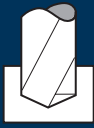


Application



Material

Steel
< 500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
3.00	170	0.085	18040	1535	11.0	0.6
3.30	170	0.095	16400	1560	13.5	0.6
3.50	170	0.100	15460	1545	15.0	0.6
4.00	170	0.115	13530	1555	19.5	0.7
4.20	170	0.120	12885	1545	21.5	0.7
5.00	170	0.145	10825	1570	31.0	0.7
6.00	170	0.170	9020	1535	43.5	0.7
6.80	170	0.195	7960	1550	56.5	1.1
8.50	170	0.245	6365	1560	88.5	1.2

Steel
500 - 850 N/mm²

3.00	130	0.085	13795	1175	8.5	0.8
3.30	130	0.095	12540	1190	10.0	0.8
3.50	130	0.100	11825	1185	11.5	0.8
4.00	130	0.115	10345	1190	15.0	1.0
4.20	130	0.120	9850	1180	16.5	1.0
5.00	130	0.145	8275	1200	23.5	0.9
6.00	130	0.170	6895	1170	33.0	1.0
6.80	130	0.195	6085	1185	43.0	1.5
8.50	130	0.245	4870	1195	68.0	1.6

Steel
850 - 1100 N/mm²

3.00	110	0.065	11670	760	5.5	1.3
3.30	110	0.075	10610	795	7.0	1.2
3.50	110	0.080	10005	800	7.5	1.2
4.00	110	0.090	8755	790	10.0	1.4
4.20	110	0.095	8335	790	11.0	1.4
5.00	110	0.110	7005	770	15.0	1.5
6.00	110	0.135	5835	790	22.5	1.4
6.80	110	0.150	5150	775	28.0	2.2
8.50	110	0.190	4120	785	44.5	2.4

Steel
1100 - 1300 N/mm²

3.00	70	0.055	7425	410	3.0	2.4
3.30	70	0.060	6750	405	3.5	2.4
3.50	70	0.060	6365	380	3.5	2.5
4.00	70	0.070	5570	390	5.0	2.9
4.20	70	0.075	5305	400	5.5	2.8
5.00	70	0.090	4455	400	8.0	2.8
6.00	70	0.105	3715	390	11.0	2.9
6.80	70	0.120	3275	395	14.5	4.4
8.50	70	0.150	2620	395	22.5	4.9

Material

Steel
1300 - 1500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
3.00	40	0.045	4245	190	1.5	5.1
3.30	40	0.045	3860	175	1.5	5.5
3.50	40	0.050	3640	180	1.5	5.3
4.00	40	0.055	3185	175	2.0	6.5
4.20	40	0.060	3030	180	2.5	6.3
5.00	40	0.070	2545	180	3.5	6.3
6.00	40	0.085	2120	180	5.0	6.2
6.80	40	0.095	1870	180	6.5	9.6
8.50	40	0.120	1500	180	10.0	10.7

Cold work tool steel
(12% Cr)
high alloyed
[1.2379]
Stainless steel
[Cr-Ni/1.4301]

3.00	60	0.045	6365	285	2.0	3.4
3.30	60	0.050	5785	290	2.5	3.3
3.50	60	0.050	5455	275	2.5	3.4
4.00	60	0.060	4775	285	3.5	4.0
4.20	60	0.065	4545	295	4.0	3.8
5.00	60	0.075	3820	285	5.5	4.0
6.00	60	0.090	3185	285	8.0	3.9
6.80	60	0.100	2810	280	10.0	6.2
8.50	60	0.125	2245	280	16.0	6.9

Cast iron
(lamellar / spheroidal)

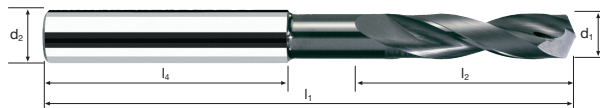
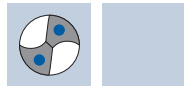
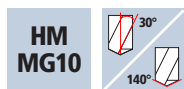
3.00	220	0.095	23345	2220	15.5	0.4
3.30	220	0.105	21220	2230	19.0	0.4
3.50	220	0.110	20010	2200	21.0	0.4
4.00	220	0.125	17505	2190	27.5	0.5
4.20	220	0.130	16675	2170	30.0	0.5
5.00	220	0.155	14005	2170	42.5	0.5
6.00	220	0.190	11670	2215	62.5	0.5
6.80	220	0.215	10300	2215	80.5	0.8
8.50	220	0.265	8240	2185	124.0	0.9

Wrought aluminium
alloys Si < 6%

3.00	250	0.085	26525	2255	16.0	0.4
3.30	250	0.095	24115	2290	19.5	0.4
3.50	250	0.100	22735	2275	22.0	0.4
4.00	250	0.115	19895	2290	29.0	0.5
4.20	250	0.120	18945	2275	31.5	0.5
5.00	250	0.145	15915	2310	45.5	0.5
6.00	250	0.170	13265	2255	64.0	0.5
6.80	250	0.195	11705	2280	83.0	0.8
8.50	250	0.245	9360	2295	130.0	0.8

Spiral flute drills Supradrill® U

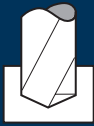
3xd



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500				Inox Stainless		GG(G) Aluminium
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Example: Order-N°.		Article-N°.		ø-Code				NANO-U ²	
		B62011		.0300				B62011	
								B63011	
ø Code	d1 m7	d2 h5	l1	l2	l4	L _{max}			
.0300	3.0	6	62	20	36	16.2			●
.0330	3.3	6	62	20	36	16.0			●
.0340	3.4	6	62	20	36	15.8			●
.0350	3.5	6	62	20	36	15.8			●
.0370	3.7	6	62	20	36	15.6			●
.0380	3.8	6	66	24	36	19.4			●
.0400	4.0	6	66	24	36	18.9			●
.0420	4.2	6	66	24	36	18.8			●
.0450	4.5	6	66	24	36	18.6			●
.0480	4.8	6	66	28	36	18.4			●
.0500	5.0	6	66	28	36	18.8			●
.0550	5.5	6	66	28	36	18.5			●
.0580	5.8	6	66	28	36	18.4			●
.0600	6.0	6	66	28	36	18.6			●
.0650	6.5	8	79	34	36	29.1			●
.0680	6.8	8	79	34	36	28.9			●
.0700	7.0	8	79	34	36	28.8			●
.0750	7.5	8	79	41	36	28.5			●
.0780	7.8	8	79	41	36	28.4			●
.0800	8.0	8	79	41	36	28.5			●
.0850	8.5	10	89	47	40	32.1			●
.0880	8.8	10	89	47	40	31.9			●
.0900	9.0	10	89	47	40	31.7			●

Application



Material

Steel
< 500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
10.00	170	0.285	5410	1540	121.0	1.2
10.20	170	0.290	5305	1540	126.0	1.4
11.00	170	0.315	4920	1550	147.5	1.4
12.00	170	0.345	4510	1555	176.0	1.4
13.00	170	0.370	4165	1540	204.5	1.5
14.00	170	0.400	3865	1545	238.0	1.5
15.00	170	0.430	3610	1550	274.0	1.6
15.50	170	0.445	3490	1555	293.5	1.6
16.00	170	0.455	3380	1540	309.5	1.6

Steel
500 - 850 N/mm²

10.00	130	0.285	4140	1180	92.5	1.6
10.20	130	0.290	4055	1175	96.0	1.9
11.00	130	0.315	3760	1185	112.5	1.9
12.00	130	0.345	3450	1190	134.5	1.8
13.00	130	0.370	3185	1180	156.5	2.0
14.00	130	0.400	2955	1180	181.5	2.0
15.00	130	0.430	2760	1185	209.5	2.1
15.50	130	0.445	2670	1190	224.5	2.0
16.00	130	0.455	2585	1175	236.0	2.1

Steel
850 - 1100 N/mm²

10.00	110	0.220	3500	770	60.5	2.5
10.20	110	0.225	3435	775	63.5	2.9
11.00	110	0.245	3185	780	74.0	2.8
12.00	110	0.265	2920	775	87.5	2.8
13.00	110	0.290	2695	780	103.5	3.0
14.00	110	0.310	2500	775	119.5	3.0
15.00	110	0.335	2335	780	138.0	3.1
15.50	110	0.345	2260	780	147.0	3.1
16.00	110	0.355	2190	775	156.0	3.1

Steel
1100 - 1300 N/mm²

10.00	70	0.175	2230	390	30.5	4.8
10.20	70	0.180	2185	395	32.5	5.7
11.00	70	0.195	2025	395	37.5	5.6
12.00	70	0.210	1855	390	44.0	5.6
13.00	70	0.230	1715	395	52.5	5.9
14.00	70	0.245	1590	390	60.0	5.9
15.00	70	0.265	1485	395	70.0	6.2
15.50	70	0.270	1440	390	73.5	6.2
16.00	70	0.280	1395	390	78.5	6.2

Material

Steel
1300 - 1500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
10.00	40	0.145	1275	185	14.5	10.2
10.20	40	0.145	1250	180	14.5	12.4
11.00	40	0.155	1155	180	17.0	12.2
12.00	40	0.170	1060	180	20.5	12.1
13.00	40	0.185	980	180	24.0	12.9
14.00	40	0.200	910	180	27.5	12.8
15.00	40	0.215	850	185	32.5	13.2
15.50	40	0.220	820	180	34.0	13.5
16.00	40	0.230	795	185	37.0	13.1

Cold work tool steel
(12% Cr)
high alloyed
[1.2379]
Stainless steel
[Cr-Ni/1.4301]

10.00	60	0.150	1910	285	22.5	6.6
10.20	60	0.150	1870	280	23.0	8.0
11.00	60	0.165	1735	285	27.0	7.7
12.00	60	0.180	1590	285	32.0	7.7
13.00	60	0.195	1470	285	38.0	8.1
14.00	60	0.210	1365	285	44.0	8.1
15.00	60	0.225	1275	285	50.5	8.6
15.50	60	0.230	1230	285	54.0	8.5
16.00	60	0.240	1195	285	57.5	8.5

Cast iron
(lamellar / spheroidal)

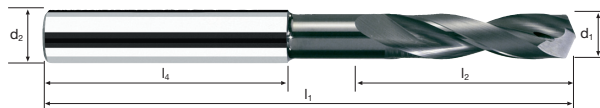
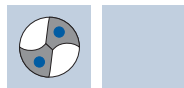
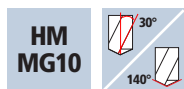
10.00	220	0.315	7005	2205	173.0	0.9
10.20	220	0.320	6865	2195	179.5	1.0
11.00	220	0.345	6365	2195	208.5	1.0
12.00	220	0.375	5835	2190	247.5	1.0
13.00	220	0.405	5385	2180	289.5	1.1
14.00	220	0.440	5000	2200	338.5	1.0
15.00	220	0.470	4670	2195	388.0	1.1
15.50	220	0.485	4520	2190	413.0	1.1
16.00	220	0.500	4375	2190	440.5	1.1

Wrought aluminium
alloys Si < 6%

10.00	250	0.285	7960	2270	178.5	0.8
10.20	250	0.290	7800	2260	184.5	1.0
11.00	250	0.315	7235	2280	216.5	1.0
12.00	250	0.345	6630	2285	258.5	1.0
13.00	250	0.370	6120	2265	300.5	1.0
14.00	250	0.400	5685	2275	350.0	1.0
15.00	250	0.430	5305	2280	403.0	1.1
15.50	250	0.445	5135	2285	431.0	1.1
16.00	250	0.455	4975	2265	455.5	1.1

Spiral flute drills Supradrill® U

3xd



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500				Inox Stainless		GG(G) Aluminium
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Example: Order-N°.		Article-N°.		ø-Code				NANO-U ²	
		B62011		.0950				B62011	
								B63011	
ø Code	d1 m7	d2 h5	l1	l2	l4	L _{max}			
.0950	9.5	10	89	47	40	31.5			●
.0980	9.8	10	89	47	40	31.4			●
.1000	10.0	10	89	47	40	31.5			●
.1020	10.2	12	102	55	45	37.2			●
.1050	10.5	12	102	55	45	37.1			●
.1080	10.8	12	102	55	45	36.9			●
.1100	11.0	12	102	55	45	36.7			●
.1150	11.5	12	102	55	45	36.5			●
.1180	11.8	12	102	55	45	36.3			●
.1200	12.0	12	102	55	45	36.4			●
.1250	12.5	14	107	60	45	39.1			●
.1280	12.8	14	107	60	45	38.9			●
.1300	13.0	14	107	60	45	38.7			●
.1350	13.5	14	107	60	45	38.5			●
.1380	13.8	14	107	60	45	38.3			●
.1400	14.0	14	107	60	45	38.4			●
.1450	14.5	16	115	65	48	41.1			●
.1480	14.8	16	115	65	48	40.8			●
.1500	15.0	16	115	65	48	40.7			●
.1550	15.5	16	115	65	48	40.5			●
.1580	15.8	16	115	65	48	40.3			●
.1600	16.0	16	115	65	48	40.4			●