.57	2.17	4.02	40.00	55.00	102.00	12
12.50		0.4921	1.57	2.17	4.02	40.00	55.00	102.00	12
12.60		0.4961	1.57	2.17	4.02	40.00	55.00	102.00	12
12.70	1/2	0.5000	1.57	2.17	4.02	40.00	55.00	102.00	12
12.75		0.5020	1.57	2.17	4.02	40.00	55.00	102.00	12
12.80		0.5039	1.57	2.17	4.02	40.00	55.00	102.00	12
12.90		0.5079	1.57	2.17	4.02	40.00	55.00	102.00	12
13.00		0.5118	1.57	2.17	4.02	40.00	55.00	102.00	12

30-1881 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
13.10	33/64	0.5156	1.57	2.17	4.02	40.00	55.00	102.00	12
13.20		0.5197	1.57	2.17	4.02	40.00	55.00	102.00	12
13.30		0.5236	1.57	2.17	4.02	40.00	55.00	102.00	12
13.40		0.5276	1.57	2.17	4.02	40.00	55.00	102.00	12
13.49	17/32	0.5312	1.57	2.17	4.02	40.00	55.00	102.00	12
13.50		0.5315	1.57	2.17	4.02	40.00	55.00	102.00	12
13.60		0.5354	1.57	2.17	4.02	40.00	55.00	102.00	12
13.70		0.5394	1.57	2.17	4.02	40.00	55.00	102.00	14
13.80		0.5433	1.69	2.36	4.21	43.00	60.00	107.00	16
13.89	35/64	0.5468	1.77	2.56	4.53	45.00	65.00	115.00	16
13.90		0.5472	1.77	2.56	4.53	45.00	65.00	115.00	16
14.00		0.5512	1.77	2.56	4.53	45.00	65.00	115.00	16
14.10		0.5551	1.77	2.56	4.53	45.00	65.00	115.00	16
14.20		0.5591	1.77	2.56	4.53	45.00	65.00	115.00	16
14.25		0.5610	1.77	2.56	4.53	45.00	65.00	115.00	16
14.29	9/16	0.5625	1.77	2.56	4.53	45.00	65.00	115.00	16
14.30		0.5630	1.77	2.56	4.53	45.00	65.00	115.00	16
14.40		0.5669	1.77	2.56	4.53	45.00	65.00	115.00	16
14.50		0.5709	1.77	2.56	4.53	45.00	65.00	115.00	16
14.60		0.5748	1.77	2.56	4.53	45.00	65.00	115.00	16
14.68	37/64	0.5781	1.77	2.56	4.53	45.00	65.00	115.00	16
14.70		0.5787	1.77	2.56	4.53	45.00	65.00	115.00	16
14.80		0.5827	1.77	2.56	4.53	45.00	65.00	115.00	16
14.90		0.5866	1.77	2.56	4.53	45.00	65.00	115.00	16
15.00		0.5906	1.77	2.56	4.53	45.00	65.00	115.00	16
15.08	19/32	0.5937	1.77	2.56	4.53	45.00	65.00	115.00	16
15.10		0.5945	1.77	2.56	4.53	45.00	65.00	115.00	16
15.20		0.5984	1.77	2.56	4.53	45.00	65.00	115.00	16
15.30		0.6024	1.77	2.56	4.53	45.00	65.00	115.00	16
15.40		0.6063	1.77	2.56	4.53	45.00	65.00	115.00	16
15.48	39/64	0.6093	1.77	2.56	4.53	45.00	65.00	115.00	16
15.50		0.6102	1.77	2.56	4.53	45.00	65.00	115.00	16
15.60		0.6142	2.01	2.87	4.84	51.00	73.00	123.00	18
15.70		0.6181	2.01	2.87	4.84	51.00	73.00	123.00	18
15.80		0.6220	2.01	2.87	4.84	51.00	73.00	123.00	18
15.88	5/8	0.6250	2.01	2.87	4.84	51.00	73.00	123.00	18
15.90		0.6260	2.01	2.87	4.84	51.00	73.00	123.00	18
16.00		0.6299	2.01	2.87	4.84	51.00	73.00	123.00	18
16.27	41/64	0.6406	2.17	3.11	5.16	55.00	79.00	131.00	20
16.50		0.6496	2.17	3.11	5.16	55.00	79.00	131.00	20
16.67	21/32	0.6562	2.17	3.11	5.16	55.00	79.00	131.00	20
17.00		0.6693	2.17	3.11	5.16	55.00	79.00	131.00	20
17.46	11/16	0.6875	2.17	3.11	5.16	55.00	79.00	131.00	20
17.50		0.6890	2.95	4.13	6.50	75.00	105.00	165.00	25
18.00		0.7087	2.01	2.87	4.84	51.00	73.00	123.00	18
18.26	23/32	0.7187	2.17	3.11	5.16	55.00	79.00	131.00	20
18.50		0.7283	2.17	3.11	5.16	55.00	79.00	131.00	20
19.00		0.7480	2.17	3.11	5.16	55.00	79.00	131.00	20
19.05	3/4	0.7500	2.17	3.11	5.16	55.00	79.00	131.00	20
19.45	49/64	0.7656	2.17	3.11	5.16	55.00	79.00	131.00	20
19.50		0.7677	2.17	3.11	5.16	55.00	79.00	131.00	20
20.00		0.7874	2.17	3.11	5.16	55.00	79.00	131.00	20

On request shank form DIN 6535HB or HE available without extra charge.
For cutting data, see page 80.

Order example: HA-Shank 30-1881-0750
HB-Shank 30-1881-0750-HB
HE-Shank 30-1881-0750-HE

HAM 30-1901 Nirodrill

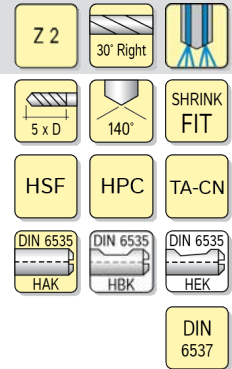
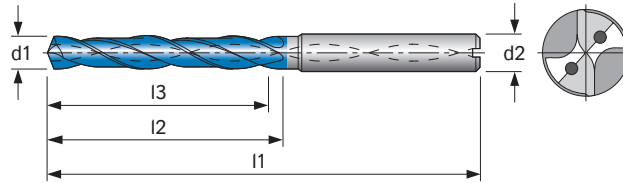
270 Series

Solid Carbide Twist Drill

5 X D

Engineering Data

- special chip flute geometry
- special point ground for machining of stainless steel
- 30° RH helix



Material	Alu	Alu > 9% Silicon	Steel < 23 Rockwell	Steel < 38 Rockwell	Steel < 48 Rockwell	Steel < 55 Rockwell	Steel < 60 Rockwell	Steel < 66 Rockwell	Stain ST < 23 Rockwell	Stain ST > 23 Rockwell	Cast Iron	Nodular Ductile Cast Iron	Super Alloy Metals	Titanium	Copper & Nonferrous Metals	Graphit & Fiber Composites	MMS	Max.	None	AIR
30-1901	●	●							●	●	○		○	●	●	○	●	●		

● very suitable ○ suitable

30-1901 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
2.00		0.0787	0.39	0.55	2.17	10.00	14.00	55.00	4
2.20		0.0866	0.43	0.56	2.17	11.00	14.30	55.00	4
2.30		0.0906	0.45	0.59	2.17	11.50	15.00	55.00	4
2.38	3/32	0.0937	0.46	0.61	2.17	11.80	15.50	55.00	4
2.40		0.0945	0.47	0.61	2.17	12.00	15.60	55.00	4
2.50		0.0984	0.49	0.64	2.17	12.50	16.30	55.00	4
2.55		0.1004	0.50	0.65	2.17	12.80	16.60	55.00	6
2.70		0.1063	0.53	0.69	2.17	13.50	17.60	55.00	6
2.78	7/64	0.1094	0.55	0.71	2.17	13.90	18.00	55.00	6
2.80		0.1102	0.55	0.72	2.17	14.00	18.20	55.00	6
3.00		0.1181	0.91	1.10	2.60	23.00	28.00	66.00	6
3.10		0.1220	0.91	1.10	2.60	23.00	28.00	66.00	6
3.17	1/8	0.1250	0.91	1.10	2.60	23.00	28.00	66.00	6
3.20		0.1260	0.91	1.10	2.60	23.00	28.00	66.00	6
3.25		0.1280	0.91	1.10	2.60	23.00	28.00	66.00	6
3.30		0.1299	0.91	1.10	2.60	23.00	28.00	66.00	6
3.40		0.1339	0.91	1.10	2.60	23.00	28.00	66.00	6
3.50		0.1378	0.91	1.10	2.60	23.00	28.00	66.00	6
3.57	9/64	0.1406	0.91	1.10	2.60	23.00	28.00	66.00	6
3.60		0.1718	0.91	1.10	2.60	23.00	28.00	66.00	6
3.65		0.1437	0.91	1.10	2.60	23.00	28.00	66.00	6
3.70		0.1457	0.91	1.10	2.60	23.00	28.00	66.00	6
3.80		0.1496	1.14	1.42	2.91	29.00	36.00	74.00	6
3.90		0.1535	1.14	1.42	2.91	29.00	36.00	74.00	6
3.97	5/32	0.1562	1.14	1.42	2.91	29.00	36.00	74.00	6
4.00		0.1575	1.14	1.42	2.91	29.00	36.00	74.00	6
4.10		0.1614	1.14	1.42	2.91	29.00	36.00	74.00	6
4.20		0.1654	1.14	1.42	2.91	29.00	36.00	74.00	6
4.30		0.1693	1.14	1.42	2.91	29.00	36.00	74.00	6
4.37	11/64	0.1718	1.14	1.42	2.91	29.00	36.00	74.00	6
4.40		0.1732	1.14	1.42	2.91	29.00	36.00	74.00	6
4.50		0.1772	1.14	1.42	2.91	29.00	36.00	74.00	6
4.57		0.1799	1.14	1.42	2.91	29.00	36.00	74.00	6
4.60		0.1811	1.14	1.42	2.91	29.00	36.00	74.00	6
4.65		0.1831	1.14	1.42	2.91	29.00	36.00	74.00	6
4.70		0.1850	1.14	1.42	2.91	29.00	36.00	74.00	6
4.76	3/16	0.1875	1.38	1.73	3.23	35.00	44.00	82.00	6
4.80		0.1890	1.38	1.73	3.23	35.00	44.00	82.00	6
4.90		0.1929	1.38	1.73	3.23	35.00	44.00	82.00	6
5.00		0.1969	1.38	1.73	3.23	35.00	44.00	82.00	6

30-1901 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
5.10		0.2008	1.38	1.73	3.23	35.00	44.00	82.00	6
5.16	13/64	0.2031	1.38	1.73	3.23	35.00	44.00	82.00	6
5.20		0.2047	1.38	1.73	3.23	35.00	44.00	82.00	6
5.30		0.2087	1.38	1.73	3.23	35.00	44.00	82.00	6
5.40		0.2126	1.38	1.73	3.23	35.00	44.00	82.00	6
5.50		0.2165	1.38	1.73	3.23	35.00	44.00	82.00	6
5.55	7/32	0.2187	1.38	1.73	3.23	35.00	44.00	82.00	6
5.60		0.2205	1.38	1.73	3.23	35.00	44.00	82.00	6
5.70		0.2244	1.38	1.73	3.23	35.00	44.00	82.00	6
5.80		0.2283	1.38	1.73	3.23	35.00	44.00	82.00	6
5.90		0.2323	1.38	1.73	3.23	35.00	44.00	82.00	6
5.95	15/64	0.2343	1.38	1.73	3.23	35.00	44.00	82.00	6
6.00		0.2362	1.38	1.73	3.23	35.00	44.00	82.00	6
6.10		0.2402	1.69	2.09	3.58	43.00	53.00	91.00	8
6.20		0.2441	1.69	2.09	3.58	43.00	53.00	91.00	8
6.30		0.2480	1.69	2.09	3.58	43.00	53.00	91.00	8
6.35	1/4	0.2500	1.69	2.09	3.58	43.00	53.00	91.00	8
6.40		0.2520	1.69	2.09	3.58	43.00	53.00	91.00	8
6.50		0.2559	1.69	2.09	3.58	43.00	53.00	91.00	8
6.60		0.2598	1.69	2.09	3.58	43.00	53.00	91.00	8
6.70		0.2638	1.69	2.09	3.58	43.00	53.00	91.00	8
6.75	17/64	0.2656	1.69	2.09	3.58	43.00	53.00	91.00	8
6.80		0.2677	1.69	2.09	3.58	43.00	53.00	91.00	8
6.90		0.2717	1.69	2.09	3.58	43.00	53.00	91.00	8
7.00		0.2756	1.69	2.09	3.58	43.00	53.00	91.00	8
7.10		0.2795	1.69	2.09	3.58	43.00	53.00	91.00	8
7.14	9/32	0.2812	1.69	2.09	3.58	43.00	53.00	91.00	8
7.20		0.2835	1.69	2.09	3.58	43.00	53.00	91.00	8
7.30		0.2874	1.69	2.09	3.58	43.00	53.00	91.00	8
7.40		0.2913	1.69	2.09	3.58	43.00	53.00	91.00	8
7.50		0.2953	1.69	2.09	3.58	43.00	53.00	91.00	8
7.54	19/64	0.2968	1.69	2.09	3.58	43.00	53.00	91.00	8
7.60		0.2992	1.69	2.09	3.58	43.00	53.00	91.00	8
7.70		0.3031	1.69	2.09	3.58	43.00	53.00	91.00	8
7.80		0.3071	1.69	2.09	3.58	43.00	53.00	91.00	8
7.90		0.3110	1.69	2.09	3.58	43.00	53.00	91.00	8
7.94	5/16	0.3125	1.69	2.09	3.58	43.00	53.00	91.00	8
8.00		0.3150	1.69	2.09	3.58	43.00	53.00	91.00	8
8.10		0.3189	1.93	2.40	4.06	49.00	61.00	103.00	10
8.20		0.3228	1.93	2.40	4.06	49.00	61.00	103.00	10

On request shank form DIN 6535HB or HE available without extra charge.
For cutting data, see page 80.

Order example: HA-Shank 30-1901-0790
HB-Shank 30-1901-0790-HB
HE-Shank 30-1901-0790-HE

30-1901 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
8.30		0.3268	1.93	2.40	4.06	49.00	61.00	103.00	10
8.33	21/64	0.3281	1.93	2.40	4.06	49.00	61.00	103.00	10
8.40		0.3307	1.93	2.40	4.06	49.00	61.00	103.00	10
8.50		0.3346	1.93	2.40	4.06	49.00	61.00	103.00	10
8.60		0.3386	1.93	2.40	4.06	49.00	61.00	103.00	10
8.70		0.3425	1.93	2.40	4.06	49.00	61.00	103.00	10
8.73	11/32	0.3437	1.93	2.40	4.06	49.00	61.00	103.00	10
8.80		0.3465	1.93	2.40	4.06	49.00	61.00	103.00	10
8.90		0.3504	1.93	2.40	4.06	49.00	61.00	103.00	10
9.00		0.3543	1.93	2.40	4.06	49.00	61.00	103.00	10
9.10		0.3583	1.93	2.40	4.06	49.00	61.00	103.00	10
9.13	23/64	0.3593	1.93	2.40	4.06	49.00	61.00	103.00	10
9.20		0.3622	1.93	2.40	4.06	49.00	61.00	103.00	10
9.30		0.3661	1.93	2.40	4.06	49.00	61.00	103.00	10
9.40		0.3701	1.93	2.40	4.06	49.00	61.00	103.00	10
9.50		0.3740	1.93	2.40	4.06	49.00	61.00	103.00	10
9.52	3/8	0.3750	1.93	2.40	4.06	49.00	61.00	103.00	10
9.55		0.3760	1.93	2.40	4.06	49.00	61.00	103.00	10
9.60		0.3780	1.93	2.40	4.06	49.00	61.00	103.00	10
9.70		0.3819	1.93	2.40	4.06	49.00	61.00	103.00	10
9.80		0.3858	1.93	2.40	4.06	49.00	61.00	103.00	10
9.90		0.3898	1.93	2.40	4.06	49.00	61.00	103.00	10
9.92	25/64	0.3906	1.93	2.40	4.06	49.00	61.00	103.00	10
10.00		0.3937	1.93	2.40	4.06	49.00	61.00	103.00	10
10.10		0.3976	2.20	2.80	4.65	56.00	71.00	118.00	12
10.20		0.4016	2.20	2.80	4.65	56.00	71.00	118.00	12
10.30		0.4055	2.20	2.80	4.65	56.00	71.00	118.00	12
10.32	13/32	0.4062	2.20	2.80	4.65	56.00	71.00	118.00	12
10.40		0.4094	2.20	2.80	4.65	56.00	71.00	118.00	12
10.50		0.4134	2.20	2.80	4.65	56.00	71.00	118.00	12
10.60		0.4173	2.20	2.80	4.65	56.00	71.00	118.00	12
10.70		0.4213	2.20	2.80	4.65	56.00	71.00	118.00	12
10.72	27/64	0.4219	2.20	2.80	4.65	56.00	71.00	118.00	12
10.80		0.4252	2.20	2.80	4.65	56.00	71.00	118.00	12
10.90		0.4291	2.20	2.80	4.65	56.00	71.00	118.00	12
11.00		0.4331	2.20	2.80	4.65	56.00	71.00	118.00	12
11.10		0.4370	2.20	2.80	4.65	56.00	71.00	118.00	12
11.11	7/16	0.4375	2.20	2.80	4.65	56.00	71.00	118.00	12
11.20		0.4409	2.20	2.80	4.65	56.00	71.00	118.00	12
11.30		0.4449	2.20	2.80	4.65	56.00	71.00	118.00	12
11.40		0.4488	2.20	2.80	4.65	56.00	71.00	118.00	12
11.50		0.4528	2.20	2.80	4.65	56.00	71.00	118.00	12
11.51	29/64	0.4531	2.20	2.80	4.65	56.00	71.00	118.00	12
11.60		0.4567	2.20	2.80	4.65	56.00	71.00	118.00	12
11.70		0.4606	2.20	2.80	4.65	56.00	71.00	118.00	12
11.80		0.4646	2.20	2.80	4.65	56.00	71.00	118.00	12
11.90		0.4685	2.20	2.80	4.65	56.00	71.00	118.00	12
11.91	15/32	0.4687	2.20	2.80	4.65	56.00	71.00	118.00	12
12.00		0.4724	2.20	2.80	4.65	56.00	71.00	118.00	12
12.10		0.4764	2.36	3.03	4.88	60.00	77.00	124.00	14
12.20		0.4803	2.36	3.03	4.88	60.00	77.00	124.00	14
12.25		0.4823	2.36	3.03	4.88	60.00	77.00	124.00	14
12.30	31/64	0.4843	2.36	3.03	4.88	60.00	77.00	124.00	14
12.40		0.4882	2.36	3.03	4.88	60.00	77.00	124.00	14
12.50		0.4921	2.36	3.03	4.88	60.00	77.00	124.00	14
12.60		0.4961	2.36	3.03	4.88	60.00	77.00	124.00	14
12.70	1/2	0.5000	2.36	3.03	4.88	60.00	77.00	124.00	14

On request shank form DIN 6535HB or HE available without extra charge.
For cutting data, see page 80.

30-1901 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
12.75		0.5020	2.36	3.03	4.88	60.00	77.00	124.00	14
12.80		0.5039	2.36	3.03	4.88	60.00	77.00	124.00	14
12.90		0.5079	2.36	3.03	4.88	60.00	77.00	124.00	14
13.00		0.5118	2.36	3.03	4.88	60.00	77.00	124.00	14
13.10	33/64	0.5156	2.36	3.03	4.88	60.00	77.00	124.00	14
13.20		0.5197	2.36	3.03	4.88	60.00	77.00	124.00	14
13.30		0.5236	2.36	3.03	4.88	60.00	77.00	124.00	14
13.40		0.5276	2.36	3.03	4.88	60.00	77.00	124.00	14
13.49	17/32	0.5312	2.36	3.03	4.88	60.00	77.00	124.00	14
13.50		0.5315	2.36	3.03	4.88	60.00	77.00	124.00	14
13.60		0.5354	2.36	3.03	4.88	60.00	77.00	124.00	14
13.70		0.5394	2.36	3.03	4.88	60.00	77.00	124.00	14
13.80		0.5433	2.36	3.03	4.88	60.00	77.00	124.00	14
13.89	35/64	0.5468	2.36	3.03	4.88	60.00	77.00	124.00	14
13.90		0.5472	2.36	3.03	4.88	60.00	77.00	124.00	14
14.00		0.5512	2.36	3.03	4.88	60.00	77.00	124.00	14
14.10		0.5551	2.48	3.27	5.24	63.00	83.00	133.00	16
14.20		0.5591	2.48	3.27	5.24	63.00	83.00	133.00	16
14.25		0.5610	2.48	3.27	5.24	63.00	83.00	133.00	16
14.29	9/16	0.5625	2.48	3.27	5.24	63.00	83.00	133.00	16
14.30		0.5630	2.48	3.27	5.24	63.00	83.00	133.00	16
14.40		0.5669	2.48	3.27	5.24	63.00	83.00	133.00	16
14.50		0.5709	2.48	3.27	5.24	63.00	83.00	133.00	16
14.60		0.5748	2.48	3.27	5.24	63.00	83.00	133.00	16
14.68	37/64	0.5781	2.48	3.27	5.24	63.00	83.00	133.00	16
14.70		0.5787	2.48	3.27	5.24	63.00	83.00	133.00	16
14.80		0.5827	2.48	3.27	5.24	63.00	83.00	133.00	16
14.90		0.5866	2.48	3.27	5.24	63.00	83.00	133.00	16
15.00		0.5906	2.48	3.27	5.24	63.00	83.00	133.00	16
15.08	19/32	0.5937	2.48	3.27	5.24	63.00	83.00	133.00	16
15.10		0.5945	2.48	3.27	5.24	63.00	83.00	133.00	16
15.20		0.5984	2.48	3.27	5.24	63.00	83.00	133.00	16
15.30		0.6024	2.48	3.27	5.24	63.00	83.00	133.00	16
15.40		0.6063	2.48	3.27	5.24	63.00	83.00	133.00	16
15.48	39/64	0.6093	2.48	3.27	5.24	63.00	83.00	133.00	16
15.50		0.6102	2.48	3.27	5.24	63.00	83.00	133.00	16
15.60		0.6142	2.48	3.27	5.24	63.00	83.00	133.00	16
15.70		0.6181	2.48	3.27	5.24	63.00	83.00	133.00	16
15.80		0.6220	2.48	3.27	5.24	63.00	83.00	133.00	16
15.88	5/8	0.6250	2.48	3.27	5.24	63.00	83.00	133.00	16
15.90		0.6260	2.48	3.27	5.24	63.00	83.00	133.00	16
16.00		0.6299	2.48	3.27	5.24	63.00	83.00	133.00	16
16.27	41/64	0.6406	2.80	3.66	5.63	71.00	93.00	143.00	18
16.50		0.6496	2.80	3.66	5.63	71.00	93.00	143.00	18
16.67	21/32	0.6562	2.80	3.66	5.63	71.00	93.00	143.00	18
17.00		0.6693	2.80	3.66	5.63	71.00	93.00	143.00	18
17.46	11/16	0.6875	2.80	3.66	5.63	71.00	93.00	143.00	18
17.50		0.6890	2.80	3.66	5.63	71.00	93.00	143.00	18
18.00		0.7087	2.80	3.66	5.63	71.00	93.00	143.00	18
18.26	23/32	0.7187	3.03	3.98	6.02	77.00	101.00	153.00	20
18.50		0.7283	3.03	3.98	6.02	77.00	101.00	153.00	20
19.00		0.7480	3.03	3.98	6.02	77.00	101.00	153.00	20
19.05	3/4	0.7500	3.03	3.98	6.02	77.00	101.00	153.00	20
19.45	49/64	0.7656	3.03	3.98	6.02	77.00	101.00	153.00	20
19.50		0.7677	3.03	3.98	6.02	77.00	101.00	153.00	20
20.00		0.7874	3.03	3.98	6.02	77.00	101.00	153.00	20

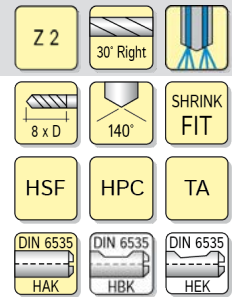
Order example: HA-Shank 30-1901-0790
HB-Shank 30-1901-0790-HB
HE-Shank 30-1901-0790-HE

HAM 30-1941 Nirodrill

271 Series

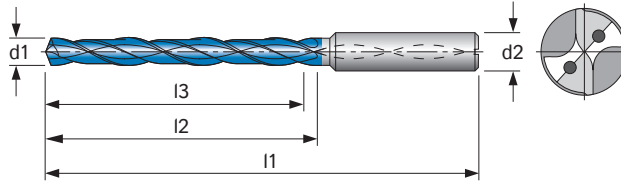
Solid Carbide Twist Drill

8 X D



Engineering Data

- special chip flute geometry
- special point ground for machining of stainless steel
- 30° RH helix



Material	Alu	Alu > 9% Silicon	Steel < 23 Rockwell	Steel < 38 Rockwell	Steel < 48 Rockwell	Steel < 55 Rockwell	Steel < 60 Rockwell	Steel < 66 Rockwell	Stain ST < 23 Rockwell	Stain ST > 23 Rockwell	Cast Iron	Nodular Ductile Cast Iron	Super Alloy Metals	Titanium	Copper & Nonferrous Metals	Graphit & Fiber Composites	MMS	Max.	None	AIR
30-1941	●	●							●	●	○		○	●	●	○	●	●		

● very suitable ○ suitable

30-1941 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
2.00		0.0787	0.39	0.55	2.17	10.00	14.00	55.00	4
2.20		0.0866	0.43	0.56	2.17	11.00	14.30	55.00	4
2.30		0.0906	0.45	0.59	2.17	11.50	15.00	55.00	4
2.38	3/32	0.0937	0.46	0.61	2.17	11.80	15.50	55.00	4
2.40		0.0945	0.47	0.61	2.17	12.00	15.60	55.00	4
2.50		0.0984	0.49	0.64	2.17	12.50	16.30	55.00	4
2.55		0.1004	0.50	0.65	2.17	12.80	16.60	55.00	6
2.70		0.1063	0.53	0.69	2.17	13.50	17.60	55.00	6
2.78	7/64	0.1094	0.55	0.71	2.17	13.90	18.00	55.00	6
2.80		0.1102	0.55	0.72	2.17	14.00	18.20	55.00	6
2.90		0.1141	0.57	0.74	2.17	14.50	18.90	55.00	6
3.00		0.1181	1.14	1.34	2.83	29.00	34.00	72.00	6
3.10		0.1220	1.14	1.34	2.83	29.00	34.00	72.00	6
3.17	1/8	0.1250	1.14	1.34	2.83	29.00	34.00	72.00	6
3.20		0.1260	1.14	1.34	2.83	29.00	34.00	72.00	6
3.25		0.1280	1.14	1.34	2.83	29.00	34.00	72.00	6
3.30		0.1299	1.14	1.34	2.83	29.00	34.00	72.00	6
3.40		0.1339	1.14	1.34	2.83	29.00	34.00	72.00	6
3.50		0.1378	1.14	1.34	2.83	29.00	34.00	72.00	6
3.57	9/64	0.1406	1.14	1.34	2.83	29.00	34.00	72.00	6
3.60		0.1718	1.14	1.34	2.83	29.00	34.00	72.00	6
3.65		0.1437	1.14	1.34	2.83	29.00	34.00	72.00	6
3.70		0.1457	1.14	1.34	2.83	29.00	34.00	72.00	6
3.80		0.1496	1.42	1.69	3.19	36.00	43.00	81.00	6
3.90		0.1535	1.42	1.69	3.19	36.00	43.00	81.00	6
3.97	5/32	0.1562	1.42	1.69	3.19	36.00	43.00	81.00	6
4.00		0.1575	1.42	1.69	3.19	36.00	43.00	81.00	6
4.10		0.1614	1.42	1.69	3.19	36.00	43.00	81.00	6
4.20		0.1654	1.42	1.69	3.19	36.00	43.00	81.00	6
4.30		0.1693	1.42	1.69	3.19	36.00	43.00	81.00	6
4.37	11/64	0.1718	1.42	1.69	3.19	36.00	43.00	81.00	6
4.40		0.1732	1.42	1.69	3.19	36.00	43.00	81.00	6
4.50		0.1772	1.42	1.69	3.19	36.00	43.00	81.00	6
4.57		0.1799	1.42	1.69	3.19	36.00	43.00	81.00	6
4.60		0.1811	1.42	1.69	3.19	36.00	43.00	81.00	6
4.65		0.1831	1.42	1.69	3.19	36.00	43.00	81.00	6
4.70		0.1850	1.42	1.69	3.19	36.00	43.00	81.00	6
4.76	3/16	0.1875	1.89	2.24	3.74	48.00	57.00	95.00	6
4.80		0.1890	1.89	2.24	3.74	48.00	57.00	95.00	6
4.90		0.1929	1.89	2.24	3.74	48.00	57.00	95.00	6

30-1941 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
5.00		0.1969	1.89	2.24	3.74	48.00	57.00	95.00	6
5.10		0.2008	1.89	2.24	3.74	48.00	57.00	95.00	6
5.16	13/64	0.2031	1.89	2.24	3.74	48.00	57.00	95.00	6
5.20		0.2047	1.89	2.24	3.74	48.00	57.00	95.00	6
5.30		0.2087	1.89	2.24	3.74	48.00	57.00	95.00	6
5.40		0.2126	1.89	2.24	3.74	48.00	57.00	95.00	6
5.50		0.2165	1.89	2.24	3.74	48.00	57.00	95.00	6
5.55	7/32	0.2187	1.89	2.24	3.74	48.00	57.00	95.00	6
5.60		0.2205	1.89	2.24	3.74	48.00	57.00	95.00	6
5.70		0.2244	1.89	2.24	3.74	48.00	57.00	95.00	6
5.80		0.2283	1.89	2.24	3.74	48.00	57.00	95.00	6
5.90		0.2323	1.89	2.24	3.74	48.00	57.00	95.00	6
5.95	15/64	0.2343	1.89	2.24	3.74	48.00	57.00	95.00	6
6.00		0.2362	1.89	2.24	3.74	48.00	57.00	95.00	6
6.10		0.2402	2.52	2.99	4.49	64.00	76.00	114.00	8
6.20		0.2441	2.52	2.99	4.49	64.00	76.00	114.00	8
6.30		0.2480	2.52	2.99	4.49	64.00	76.00	114.00	8
6.35	1/4	0.2500	2.52	2.99	4.49	64.00	76.00	114.00	8
6.40		0.2520	2.52	2.99	4.49	64.00	76.00	114.00	8
6.50		0.2559	2.52	2.99	4.49	64.00	76.00	114.00	8
6.60		0.2598	2.52	2.99	4.49	64.00	76.00	114.00	8
6.70		0.2638	2.52	2.99	4.49	64.00	76.00	114.00	8
6.75	17/64	0.2656	2.52	2.99	4.49	64.00	76.00	114.00	8
6.80		0.2677	2.52	2.99	4.49	64.00	76.00	114.00	8
6.90		0.2717	2.52	2.99	4.49	64.00	76.00	114.00	8
7.00		0.2756	2.52	2.99	4.49	64.00	76.00	114.00	8
7.10		0.2795	2.52	2.99	4.49	64.00	76.00	114.00	8
7.14	9/32	0.2812	2.52	2.99	4.49	64.00	76.00	114.00	8
7.20		0.2835	2.52	2.99	4.49	64.00	76.00	114.00	8
7.30		0.2874	2.52	2.99	4.49	64.00	76.00	114.00	8
7.40		0.2913	2.52	2.99	4.49	64.00	76.00	114.00	8
7.50		0.2953	2.52	2.99	4.49	64.00	76.00	114.00	8
7.54	19/64	0.2968	2.52	2.99	4.49	64.00	76.00	114.00	8
7.60		0.2992	2.52	2.99	4.49	64.00	76.00	114.00	8
7.70		0.3031	2.52	2.99	4.49	64.00	76.00	114.00	8
7.80		0.3071	2.52	2.99	4.49	64.00	76.00	114.00	8
7.90		0.3110	2.52	2.99	4.49	64.00	76.00	114.00	8
7.94	5/16	0.3125	2.52	2.99	4.49	64.00	76.00	114.00	8
8.00		0.3150	2.52	2.99	4.49	64.00	76.00	114.00	8
8.10		0.3189	3.15	3.74	5.59	80.00	95.00	142.00	10

On request shank form DIN 6535HB or HE available without extra charge.
For cutting data, see page 80.

Order example: HA-Shank 30-1941-0770
HB-Shank 30-1941-0770-HB
HE-Shank 30-1941-0770-HE

30-1941 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
8.20		0.3228	3.15	3.74	5.59	80.00	95.00	142.00	10
8.30		0.3268	3.15	3.74	5.59	80.00	95.00	142.00	10
8.33	21/64	0.3281	3.15	3.74	5.59	80.00	95.00	142.00	10
8.40		0.3307	3.15	3.74	5.59	80.00	95.00	142.00	10
8.50		0.3346	3.15	3.74	5.59	80.00	95.00	142.00	10
8.60		0.3386	3.15	3.74	5.59	80.00	95.00	142.00	10
8.70		0.3425	3.15	3.74	5.59	80.00	95.00	142.00	10
8.73	11/32	0.3437	3.15	3.74	5.59	80.00	95.00	142.00	10
8.80		0.3465	3.15	3.74	5.59	80.00	95.00	142.00	10
8.90		0.3504	3.15	3.74	5.59	80.00	95.00	142.00	10
9.00		0.3543	3.15	3.74	5.59	80.00	95.00	142.00	10
9.10		0.3583	3.15	3.74	5.59	80.00	95.00	142.00	10
9.13	23/64	0.3593	3.15	3.74	5.59	80.00	95.00	142.00	10
9.20		0.3622	3.15	3.74	5.59	80.00	95.00	142.00	10
9.30		0.3661	3.15	3.74	5.59	80.00	95.00	142.00	10
9.40		0.3701	3.15	3.74	5.59	80.00	95.00	142.00	10
9.50		0.3740	3.15	3.74	5.59	80.00	95.00	142.00	10
9.52	3/8	0.3750	3.15	3.74	5.59	80.00	95.00	142.00	10
9.55		0.3760	3.15	3.74	5.59	80.00	95.00	142.00	10
9.60		0.3780	3.15	3.74	5.59	80.00	95.00	142.00	10
9.70		0.3819	3.15	3.74	5.59	80.00	95.00	142.00	10
9.80		0.3858	3.15	3.74	5.59	80.00	95.00	142.00	10
9.90		0.3898	3.15	3.74	5.59	80.00	95.00	142.00	10
9.92	25/64	0.3906	3.15	3.74	5.59	80.00	95.00	142.00	10
10.00		0.3937	3.15	3.74	5.59	80.00	95.00	142.00	10
10.10		0.3976	3.78	4.49	6.38	96.00	114.00	162.00	12
10.20		0.4016	3.78	4.49	6.38	96.00	114.00	162.00	12
10.30		0.4055	3.78	4.49	6.38	96.00	114.00	162.00	12
10.32	13/32	0.4062	3.78	4.49	6.38	96.00	114.00	162.00	12
10.40		0.4094	3.78	4.49	6.38	96.00	114.00	162.00	12
10.50		0.4134	3.78	4.49	6.38	96.00	114.00	162.00	12
10.60		0.4173	3.78	4.49	6.38	96.00	114.00	162.00	12
10.70		0.4213	3.78	4.49	6.38	96.00	114.00	162.00	12
10.72	27/64	0.4219	3.78	4.49	6.38	96.00	114.00	162.00	12
10.80		0.4252	3.78	4.49	6.38	96.00	114.00	162.00	12
10.90		0.4291	3.78	4.49	6.38	96.00	114.00	162.00	12
11.00		0.4331	3.78	4.49	6.38	96.00	114.00	162.00	12
11.10		0.4370	3.78	4.49	6.38	96.00	114.00	162.00	12
11.11	7/16	0.4375	3.78	4.49	6.38	96.00	114.00	162.00	12
11.20		0.4409	3.78	4.49	6.38	96.00	114.00	162.00	12
11.30		0.4449	3.78	4.49	6.38	96.00	114.00	162.00	12
11.40		0.4488	3.78	4.49	6.38	96.00	114.00	162.00	12
11.50		0.4528	3.78	4.49	6.38	96.00	114.00	162.00	12
11.51	29/64	0.4531	3.78	4.49	6.38	96.00	114.00	162.00	12
11.60		0.4567	3.78	4.49	6.38	96.00	114.00	162.00	12
11.70		0.4606	3.78	4.49	6.38	96.00	114.00	162.00	12
11.80		0.4646	3.78	4.49	6.38	96.00	114.00	162.00	12
11.90		0.4685	3.78	4.49	6.38	96.00	114.00	162.00	12
11.91	15/32	0.4687	3.78	4.49	6.38	96.00	114.00	162.00	12
12.00		0.4724	3.78	4.49	6.38	96.00	114.00	162.00	12
12.10		0.4764	4.41	5.16	7.01	112.00	131.00	178.00	14
12.20		0.4803	4.41	5.16	7.01	112.00	131.00	178.00	14
12.25		0.4823	4.41	5.16	7.01	112.00	131.00	178.00	14
12.30	31/64	0.4843	4.41	5.16	7.01	112.00	131.00	178.00	14
12.40		0.4882	4.41	5.16	7.01	112.00	131.00	178.00	14
12.50		0.4921	4.41	5.16	7.01	112.00	131.00	178.00	14
12.60		0.4961	4.41	5.16	7.01	112.00	131.00	178.00	14

30-1941 Ø d1 (m7)		Dec. Equiv.	I3 Cutting Length Inch	I2 Flute Length Inch	I1 OAL Inch	I3 Cutting Length mm	I2 Flute Length mm	I1 OAL mm	Ø d2 (h6) mm
mm	Inch								
12.70	1/2	0.5000	4.41	5.16	7.01	112.00	131.00	178.00	14
12.75		0.5020	4.41	5.16	7.01	112.00	131.00	178.00	14
12.80		0.5039	4.41	5.16	7.01	112.00	131.00	178.00	14
12.90		0.5079	4.41	5.16	7.01	112.00	131.00	178.00	14
13.00		0.5118	4.41	5.16	7.01	112.00	131.00	178.00	14
13.10	33/64	0.5156	4.41	5.16	7.01	112.00	131.00	178.00	14
13.20		0.5197	4.41	5.16	7.01	112.00	131.00	178.00	14
13.30		0.5236	4.41	5.16	7.01	112.00	131.00	178.00	14
13.40		0.5276	4.41	5.16	7.01	112.00	131.00	178.00	14
13.49	17/32	0.5312	4.41	5.16	7.01	112.00	131.00	178.00	14
13.50		0.5315	4.41	5.16	7.01	112.00	131.00	178.00	14
13.60		0.5354	4.41	5.16	7.01	112.00	131.00	178.00	14
13.70		0.5394	4.41	5.16	7.01	112.00	131.00	178.00	14
13.80		0.5433	4.41	5.16	7.01	112.00	131.00	178.00	14
13.89	35/64	0.5468	4.41	5.16	7.01	112.00	131.00	178.00	14
13.90		0.5472	4.41	5.16	7.01	112.00	131.00	178.00	14
14.00		0.5512	4.41	5.16	7.01	112.00	131.00	178.00	14
14.10		0.5551	5.04	5.98	7.99	128.00	152.00	203.00	16
14.20		0.5591	5.04	5.98	7.99	128.00	152.00	203.00	16
14.25		0.5610	5.04	5.98	7.99	128.00	152.00	203.00	16
14.29	9/16	0.5625	5.04	5.98	7.99	128.00	152.00	203.00	16
14.30		0.5630	5.04	5.98	7.99	128.00	152.00	203.00	16
14.40		0.5669	5.04	5.98	7.99	128.00	152.00	203.00	16
14.50		0.5709	5.04	5.98	7.99	128.00	152.00	203.00	16
14.60		0.5748	5.04	5.98	7.99	128.00	152.00	203.00	16
14.68	37/64	0.5781	5.04	5.98	7.99	128.00	152.00	203.00	16
14.70		0.5787	5.04	5.98	7.99	128.00	152.00	203.00	16
14.80		0.5827	5.04	5.98	7.99	128.00	152.00	203.00	16
14.90		0.5866	5.04	5.98	7.99	128.00	152.00	203.00	16
15.00		0.5906	5.04	5.98	7.99	128.00	152.00	203.00	16
15.08	19/32	0.5937	5.04	5.98	7.99	128.00	152.00	203.00	16
15.10		0.5945	5.04	5.98	7.99	128.00	152.00	203.00	16
15.20		0.5984	5.04	5.98	7.99	128.00	152.00	203.00	16
15.30		0.6024	5.04	5.98	7.99	128.00	152.00	203.00	16
15.40		0.6063	5.04	5.98	7.99	128.00	152.00	203.00	16
15.48	39/64	0.6093	5.04	5.98	7.99	128.00	152.00	203.00	16
15.50		0.6102	5.04	5.98	7.99	128.00	152.00	203.00	16
15.60		0.6142	5.04	5.98	7.99	128.00	152.00	203.00	16
15.70		0.6181	5.04	5.98	7.99	128.00	152.00	203.00	16
15.80		0.6220	5.04	5.98	7.99	128.00	152.00	203.00	16
15.88	5/8	0.6250	5.04	5.98	7.99	128.00	152.00	203.00	16
15.90		0.6260	5.04	5.98	7.99	128.00	152.00	203.00	16
16.00		0.6299	5.04	5.98	7.99	128.00	152.00	203.00	16
16.27	41/64	0.6406	5.67	6.73	8.74	144.00	171.00	222.00	18
16.50		0.6496	5.67	6.73	8.74	144.00	171.00	222.00	18
16.67	21/32	0.6562	5.67	6.73	8.74	144.00	171.00	222.00	18
17.00		0.6693	5.67	6.73	8.74	144.00	171.00	222.00	18
17.46	11/16	0.6875	5.67	6.73	8.74	144.00	171.00	222.00	18
17.50		0.6890	5.67	6.73	8.74	144.00	171.00	222.00	18
18.00		0.7087	5.67	6.73	8.74	144.00	171.00	222.00	18
18.26	23/32	0.7187	6.30	7.48	9.57	160.00	190.00	243.00	20
18.50		0.7283	6.30	7.48	9.57	160.00	190.00	243.00	20
19.00		0.7480	6.30	7.48	9.57	160.00	190.00	243.00	20
19.05	3/4	0.7500	6.30	7.48	9.57	160.00	190.00	243.00	20
19.45	49/64	0.7656	6.30	7.48	9.57	160.00	190.00	243.00	20
19.50		0.7677	6.30	7.48	9.57	160.00	190.00	243.00	20
20.00		0.7874	6.30	7.48	9.57	160.00	190.00	243.00	20

On request shank form DIN 6535HB or HE available without extra charge.
For cutting data, see page 80.

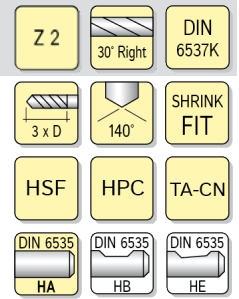
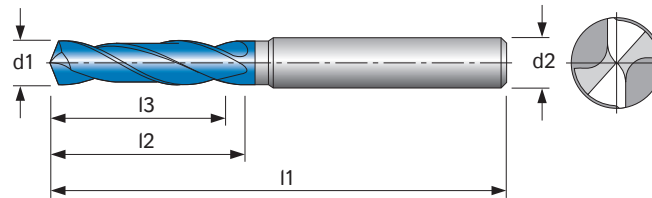
Order example: HA-Shank 30-1941-0770
HB-Shank 30-1941-0770-HB
HE-Shank 30-1941-0770-HE

HAM 30-1891 Nirodrill

Solid Carbide Twist Drill

Engineering Data

- special chip flute geometry
- special point ground for machining of stainless steel
- 30° RH helix



Material	Alu	Alu > 9% Silicon	Steel < 23 Rockwell	Steel < 38 Rockwell	Steel < 48 Rockwell	Steel < 55 Rockwell	Steel < 60 Rockwell	Steel < 66 Rockwell	Stain ST < 23 Rockwell	Stain ST > 23 Rockwell	Cast Iron	Nodular Ductile Cast Iron	Super Alloy Metals	Titanium	Copper & Nonferrous Metals	Graphit & Fiber Composites	MMS	Max.	None	AIR
	●	○							●	●	○		○	●	●	○	●	●		

● very suitable ○ suitable

	Diameter Inch	0.078	0.118	0.157	0.196	0.236	0.315	0.394	0.472	0.551	0.63
Material Group	Diameter mm	2.00	3.00	4.00	5.00	6.00	8.00	10.00	12.00	14.00	16.00
Aluminum	SFM [surface feet/min]	787	787	787	787	787	787	787	787	787	787
	IPR [inches/rev]	0.0031	0.0035	0.0047	0.0059	0.0071	0.0094	0.0118	0.0142	0.0165	0.0189
	Vc [m/min]	240	240	240	240	240	240	240	240	240	240
	f [mm/U]	0.08	0.090	0.120	0.150	0.180	0.240	0.300	0.360	0.420	0.480
Aluminum > 9% Si	SFM [surface feet/min]	656	656	656	656	656	656	656	656	656	656
	IPR [inches/rev]	0.0028	0.0031	0.0043	0.0055	0.0067	0.0091	0.0114	0.0138	0.0161	0.0185
	Vc [m/min]	200	200	200	200	200	200	200	200	200	200
	f [mm/U]	0.070	0.080	0.110	0.140	0.170	0.230	0.290	0.350	0.410	0.470
Stainless Steel < 23 Rockwell	SFM [surface feet/min]	164	164	164	164	164	164	164	164	164	164
	IPR [inches/rev]	0.0012	0.0016	0.0020	0.0022	0.0024	0.0031	0.0039	0.0047	0.0059	0.0079
	Vc [m/min]	50	50	50	50	50	50	50	50	50	50
	f [mm/U]	0.030	0.040	0.050	0.055	0.060	0.080	0.100	0.120	0.150	0.200
Stainless Steel > 23 Rockwell	SFM [surface feet/min]	115	115	115	115	115	115	115	115	115	115
	IPR [inches/rev]	0.0008	0.0010	0.0012	0.0014	0.0016	0.0024	0.0031	0.0039	0.0047	0.0059
	Vc [m/min]	35	35	35	35	35	35	35	35	35	35
	f [mm/U]	0.020	0.025	0.030	0.035	0.040	0.060	0.080	0.100	0.120	0.150
Cast Iron	SFM [surface feet/min]	262	262	262	262	262	262	262	262	262	262
	IPR [inches/rev]	0.0031	0.0035	0.0047	0.0059	0.0071	0.0094	0.0118	0.0142	0.0165	0.0185
	Vc [m/min]	80	80	80	80	80	80	80	80	80	80
	f [mm/U]	0.08	0.090	0.120	0.150	0.180	0.240	0.300	0.360	0.420	0.470
Inconel, Haynes, Hastelloy & other Super Alloy Metals	SFM [surface feet/min]	131	131	131	131	131	131	131	131	131	131
	IPR [inches/rev]	0.0008	0.0012	0.0018	0.0020	0.0024	0.0031	0.0035	0.0043	0.0047	0.0059
	Vc [m/min]	40	40	40	40	40	40	40	40	40	40
	f [mm/U]	0.020	0.030	0.045	0.050	0.060	0.080	0.090	0.110	0.120	0.150
Titanium	SFM [surface feet/min]	115	115	115	115	115	115	115	115	115	115
	IPR [inches/rev]	0.0008	0.0012	0.0016	0.0020	0.0024	0.0028	0.0031	0.0039	0.0047	0.0055
	Vc [m/min]	35	35	35	35	35	35	35	35	35	35
	f [mm/U]	0.020	0.030	0.040	0.050	0.060	0.070	0.080	0.100	0.120	0.140
Copper & Non Ferrous Metals	SFM [surface feet/min]	394	394	394	394	394	394	394	394	394	394
	IPR [inches/rev]	0.0028	0.0031	0.0039	0.0047	0.0059	0.0071	0.0087	0.0102	0.0118	0.0157
	Vc [m/min]	120	120	120	120	120	120	120	120	120	120
	f [mm/U]	0.070	0.080	0.100	0.120	0.150	0.180	0.220	0.260	0.300	0.400
Graphite & Fibre Reinforced Composites	SFM [surface feet/min]	115	115	115	115	115	115	115	115	115	115
	IPR [inches/rev]	0.0016	0.0020	0.0024	0.0028	0.0031	0.0039	0.0047	0.0059	0.0071	0.0079
	Vc [m/min]	35	35	35	35	35	35	35	35	35	35
	f [mm/U]	0.040	0.050	0.060	0.070	0.080	0.100	0.120	0.150	0.180	0.200

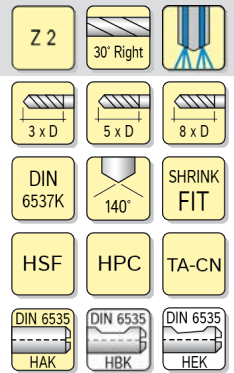
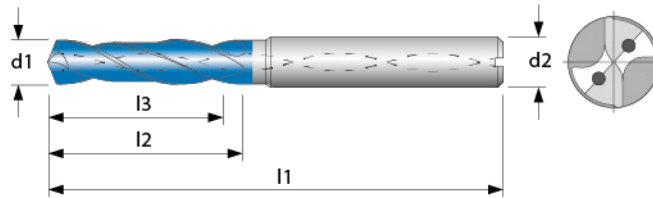
- **Note:** Feed rates listed are starting points. With the proper setup, machine tools and holding technique, higher feeds can be achieved with excellent results. For cutting data for drill sizes not shown in above chart, please contact us.

HAM 30-1881/1901/ 1941 Nirodrill

Solid Carbide Spiral Drill

Engineering Data

- special point ground for machining of stainless steel
- special chip flute geometry
- 30° RH helix



Material	Alu	Alu > 9% Silicon	Steel < 23 Rockwell	Steel < 38 Rockwell	Steel < 48 Rockwell	Steel < 55 Rockwell	Steel < 60 Rockwell	Steel < 66 Rockwell	Stain ST < 23 Rockwell	Stain ST > 23 Rockwell	Cast Iron	Nodular Ductile Cast Iron	Super Alloy Metals	Titanium	Copper & Nonferrous Metals	Graphit. & Fiber Composites	MMS	Max.	None	AIR
	●	○							●	●	○		○	●	●	○	●	●		

● very suitable ○ suitable

	Diameter Inch	0.118	0.157	0.196	0.236	0.315	0.394	0.472	0.551	0.63	0.63
Material Group	Diameter mm	3.00	4.00	5.00	6.00	8.00	10.00	12.00	14.00	16.00	16.00
Aluminum	SFM [surface feet/min]	984	984	984	984	984	984	984	984	984	787
	IPR [inches/rev]	0.0047	0.0071	0.0079	0.0098	0.0118	0.0157	0.0197	0.0236	0.0315	0.0189
	Vc [m/min]	300	300	300	300	300	300	300	300	300	240
	f [mm/U]	0.120	0.180	0.200	0.250	0.300	0.400	0.500	0.600	0.800	0.480
Aluminum > 9% Si	SFM [surface feet/min]	820	820	820	820	820	820	820	820	820	656
	IPR [inches/rev]	0.0039	0.0059	0.0071	0.0098	0.0118	0.0138	0.0157	0.0197	0.0236	0.0185
	Vc [m/min]	250	250	250	250	250	250	250	250	250	200
	f [mm/U]	0.100	0.150	0.180	0.250	0.300	0.350	0.400	0.500	0.600	0.470
Stainless Steel < 23 Rockwell	SFM [surface feet/min]	230	230	230	230	230	230	230	230	230	164
	IPR [inches/rev]	0.0016	0.0020	0.0022	0.0024	0.0031	0.0039	0.0047	0.0059	0.0079	0.0079
	Vc [m/min]	70	70	70	70	70	70	70	70	70	50
	f [mm/U]	0.040	0.050	0.055	0.060	0.080	0.100	0.120	0.150	0.200	0.200
Stainless Steel > 23 Rockwell	SFM [surface feet/min]	148	148	148	148	148	148	148	148	148	115
	IPR [inches/rev]	0.0010	0.0012	0.0014	0.0016	0.0024	0.0031	0.0039	0.0047	0.0059	0.0059
	Vc [m/min]	45	45	45	45	45	45	45	45	45	35
	f [mm/U]	0.025	0.030	0.035	0.040	0.060	0.080	0.100	0.120	0.150	0.150
Cast Iron	SFM [surface feet/min]	394	394	394	394	394	394	394	394	394	262
	IPR [inches/rev]	0.0039	0.0059	0.0071	0.0079	0.0098	0.0118	0.0138	0.0165	0.0197	0.0185
	Vc [m/min]	120	120	120	120	120	120	120	120	120	80
	f [mm/U]	0.100	0.150	0.180	0.200	0.250	0.300	0.350	0.420	0.500	0.470
Inconel, Haynes, Hastelloy & other Super Alloy Metals	SFM [surface feet/min]	164	164	164	164	164	164	164	164	164	131
	IPR [inches/rev]	0.0012	0.0018	0.0020	0.0024	0.0031	0.0035	0.0043	0.0047	0.0059	0.0059
	Vc [m/min]	50	50	50	50	50	50	50	50	50	40
	f [mm/U]	0.030	0.045	0.500	0.060	0.080	0.090	0.110	0.120	0.150	0.150
Titanium	SFM [surface feet/min]	164	164	164	164	164	164	164	164	164	115
	IPR [inches/rev]	0.0012	0.0016	0.0020	0.0024	0.0028	0.0031	0.0039	0.0047	0.0055	0.0055
	Vc [m/min]	50	50	50	50	50	50	50	50	50	35
	f [mm/U]	0.030	0.040	0.050	0.060	0.070	0.080	0.100	0.120	0.140	0.140
Copper & Non Ferrous Metals	SFM [surface feet/min]	492	492	492	492	492	492	492	492	492	394
	IPR [inches/rev]	0.0031	0.0039	0.0047	0.0059	0.0071	0.0087	0.0102	0.0118	0.0157	0.0157
	Vc [m/min]	150	150	150	150	150	150	150	150	150	120
	f [mm/U]	0.080	0.100	0.120	0.150	0.180	0.220	0.260	0.300	0.400	0.400
Graphite & Fibre Reinforced Composites	SFM [surface feet/min]	164	164	164	164	164	164	164	164	164	115
	IPR [inches/rev]	0.0020	0.0024	0.0028	0.0031	0.0039	0.0047	0.0059	0.0071	0.0079	0.0079
	Vc [m/min]	50	50	50	50	50	50	50	50	50	35
	f [mm/U]	0.050	0.060	0.070	0.080	0.100	0.120	0.150	0.180	0.200	0.200

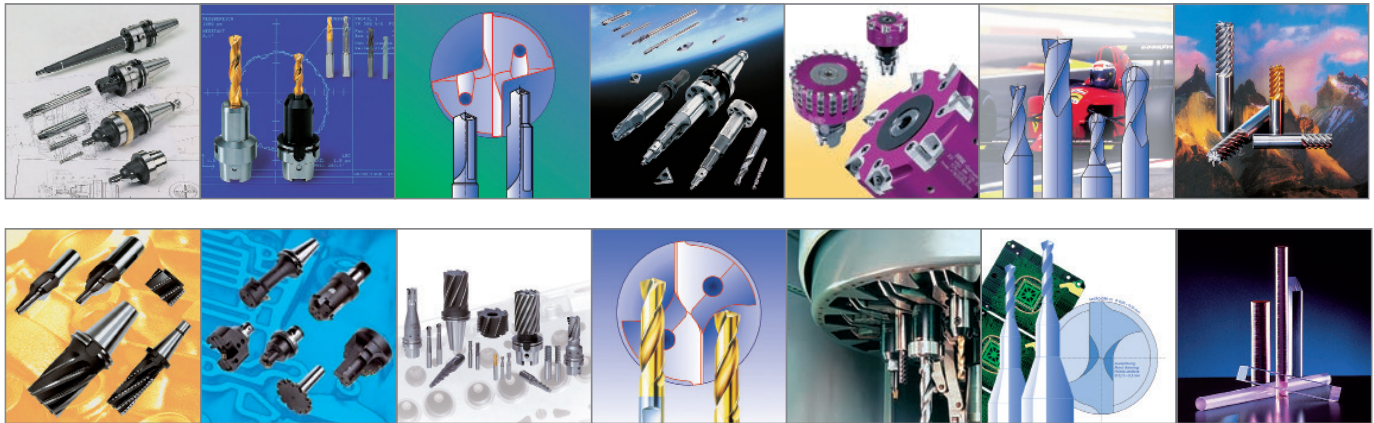
- **Note:** Feed rates listed are starting points. With the proper setup, machine tools and holding technique, higher feeds can be achieved with excellent results. For cutting data for drill sizes not shown in above chart, please contact us.



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