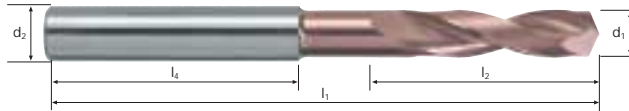
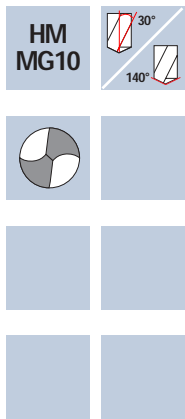


Spiralbohrer Supradrill N

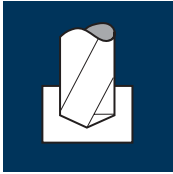
3xd



Rm < 850	Rm 850-1100	Rm 1100-1300								GG(G) Aluminium
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Beispiel: Bestell-Nr.						U-4XD	
Artikel-Nr.		ø-Code				B52010	
B52010		.0300				B53010	
ø Code	d1 m7	d2 h6	l1	l2	l4		
.0300	3.0	6	62	20	36	●	
.0310	3.1	6	62	20	36	●	
.0320	3.2	6	62	20	36	●	
.0330	3.3	6	62	20	36	●	
.0340	3.4	6	62	20	36	●	
.0350	3.5	6	62	20	36	●	
.0360	3.6	6	62	20	36	●	
.0370	3.7	6	62	20	36	●	
.0380	3.8	6	66	24	36	●	
.0390	3.9	6	66	24	36	●	
.0400	4.0	6	66	24	36	●	
.0410	4.1	6	66	24	36	●	
.0420	4.2	6	66	24	36	●	
.0430	4.3	6	66	24	36	●	
.0440	4.4	6	66	24	36	●	
.0450	4.5	6	66	24	36	●	
.0460	4.6	6	66	24	36	●	
.0470	4.7	6	66	24	36	●	
.0480	4.8	6	66	28	36	●	
.0490	4.9	6	66	28	36	●	
.0500	5.0	6	66	28	36	●	
.0510	5.1	6	66	28	36	●	
.0520	5.2	6	66	28	36	●	

Anwendung



Werkstoff

Stahl
< 500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	L _{max} [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
3.00	140	0.080	15.5	14855	1190	8.5	0.8
3.30	140	0.085	15.1	13505	1150	10.0	0.8
3.50	140	0.090	14.8	12730	1145	11.0	0.8
3.80	140	0.100	18.3	11725	1175	13.5	0.9
4.00	140	0.105	18.0	11140	1170	14.5	0.9
4.20	140	0.110	17.7	10610	1165	16.0	0.9
4.50	140	0.120	17.3	9905	1190	19.0	0.9
4.80	140	0.125	20.8	9285	1160	21.0	1.1
5.00	140	0.130	20.5	8915	1160	23.0	1.1

Stahl
500 - 850 N/mm²

3.00	110	0.080	15.5	11670	935	6.5	1.0
3.30	110	0.085	15.1	10610	900	7.5	1.0
3.50	110	0.090	14.8	10005	900	8.5	1.0
3.80	110	0.100	18.3	9215	920	10.5	1.2
4.00	110	0.105	18.0	8755	920	11.5	1.2
4.20	110	0.110	17.7	8335	915	12.5	1.2
4.50	110	0.120	17.3	7780	935	15.0	1.1
4.80	110	0.125	20.8	7295	910	16.5	1.4
5.00	110	0.130	20.5	7005	910	18.0	1.4

Stahl
850 - 1100 N/mm²

3.00	80	0.060	15.5	8490	510	3.5	1.8
3.30	80	0.065	15.1	7715	500	4.5	1.8
3.50	80	0.070	14.8	7275	510	5.0	1.7
3.80	80	0.075	18.3	6700	505	5.5	2.2
4.00	80	0.080	18.0	6365	510	6.5	2.1
4.20	80	0.085	17.7	6065	515	7.0	2.1
4.50	80	0.090	17.3	5660	510	8.0	2.0
4.80	80	0.095	20.8	5305	505	9.0	2.5
5.00	80	0.100	20.5	5095	510	10.0	2.4

Stahl
1100 - 1300 N/mm²

3.00	55	0.050	15.5	5835	290	2.0	3.2
3.30	55	0.055	15.1	5305	290	2.5	3.1
3.50	55	0.060	14.8	5000	300	3.0	3.0
3.80	55	0.065	18.3	4605	300	3.5	3.7
4.00	55	0.065	18.0	4375	285	3.5	3.8
4.20	55	0.070	17.7	4170	290	4.0	3.7
4.50	55	0.075	17.3	3890	290	4.5	3.6
4.80	55	0.080	20.8	3645	290	5.0	4.3
5.00	55	0.085	20.5	3500	300	6.0	4.1

Werkstoff

Stahl
1300 - 1500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	L _{max} [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
3.00	25	0.035	15.5	2655	95	0.5	9.8
3.30	25	0.040	15.1	2410	95	1.0	9.5
3.50	25	0.040	14.8	2275	90	1.0	9.9
3.80	25	0.045	18.3	2095	95	1.0	11.6
4.00	25	0.045	18.0	1990	90	1.0	12.0
4.20	25	0.050	17.7	1895	95	1.5	11.2
4.50	25	0.055	17.3	1770	95	1.5	10.9
4.80	25	0.055	20.8	1660	90	1.5	13.9
5.00	25	0.060	20.5	1590	95	2.0	12.9

Kaltarbeitsstahl
(12% Cr)
hoch legiert
[1.2379]

3.00	50	0.045	15.5	5305	240	1.5	3.9
3.30	50	0.045	15.1	4825	215	2.0	4.2
3.50	50	0.050	14.8	4545	225	2.0	3.9
3.80	50	0.055	18.3	4190	230	2.5	4.8
4.00	50	0.055	18.0	3980	220	3.0	4.9
4.20	50	0.060	17.7	3790	225	3.0	4.7
4.50	50	0.065	17.3	3535	230	3.5	4.5
4.80	50	0.070	20.8	3315	230	4.0	5.4
5.00	50	0.070	20.5	3185	225	4.5	5.5

Gusseisen
GG(G)

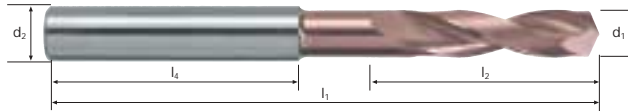
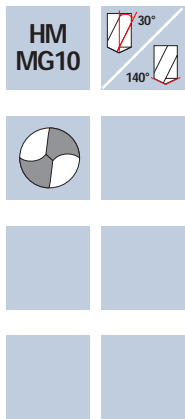
3.00	160	0.085	15.5	16975	1445	10.0	0.6
3.30	160	0.095	15.1	15435	1465	12.5	0.6
3.50	160	0.100	14.8	14550	1455	14.0	0.6
3.80	160	0.110	18.3	13405	1475	16.5	0.7
4.00	160	0.115	18.0	12730	1465	18.5	0.7
4.20	160	0.120	17.7	12125	1455	20.0	0.7
4.50	160	0.130	17.3	11320	1470	23.5	0.7
4.80	160	0.135	20.8	10610	1430	26.0	0.9
5.00	160	0.145	20.5	10185	1475	29.0	0.8

Al-Knetlegierung
Si < 6%

3.00	250	0.070	15.5	26525	1855	13.0	0.5
3.30	250	0.075	15.1	24115	1810	15.5	0.5
3.50	250	0.080	14.8	22735	1820	17.5	0.5
3.80	250	0.085	18.3	20940	1780	20.0	0.6
4.00	250	0.090	18.0	19895	1790	22.5	0.6
4.20	250	0.095	17.7	18945	1800	25.0	0.6
4.50	250	0.105	17.3	17685	1855	29.5	0.6
4.80	250	0.110	20.8	16580	1825	33.0	0.7
5.00	250	0.115	20.5	15915	1830	36.0	0.7

Spiralbohrer Supradrill N

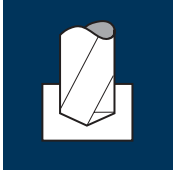
3xd



Rm < 850	Rm 850-1100	Rm 1100-1300								GG(G) Aluminium
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Beispiel: Bestell-Nr. B52010 .0530						U-4XD	
						B52010	
						B53010	
Ø Code	d1 m7	d2 h6	l1	l2	l4		
.0530	5.3	6	66	28	36	●	
.0540	5.4	6	66	28	36	●	
.0550	5.5	6	66	28	36	●	
.0560	5.6	6	66	28	36	●	
.0570	5.7	6	66	28	36	●	
.0580	5.8	6	66	28	36	●	
.0590	5.9	6	66	28	36	●	
.0600	6.0	6	66	28	36	●	
.0610	6.1	8	79	34	36	●	
.0620	6.2	8	79	34	36	●	
.0630	6.3	8	79	34	36	●	
.0640	6.4	8	79	34	36	●	
.0650	6.5	8	79	34	36	●	
.0660	6.6	8	79	34	36	●	
.0670	6.7	8	79	34	36	●	
.0680	6.8	8	79	34	36	●	
.0690	6.9	8	79	34	36	●	
.0700	7.0	8	79	34	36	●	
.0710	7.1	8	79	41	36	●	
.0720	7.2	8	79	41	36	●	
.0730	7.3	8	79	41	36	●	
.0740	7.4	8	79	41	36	●	
.0750	7.5	8	79	41	36	●	

Anwendung



Werkstoff

Stahl
< 500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	L _{max} [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
5.50	140	0.145	19.8	8100	1175	28.0	1.0
5.80	140	0.155	19.3	7685	1190	31.5	1.0
6.00	140	0.160	19.0	7425	1190	33.5	1.0
6.20	140	0.165	31.7	7190	1185	36.0	1.6
6.50	140	0.170	31.3	6855	1165	38.5	1.6
6.80	140	0.180	30.8	6555	1180	43.0	1.6
7.00	140	0.185	30.5	6365	1180	45.5	1.6
7.20	140	0.190	30.2	6190	1175	48.0	1.5
7.50	140	0.195	29.8	5940	1160	51.0	1.5

Stahl
500 - 850 N/mm²

5.50	110	0.145	19.8	6365	925	22.0	1.3
5.80	110	0.155	19.3	6035	935	24.5	1.2
6.00	110	0.160	19.0	5835	935	26.5	1.2
6.20	110	0.165	31.7	5645	930	28.0	2.0
6.50	110	0.170	31.3	5385	915	30.5	2.1
6.80	110	0.180	30.8	5150	925	33.5	2.0
7.00	110	0.185	30.5	5000	925	35.5	2.0
7.20	110	0.190	30.2	4865	925	37.5	2.0
7.50	110	0.195	29.8	4670	910	40.0	2.0

Stahl
850 - 1100 N/mm²

5.50	80	0.110	19.8	4630	510	12.0	2.3
5.80	80	0.115	19.3	4390	505	13.5	2.3
6.00	80	0.120	19.0	4245	510	14.5	2.2
6.20	80	0.125	31.7	4105	515	15.5	3.7
6.50	80	0.130	31.3	3920	510	17.0	3.7
6.80	80	0.135	30.8	3745	505	18.5	3.7
7.00	80	0.140	30.5	3640	510	19.5	3.6
7.20	80	0.145	30.2	3535	515	21.0	3.5
7.50	80	0.150	29.8	3395	510	22.5	3.5

Stahl
1100 - 1300 N/mm²

5.50	55	0.090	19.8	3185	285	7.0	4.2
5.80	55	0.095	19.3	3020	285	7.5	4.1
6.00	55	0.100	19.0	2920	290	8.0	3.9
6.20	55	0.105	31.7	2825	295	9.0	6.4
6.50	55	0.110	31.3	2695	295	10.0	6.4
6.80	55	0.115	30.8	2575	295	10.5	6.3
7.00	55	0.115	30.5	2500	290	11.0	6.3
7.20	55	0.120	30.2	2430	290	12.0	6.2
7.50	55	0.125	29.8	2335	290	13.0	6.2

Werkstoff

Stahl
1300 - 1500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	L _{max} [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
5.50	25	0.065	19.8	1445	95	2.5	12.5
5.80	25	0.070	19.3	1370	95	2.5	12.2
6.00	25	0.070	19.0	1325	95	2.5	12.0
6.20	25	0.075	31.7	1285	95	3.0	20.0
6.50	25	0.075	31.3	1225	90	3.0	20.9
6.80	25	0.080	30.8	1170	95	3.5	19.5
7.00	25	0.080	30.5	1135	90	3.5	20.3
7.20	25	0.085	30.2	1105	95	4.0	19.1
7.50	25	0.090	29.8	1060	95	4.0	18.8

Kaltarbeitsstahl
(12% Cr)
hoch legiert
[1.2379]

5.50	50	0.080	19.8	2895	230	5.5	5.2
5.80	50	0.085	19.3	2745	235	6.0	4.9
6.00	50	0.085	19.0	2655	225	6.5	5.1
6.20	50	0.090	31.7	2565	230	7.0	8.3
6.50	50	0.095	31.3	2450	235	8.0	8.0
6.80	50	0.095	30.8	2340	220	8.0	8.4
7.00	50	0.100	30.5	2275	230	9.0	8.0
7.20	50	0.105	30.2	2210	230	9.5	7.9
7.50	50	0.105	29.8	2120	225	10.0	7.9

Gusseisen
GG(G)

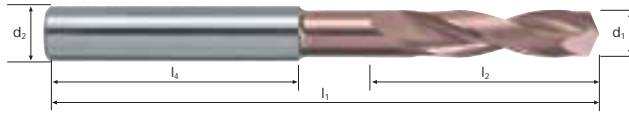
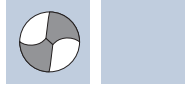
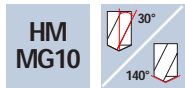
5.50	160	0.155	19.8	9260	1435	34.0	0.8
5.80	160	0.165	19.3	8780	1450	38.5	0.8
6.00	160	0.170	19.0	8490	1445	41.0	0.8
6.20	160	0.175	31.7	8215	1440	43.5	1.3
6.50	160	0.185	31.3	7835	1450	48.0	1.3
6.80	160	0.195	30.8	7490	1460	53.0	1.3
7.00	160	0.200	30.5	7275	1455	56.0	1.3
7.20	160	0.205	30.2	7075	1450	59.0	1.2
7.50	160	0.215	29.8	6790	1460	64.5	1.2

Al-Knetlegierung
Si < 6%

5.50	250	0.125	19.8	14470	1810	43.0	0.7
5.80	250	0.135	19.3	13720	1850	49.0	0.6
6.00	250	0.135	19.0	13265	1790	50.5	0.6
6.20	250	0.140	31.7	12835	1795	54.0	1.1
6.50	250	0.150	31.3	12245	1835	61.0	1.0
6.80	250	0.155	30.8	11705	1815	66.0	1.0
7.00	250	0.160	30.5	11370	1820	70.0	1.0
7.20	250	0.165	30.2	11050	1825	74.5	1.0
7.50	250	0.170	29.8	10610	1805	79.5	1.0

Spiralbohrer Supradrill N

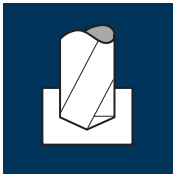
3xd



Rm < 850	Rm 850-1100	Rm 1100-1300								GG(G) Aluminium
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Beispiel: Bestell-Nr. B52010 .0760						U-4XD	
						B52010	
						B53010	
Ø Code	d1 m7	d2 h6	l1	l2	l4		
.0760	7.6	8	79	41	36	●	
.0770	7.7	8	79	41	36	●	
.0780	7.8	8	79	41	36	●	
.0790	7.9	8	79	41	36	●	
.0800	8.0	8	79	41	36	●	
.0810	8.1	10	89	47	40	●	
.0820	8.2	10	89	47	40	●	
.0830	8.3	10	89	47	40	●	
.0840	8.4	10	89	47	40	●	
.0850	8.5	10	89	47	40	●	
.0860	8.6	10	89	47	40	●	
.0870	8.7	10	89	47	40	●	
.0880	8.8	10	89	47	40	●	
.0890	8.9	10	89	47	40	●	
.0900	9.0	10	89	47	40	●	
.0910	9.1	10	89	47	40	●	
.0920	9.2	10	89	47	40	●	
.0930	9.3	10	89	47	40	●	
.0940	9.4	10	89	47	40	●	
.0950	9.5	10	89	47	40	●	
.0960	9.6	10	89	47	40	●	
.0970	9.7	10	89	47	40	●	
.0980	9.8	10	89	47	40	●	

Anwendung



Werkstoff

Stahl
< 500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	L _{max} [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
7.60	140	0.200	29.6	5865	1175	53.5	1.5
8.00	140	0.210	29.0	5570	1170	59.0	1.5
8.20	140	0.215	34.7	5435	1170	62.0	1.8
8.50	140	0.225	34.3	5245	1180	67.0	1.7
8.80	140	0.230	33.8	5065	1165	71.0	1.7
9.00	140	0.235	33.5	4950	1165	74.0	1.7
9.20	140	0.240	33.2	4845	1165	77.5	1.7
9.50	140	0.250	32.8	4690	1175	83.5	1.7
9.80	140	0.260	32.3	4545	1180	89.0	1.6

Stahl
500 - 850 N/mm²

7.60	110	0.200	29.6	4605	920	41.5	1.9
8.00	110	0.210	29.0	4375	920	46.0	1.9
8.20	110	0.215	34.7	4270	920	48.5	2.3
8.50	110	0.225	34.3	4120	925	52.5	2.2
8.80	110	0.230	33.8	3980	915	55.5	2.2
9.00	110	0.235	33.5	3890	915	58.0	2.2
9.20	110	0.240	33.2	3805	915	61.0	2.2
9.50	110	0.250	32.8	3685	920	65.0	2.1
9.80	110	0.260	32.3	3575	930	70.0	2.1

Stahl
850 - 1100 N/mm²

7.60	80	0.150	29.6	3350	505	23.0	3.5
8.00	80	0.160	29.0	3185	510	25.5	3.4
8.20	80	0.165	34.7	3105	510	27.0	4.1
8.50	80	0.170	34.3	2995	510	29.0	4.0
8.80	80	0.175	33.8	2895	505	30.5	4.0
9.00	80	0.180	33.5	2830	510	32.5	3.9
9.20	80	0.185	33.2	2770	510	34.0	3.9
9.50	80	0.190	32.8	2680	510	36.0	3.9
9.80	80	0.195	32.3	2600	505	38.0	3.8

Stahl
1100 - 1300 N/mm²

7.60	55	0.125	29.6	2305	290	13.0	6.1
8.00	55	0.135	29.0	2190	295	15.0	5.9
8.20	55	0.135	34.7	2135	290	15.5	7.2
8.50	55	0.140	34.3	2060	290	16.5	7.1
8.80	55	0.145	33.8	1990	290	17.5	7.0
9.00	55	0.150	33.5	1945	290	18.5	6.9
9.20	55	0.155	33.2	1905	295	19.5	6.8
9.50	55	0.160	32.8	1845	295	21.0	6.7
9.80	55	0.165	32.3	1785	295	22.5	6.6

Werkstoff

Stahl
1300 - 1500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	L _{max} [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
7.60	25	0.090	29.6	1045	95	4.5	18.7
8.00	25	0.095	29.0	995	95	5.0	18.3
8.20	25	0.095	34.7	970	90	5.0	23.1
8.50	25	0.100	34.3	935	95	5.5	21.7
8.80	25	0.105	33.8	905	95	6.0	21.3
9.00	25	0.105	33.5	885	95	6.0	21.2
9.20	25	0.110	33.2	865	95	6.5	21.0
9.50	25	0.110	32.8	840	90	6.5	21.9
9.80	25	0.115	32.3	810	95	7.0	20.4

Kaltarbeitsstahl
(12% Cr)
hoch legiert
[1.2379]

7.60	50	0.110	29.6	2095	230	10.5	7.7
8.00	50	0.115	29.0	1990	230	11.5	7.6
8.20	50	0.115	34.7	1940	225	12.0	9.3
8.50	50	0.120	34.3	1870	225	13.0	9.1
8.80	50	0.125	33.8	1810	225	13.5	9.0
9.00	50	0.130	33.5	1770	230	14.5	8.7
9.20	50	0.130	33.2	1730	225	15.0	8.9
9.50	50	0.135	32.8	1675	225	16.0	8.7
9.80	50	0.140	32.3	1625	230	17.5	8.4

Gusseisen
GG(G)

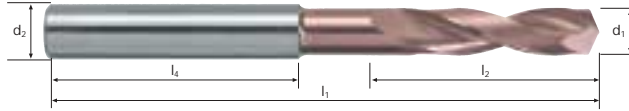
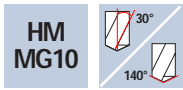
7.60	160	0.215	29.6	6700	1440	65.5	1.2
8.00	160	0.230	29.0	6365	1465	73.5	1.2
8.20	160	0.235	34.7	6210	1460	77.0	1.4
8.50	160	0.245	34.3	5990	1470	83.5	1.4
8.80	160	0.250	33.8	5785	1445	88.0	1.4
9.00	160	0.255	33.5	5660	1445	92.0	1.4
9.20	160	0.265	33.2	5535	1465	97.5	1.4
9.50	160	0.270	32.8	5360	1445	102.5	1.4
9.80	160	0.280	32.3	5195	1455	110.0	1.3

Al-Knetlegierung
Si < 6%

7.60	250	0.175	29.6	10470	1830	83.0	1.0
8.00	250	0.185	29.0	9945	1840	92.5	0.9
8.20	250	0.185	34.7	9705	1795	95.0	1.2
8.50	250	0.195	34.3	9360	1825	103.5	1.1
8.80	250	0.200	33.8	9045	1810	110.0	1.1
9.00	250	0.205	33.5	8840	1810	115.0	1.1
9.20	250	0.210	33.2	8650	1815	120.5	1.1
9.50	250	0.215	32.8	8375	1800	127.5	1.1
9.80	250	0.225	32.3	8120	1825	137.5	1.1

Spiralbohrer Supradrill N

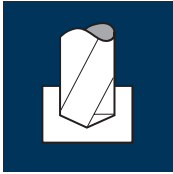
3xd



Rm < 850	Rm 850-1100	Rm 1100-1300								GG(G) Aluminium
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Beispiel: Bestell-Nr. B52010 .0990						U-4XD	
						B52010	
						B53010	
Ø Code	d1 m7	d2 h6	l1	l2	l4		
.0990	9.9	10	89	47	40	●	
.1000	10.0	10	89	47	40	●	
.1010	10.1	12	102	55	45	●	
.1020	10.2	12	102	55	45	●	
.1030	10.3	12	102	55	45	●	
.1040	10.4	12	102	55	45	●	
.1050	10.5	12	102	55	45	●	
.1060	10.6	12	102	55	45	●	
.1070	10.7	12	102	55	45	●	
.1080	10.8	12	102	55	45	●	
.1090	10.9	12	102	55	45	●	
.1100	11.0	12	102	55	45	●	
.1110	11.1	12	102	55	45	●	
.1120	11.2	12	102	55	45	●	
.1130	11.3	12	102	55	45	●	
.1140	11.4	12	102	55	45	●	
.1150	11.5	12	102	55	45	●	
.1160	11.6	12	102	55	45	●	
.1170	11.7	12	102	55	45	●	
.1180	11.8	12	102	55	45	●	
.1190	11.9	12	102	55	45	●	
.1200	12.0	12	102	55	45	●	

Anwendung



Werkstoff

Stahl
< 500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	L _{max} [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
10.00	140	0.265	32.0	4455	1180	92.5	1.6
10.20	140	0.270	39.7	4370	1180	96.5	2.0
10.50	140	0.275	39.3	4245	1165	101.0	2.0
10.80	140	0.285	38.8	4125	1175	107.5	2.0
11.00	140	0.290	38.5	4050	1175	111.5	2.0
11.20	140	0.295	38.2	3980	1175	116.0	2.0
11.50	140	0.305	37.8	3875	1180	122.5	1.9
11.80	140	0.310	37.3	3775	1170	128.0	1.9
12.00	140	0.315	37.0	3715	1170	132.5	1.9

Stahl
500 - 850 N/mm²

10.00	110	0.265	32.0	3500	930	73.0	2.1
10.20	110	0.270	39.7	3435	925	75.5	2.6
10.50	110	0.275	39.3	3335	915	79.0	2.6
10.80	110	0.285	38.8	3240	925	84.5	2.5
11.00	110	0.290	38.5	3185	925	88.0	2.5
11.20	110	0.295	38.2	3125	920	90.5	2.5
11.50	110	0.305	37.8	3045	930	96.5	2.4
11.80	110	0.310	37.3	2965	920	100.5	2.4
12.00	110	0.315	37.0	2920	920	104.0	2.4

Stahl
850 - 1100 N/mm²

10.00	80	0.200	32.0	2545	510	40.0	3.8
10.20	80	0.205	39.7	2495	510	41.5	4.7
10.50	80	0.210	39.3	2425	510	44.0	4.6
10.80	80	0.215	38.8	2360	505	46.5	4.6
11.00	80	0.220	38.5	2315	510	48.5	4.5
11.20	80	0.225	38.2	2275	510	50.0	4.5
11.50	80	0.230	37.8	2215	510	53.0	4.4
11.80	80	0.235	37.3	2160	510	56.0	4.4
12.00	80	0.240	37.0	2120	510	57.5	4.4

Stahl
1100 - 1300 N/mm²

10.00	55	0.165	32.0	1750	290	23.0	6.6
10.20	55	0.170	39.7	1715	290	23.5	8.2
10.50	55	0.175	39.3	1665	290	25.0	8.1
10.80	55	0.180	38.8	1620	290	26.5	8.0
11.00	55	0.185	38.5	1590	295	28.0	7.8
11.20	55	0.185	38.2	1565	290	28.5	7.9
11.50	55	0.190	37.8	1520	290	30.0	7.8
11.80	55	0.195	37.3	1485	290	31.5	7.7
12.00	55	0.200	37.0	1460	290	33.0	7.7

Werkstoff

Stahl
1300 - 1500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	L _{max} [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
10.00	25	0.120	32.0	795	95	7.5	20.2
10.20	25	0.120	39.7	780	95	8.0	25.1
10.50	25	0.125	39.3	760	95	8.0	24.8
10.80	25	0.125	38.8	735	90	8.0	25.9
11.00	25	0.130	38.5	725	95	9.0	24.3
11.20	25	0.130	38.2	710	90	9.0	25.5
11.50	25	0.135	37.8	690	95	10.0	23.9
11.80	25	0.140	37.3	675	95	10.5	23.6
12.00	25	0.140	37.0	665	95	10.5	23.4

Kaltarbeitsstahl
(12% Cr)
hoch legiert
[1.2379]

10.00	50	0.145	32.0	1590	230	18.0	8.3
10.20	50	0.145	39.7	1560	225	18.5	10.6
10.50	50	0.150	39.3	1515	225	19.5	10.5
10.80	50	0.155	38.8	1475	230	21.0	10.1
11.00	50	0.155	38.5	1445	225	21.5	10.3
11.20	50	0.160	38.2	1420	225	22.0	10.2
11.50	50	0.165	37.8	1385	230	24.0	9.9
11.80	50	0.170	37.3	1350	230	25.0	9.7
12.00	50	0.170	37.0	1325	225	25.5	9.9

Gusseisen
GG(G)

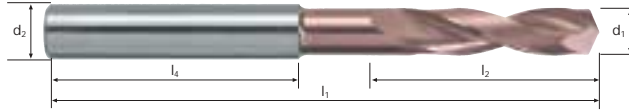
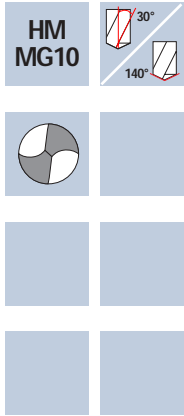
10.00	160	0.285	32.0	5095	1450	114.0	1.3
10.20	160	0.290	39.7	4995	1450	118.5	1.6
10.50	160	0.300	39.3	4850	1455	126.0	1.6
10.80	160	0.310	38.8	4715	1460	133.5	1.6
11.00	160	0.315	38.5	4630	1460	138.5	1.6
11.20	160	0.320	38.2	4545	1455	143.5	1.6
11.50	160	0.330	37.8	4430	1460	151.5	1.6
11.80	160	0.335	37.3	4315	1445	158.0	1.5
12.00	160	0.345	37.0	4245	1465	165.5	1.5

Al-Knetlegierung
Si < 6%

10.00	250	0.230	32.0	7960	1830	143.5	1.0
10.20	250	0.235	39.7	7800	1835	150.0	1.3
10.50	250	0.240	39.3	7580	1820	157.5	1.3
10.80	250	0.245	38.8	7370	1805	165.5	1.3
11.00	250	0.250	38.5	7235	1810	172.0	1.3
11.20	250	0.255	38.2	7105	1810	178.5	1.3
11.50	250	0.265	37.8	6920	1835	190.5	1.2
11.80	250	0.270	37.3	6745	1820	199.0	1.2
12.00	250	0.275	37.0	6630	1825	206.5	1.2

Spiralbohrer Supradrill N

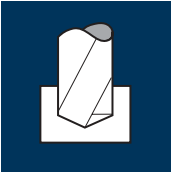
3xd



Rm < 850	Rm 850-1100	Rm 1100-1300								GG(G) Aluminium
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Beispiel: Bestell-Nr.							U-4XD	
							B52010	
							B53010	
Ø Code	d1 m7	d2 h6	l1	l2	l4			
.1250	12.5	14	107	60	45	●		
.1280	12.8	14	107	60	45	●		
.1300	13.0	14	107	60	45	●		
.1350	13.5	14	107	60	45	●		
.1380	13.8	14	107	60	45	●		
.1400	14.0	14	107	60	45	●		
.1450	14.5	16	115	65	48	●		
.1480	14.8	16	115	65	48	●		
.1500	15.0	16	115	65	48	●		
.1550	15.5	16	115	65	48	●		
.1580	15.8	16	115	65	48	●		
.1600	16.0	16	115	65	48	●		

Anwendung



Werkstoff

Stahl
< 500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	L _{max} [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
12.50	140	0.330	41.3	3565	1175	144.0	2.1
12.80	140	0.335	40.8	3480	1165	150.0	2.1
13.00	140	0.340	40.5	3430	1165	154.5	2.1
13.50	140	0.355	39.8	3300	1170	167.5	2.0
14.00	140	0.370	39.0	3185	1180	181.5	2.0
14.50	140	0.380	43.3	3075	1170	193.0	2.2
15.00	140	0.395	42.5	2970	1175	207.5	2.2
15.50	140	0.410	41.8	2875	1180	222.5	2.1
16.00	140	0.420	41.0	2785	1170	235.0	2.1

Stahl
500 - 850 N/mm²

12.50	110	0.330	41.3	2800	925	113.5	2.7
12.80	110	0.335	40.8	2735	915	117.5	2.7
13.00	110	0.340	40.5	2695	915	121.5	2.7
13.50	110	0.355	39.8	2595	920	131.5	2.6
14.00	110	0.370	39.0	2500	925	142.5	2.5
14.50	110	0.380	43.3	2415	920	152.0	2.8
15.00	110	0.395	42.5	2335	920	162.5	2.8
15.50	110	0.410	41.8	2260	925	174.5	2.7
16.00	110	0.420	41.0	2190	920	185.0	2.7

Stahl
850 - 1100 N/mm²

12.50	80	0.250	41.3	2035	510	62.5	4.9
12.80	80	0.255	40.8	1990	505	65.0	4.8
13.00	80	0.260	40.5	1960	510	67.5	4.8
13.50	80	0.270	39.8	1885	510	73.0	4.7
14.00	80	0.280	39.0	1820	510	78.5	4.6
14.50	80	0.290	43.3	1755	510	84.0	5.1
15.00	80	0.300	42.5	1700	510	90.0	5.0
15.50	80	0.310	41.8	1645	510	96.0	4.9
16.00	80	0.320	41.0	1590	510	102.5	4.8

Stahl
1100 - 1300 N/mm²

12.50	55	0.210	41.3	1400	295	36.0	8.4
12.80	55	0.215	40.8	1370	295	38.0	8.3
13.00	55	0.215	40.5	1345	290	38.5	8.4
13.50	55	0.225	39.8	1295	290	41.5	8.2
14.00	55	0.235	39.0	1250	295	45.5	7.9
14.50	55	0.240	43.3	1205	290	48.0	9.0
15.00	55	0.250	42.5	1165	290	51.0	8.8
15.50	55	0.260	41.8	1130	295	55.5	8.5
16.00	55	0.265	41.0	1095	290	58.5	8.5

Werkstoff

Stahl
1300 - 1500 N/mm²

d1 [mm]	v _c [m/min]	f [mm]	L _{max} [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	T [sek]
12.50	25	0.145	41.3	635	90	11.0	27.5
12.80	25	0.150	40.8	620	95	12.0	25.8
13.00	25	0.155	40.5	610	95	12.5	25.6
13.50	25	0.160	39.8	590	95	13.5	25.1
14.00	25	0.165	39.0	570	95	14.5	24.6
14.50	25	0.170	43.3	550	95	15.5	27.3
15.00	25	0.175	42.5	530	95	17.0	26.8
15.50	25	0.180	41.8	515	95	18.0	26.4
16.00	25	0.190	41.0	495	95	19.0	25.9

Kaltarbeitsstahl
(12% Cr)
hoch legiert
[1.2379]

12.50	50	0.180	41.3	1275	230	28.0	10.8
12.80	50	0.185	40.8	1245	230	29.5	10.6
13.00	50	0.185	40.5	1225	225	30.0	10.8
13.50	50	0.195	39.8	1180	230	33.0	10.4
14.00	50	0.200	39.0	1135	225	34.5	10.4
14.50	50	0.205	43.3	1100	225	37.0	11.5
15.00	50	0.215	42.5	1060	230	40.5	11.1
15.50	50	0.220	41.8	1025	225	42.5	11.1
16.00	50	0.230	41.0	995	230	46.0	10.7

Gusseisen
GG(G)

12.50	160	0.355	41.3	4075	1445	177.5	1.7
12.80	160	0.365	40.8	3980	1455	187.0	1.7
13.00	160	0.370	40.5	3920	1450	192.5	1.7
13.50	160	0.385	39.8	3775	1455	208.5	1.6
14.00	160	0.400	39.0	3640	1455	224.0	1.6
14.50	160	0.415	43.3	3510	1455	240.5	1.8
15.00	160	0.430	42.5	3395	1460	258.0	1.7
15.50	160	0.445	41.8	3285	1460	275.5	1.7
16.00	160	0.455	41.0	3185	1450	291.5	1.7

Al-Knetlegierung
Si < 6%

12.50	250	0.285	41.3	6365	1815	222.5	1.4
12.80	250	0.295	40.8	6215	1835	236.0	1.3
13.00	250	0.295	40.5	6120	1805	239.5	1.3
13.50	250	0.310	39.8	5895	1825	261.0	1.3
14.00	250	0.320	39.0	5685	1820	280.0	1.3
14.50	250	0.330	43.3	5490	1810	299.0	1.4
15.00	250	0.345	42.5	5305	1830	323.5	1.4
15.50	250	0.355	41.8	5135	1825	344.5	1.4
16.00	250	0.365	41.0	4975	1815	365.0	1.4