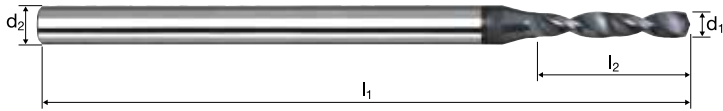
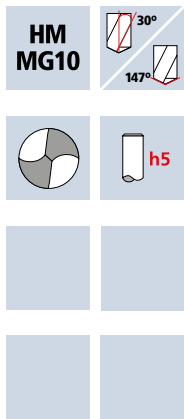


Micro drills Microdrill NX

5xd

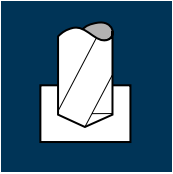


Rm < 850	Rm 850-1100	Rm 1100-1300					Inox Stainless	GG(G) Aluminium
----------	-------------	--------------	--	--	--	--	----------------	-----------------

Example: Order-N°.							DURO-SD	
Article-N°. ø-Code							B57014	
Ø Code	d ₁ m7	d ₂ h5	l ₁	l ₂	L _{max}			
0020	0.20	3.0	42.0	1.3	1.0		●	
0025	0.25	3.0	42.0	1.6	1.2		●	
0030	0.30	3.0	42.0	2.0	1.6		●	
0035	0.35	3.0	42.0	2.3	1.8		●	
0040	0.40	3.0	42.0	2.6	2.0		●	
0045	0.45	3.0	42.0	2.9	2.2		●	
0050	0.50	3.0	42.0	3.3	2.6		●	
0055	0.55	3.0	42.0	3.6	2.8		●	
0060	0.60	3.0	42.0	3.9	3.0		●	
0065	0.65	3.0	42.0	4.2	3.2		●	
0070	0.70	3.0	42.0	4.6	3.6		●	
0075	0.75	3.0	42.0	4.9	3.8		●	
0080	0.80	3.0	42.0	5.2	4.0		●	
0085	0.85	3.0	42.0	5.5	4.2		●	
0087	0.87	3.0	42.0	5.7	4.4		●	
0090	0.90	3.0	42.0	5.9	4.6		●	
0095	0.95	3.0	42.0	6.2	4.8		●	
0100	1.00	3.0	42.0	6.5	5.0		●	
0105	1.05	3.0	42.0	6.8	5.2		●	
0107	1.07	3.0	42.0	7.0	5.4		●	

Application

Material



Steel
< 500 N/mm²



Steel
500 - 850 N/mm²



Steel
850 - 1100 N/mm²



Steel
1100 - 1300 N/mm²



Stainless steel
[Cr-Ni/1.4301]



Cast iron
(lamellar / spheroidal)



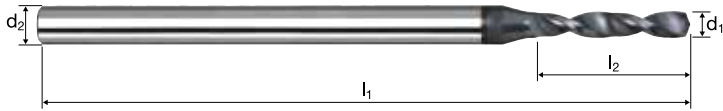
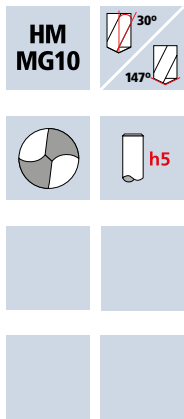
Wrought aluminium alloys
Si < 6%
hardened



d_1 [mm]	v_c [m/min]	f [mm]	n [min ⁻¹]	v_f [mm/min]	Q [mm ² /min]
0.20	100	0.0040	60000	240	7.5
0.30	100	0.0060	60000	360	25.5
0.40	100	0.0080	60000	480	60.5
0.50	100	0.0100	60000	600	118.0
0.60	100	0.0120	53050	637	180.0
0.70	100	0.0140	45475	637	245.0
0.80	100	0.0160	39790	637	320.0
0.90	100	0.0180	35370	637	405.0
1.00	100	0.0200	31830	637	500.0
0.20	80	0.0040	60000	240	7.5
0.30	80	0.0070	60000	420	29.5
0.40	80	0.0090	60000	540	68.0
0.50	80	0.0110	50930	560	110.0
0.60	80	0.0130	42440	552	156.0
0.70	80	0.0160	36380	582	224.0
0.80	80	0.0180	31830	573	288.0
0.90	80	0.0200	28295	566	360.0
1.00	80	0.0220	25465	560	440.0
0.20	40	0.0030	60000	180	5.5
0.30	40	0.0050	42440	212	15.0
0.40	40	0.0060	31830	191	24.0
0.50	40	0.0080	25465	204	40.0
0.60	40	0.0090	21220	191	54.0
0.70	40	0.0110	18190	200	77.0
0.80	40	0.0120	15915	191	96.0
0.90	40	0.0140	14145	198	126.0
1.00	40	0.0150	12730	191	150.0
0.20	50	0.0040	60000	240	7.5
0.30	50	0.0050	53050	265	19.0
0.40	50	0.0070	39790	279	35.0
0.50	50	0.0090	31830	287	56.5
0.60	50	0.0110	26525	292	82.5
0.70	50	0.0130	22735	296	114.0
0.80	35	0.0100	13925	139	70.0
0.90	35	0.0110	12380	136	86.5
1.00	35	0.0120	11140	134	105.0
0.80	30	0.0120	11935	143	72.0
0.90	30	0.0140	10610	149	94.5
1.00	30	0.0150	9550	143	112.5
0.20	130	0.0040	60000	240	7.5
0.30	130	0.0070	60000	420	29.5
0.40	130	0.0090	60000	540	68.0
0.50	130	0.0110	60000	660	129.5
0.60	130	0.0130	60000	780	220.5
0.70	130	0.0160	59115	946	364.0
0.80	130	0.0180	51725	931	468.0
0.90	130	0.0200	45980	920	585.0
1.00	130	0.0220	41380	910	715.0
0.20	160	0.0040	60000	240	7.5
0.30	160	0.0070	60000	420	29.5
0.40	160	0.0090	60000	540	68.0
0.50	160	0.0110	60000	660	129.5
0.60	160	0.0130	60000	780	220.5
0.70	160	0.0160	60000	960	369.5
0.80	160	0.0180	60000	1080	543.0
0.90	160	0.0200	56590	1132	720.0
1.00	160	0.0220	50930	1121	880.0

Micro drills Microdrill NX

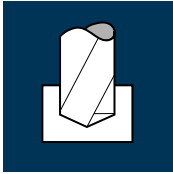
5xd



Rm < 850	Rm 850-1100	Rm 1100-1300					Inox Stainless		GG(G) Aluminium
-------------	----------------	-----------------	--	--	--	--	-------------------	--	--------------------

Example: Order-N°.							DURO-SD	
Article-N°. Ø-Code							B57014	
Ø Code	d ₁ m7	d ₂ h5	l ₁	l ₂	L _{max}			
0110	1.10	3.0	42.0	7.2	5.6		●	
0115	1.15	3.0	42.0	7.5	5.8		●	
0120	1.20	3.0	42.0	7.8	6.0		●	
0125	1.25	3.0	42.0	8.1	6.2		●	
0130	1.30	3.0	42.0	8.5	6.6		●	
0135	1.35	3.0	42.0	8.8	6.8		●	
0140	1.40	3.0	42.0	9.1	7.0		●	
0142	1.42	3.0	42.0	9.2	7.1		●	
0145	1.45	3.0	42.0	9.4	7.2		●	
0150	1.50	3.0	42.0	9.8	7.6		●	
0155	1.55	3.0	42.0	10.1	7.8		●	
0160	1.60	3.0	42.0	10.4	8.0		●	
0162	1.62	3.0	42.0	10.5	8.1		●	
0165	1.65	3.0	42.0	10.7	8.2		●	
0170	1.70	3.0	42.0	11.1	8.6		●	
0175	1.75	3.0	42.0	11.4	8.8		●	
0180	1.80	3.0	42.0	11.7	9.0		●	
0185	1.85	3.0	50.0	12.0	9.2		●	
0190	1.90	3.0	50.0	12.4	9.6		●	
0195	1.95	3.0	50.0	12.7	9.8		●	

Application



Material

Steel
< 500 N/mm²



Steel
500 - 850 N/mm²



Steel
850 - 1100 N/mm²



Steel
1100 - 1300 N/mm²



Stainless steel
[Cr-Ni/1.4301]



Cast iron
(lamellar / spheroidal)



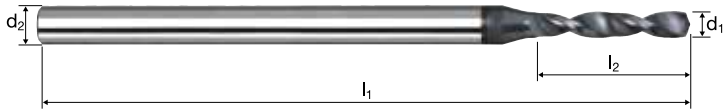
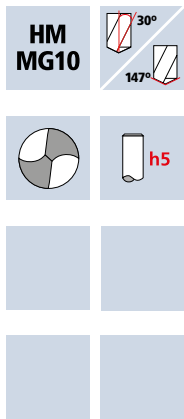
Wrought aluminium alloys
Si < 6%
hardened



d_1 [mm]	v_c [m/min]	f [mm]	n [min ⁻¹]	v_f [mm/min]	Q [mm ² /min]
1.10	100	0.0220	28935	637	605.0
1.20	100	0.0240	26525	637	720.0
1.30	100	0.0260	24485	637	845.0
1.40	100	0.0280	22735	637	980.0
1.50	100	0.0300	21220	637	1125.0
1.60	100	0.0320	19895	637	1280.0
1.70	100	0.0340	18725	637	1445.0
1.80	100	0.0360	17685	637	1620.0
1.90	100	0.0380	16755	637	1805.5
1.10	80	0.0240	23150	556	528.0
1.20	80	0.0270	21220	573	648.0
1.30	80	0.0290	19590	568	754.0
1.40	80	0.0310	18190	564	868.0
1.50	80	0.0330	16975	560	990.0
1.60	80	0.0360	15915	573	1152.0
1.70	80	0.0380	14980	569	1292.0
1.80	80	0.0400	14145	566	1440.0
1.90	80	0.0420	13405	563	1596.5
1.10	40	0.0170	11575	197	187.0
1.20	40	0.0180	10610	191	216.0
1.30	40	0.0200	9795	196	260.0
1.40	40	0.0220	9095	200	308.0
1.50	40	0.0230	8490	195	345.0
1.60	40	0.0250	7960	199	400.0
1.70	40	0.0260	7490	195	442.0
1.80	40	0.0280	7075	198	504.0
1.90	40	0.0290	6700	194	551.0
1.10	35	0.0140	10130	142	135.0
1.20	35	0.0140	9285	130	147.0
1.30	35	0.0160	8570	137	182.0
1.40	35	0.0180	7960	143	220.5
1.50	35	0.0180	7425	134	236.5
1.60	35	0.0200	6965	139	280.0
1.70	35	0.0210	6555	138	312.5
1.80	35	0.0220	6190	136	346.5
1.90	35	0.0230	5865	135	382.5
1.10	30	0.0170	8680	148	140.5
1.20	30	0.0180	7960	143	162.0
1.30	30	0.0200	7345	147	195.0
1.40	30	0.0220	6820	150	231.0
1.50	30	0.0230	6365	146	258.5
1.60	30	0.0250	5970	149	300.0
1.70	30	0.0260	5615	146	331.5
1.80	30	0.0280	5305	149	378.0
1.90	30	0.0290	5025	146	413.0
1.10	130	0.0240	37620	903	858.0
1.20	130	0.0270	34485	931	1053.0
1.30	130	0.0290	31830	923	1225.5
1.40	130	0.0310	29555	916	1410.5
1.50	130	0.0330	27585	910	1608.5
1.60	130	0.0360	25865	931	1872.0
1.70	130	0.0380	24340	925	2099.5
1.80	130	0.0400	22990	920	2340.0
1.90	130	0.0420	21780	915	2593.5
1.10	160	0.0240	46300	1111	1056.0
1.20	160	0.0270	42440	1146	1296.0
1.30	160	0.0290	39175	1136	1508.0
1.40	160	0.0310	36380	1128	1736.0
1.50	160	0.0330	33955	1121	1980.0
1.60	160	0.0360	31830	1146	2304.0
1.70	160	0.0380	29960	1139	2584.0
1.80	160	0.0400	28295	1132	2880.0
1.90	160	0.0420	26805	1126	3192.0

Micro drills Microdrill NX

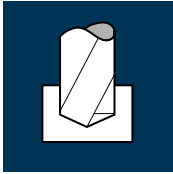
5xd



Rm < 850	Rm 850-1100	Rm 1100-1300					Inox Stainless		GG(G) Aluminium
-------------	----------------	-----------------	--	--	--	--	-------------------	--	--------------------

Example: Order-N°.							DURO-SD	
Article-N°. ø-Code							B57014	
Ø Code	d ₁ m7	d ₂ h5	l ₁	l ₂	L _{max}			
0200	2.00	3.0	50.0	13.0	10.0		●	
0205	2.05	3.0	50.0	13.3	10.2		●	
0210	2.10	3.0	50.0	13.7	10.6		●	
0215	2.15	3.0	50.0	14.0	10.8		●	
0220	2.20	3.0	50.0	14.3	11.0		●	
0225	2.25	3.0	50.0	14.6	11.2		●	
0230	2.30	3.0	50.0	15.0	11.6		●	
0235	2.35	3.0	50.0	15.3	11.8		●	
0240	2.40	3.0	50.0	15.6	12.0		●	
0245	2.45	3.0	50.0	15.9	12.2		●	
0250	2.50	3.0	50.0	16.3	12.6		●	
0255	2.55	3.0	50.0	16.6	12.8		●	
0260	2.60	3.0	50.0	16.9	13.0		●	
0265	2.65	3.0	50.0	17.2	13.2		●	
0270	2.70	3.0	50.0	17.6	13.6		●	
0275	2.75	3.0	50.0	17.9	13.8		●	
0280	2.80	3.0	50.0	18.2	14.0		●	
0285	2.85	3.0	50.0	18.5	14.2		●	
0290	2.90	3.0	50.0	18.9	14.6		●	
0295	2.95	3.0	50.0	19.2	14.8		●	

Application



Material

Steel
< 500 N/mm²



Steel
500 - 850 N/mm²



Steel
850 - 1100 N/mm²



Steel
1100 - 1300 N/mm²



Stainless steel
[Cr-Ni/1.4301]



Cast iron
(lamellar / spheroidal)



Wrought aluminium alloys
Si < 6%
hardened



d_1 [mm]	v_c [m/min]	f [mm]	n [min ⁻¹]	v_f [mm/min]	Q [cm ³ /min]
2.00	100	0.0400	15915	637	2.0
2.10	100	0.0420	15160	637	2.2
2.20	100	0.0440	14470	637	2.4
2.35	100	0.0470	13545	637	2.8
2.50	100	0.0500	12730	637	3.1
2.60	100	0.0520	12245	637	3.4
2.75	100	0.0550	11575	637	3.8
2.85	100	0.0570	11170	637	4.1
2.95	100	0.0590	10790	637	4.4
2.00	80	0.0440	12730	560	1.8
2.10	80	0.0470	12125	570	2.0
2.20	80	0.0490	11575	567	2.2
2.35	80	0.0520	10835	563	2.4
2.50	80	0.0560	10185	570	2.8
2.60	80	0.0580	9795	568	3.0
2.75	80	0.0610	9260	565	3.4
2.85	80	0.0630	8935	563	3.6
2.95	80	0.0660	8630	570	3.9
2.00	40	0.0310	6365	197	0.6
2.10	40	0.0320	6065	194	0.7
2.20	40	0.0340	5785	197	0.7
2.35	40	0.0360	5420	195	0.8
2.50	40	0.0380	5095	194	1.0
2.60	40	0.0400	4895	196	1.0
2.75	40	0.0420	4630	195	1.2
2.85	40	0.0440	4470	197	1.3
2.95	40	0.0450	4315	194	1.3
2.00	35	0.0250	5570	139	0.4
2.10	35	0.0260	5305	138	0.5
2.20	35	0.0270	5065	137	0.5
2.35	35	0.0290	4740	138	0.6
2.50	35	0.0300	4455	134	0.7
2.60	35	0.0320	4285	137	0.7
2.75	35	0.0340	4050	138	0.8
2.85	35	0.0350	3910	137	0.9
2.95	35	0.0360	3775	136	0.9
2.00	30	0.0310	4775	148	0.5
2.10	30	0.0320	4545	145	0.5
2.20	30	0.0340	4340	148	0.6
2.35	30	0.0360	4065	146	0.6
2.50	30	0.0380	3820	145	0.7
2.60	30	0.0400	3675	147	0.8
2.75	30	0.0420	3470	146	0.9
2.85	30	0.0440	3350	147	0.9
2.95	30	0.0450	3235	146	1.0
2.00	130	0.0440	20690	910	2.9
2.10	130	0.0470	19705	926	3.2
2.20	130	0.0490	18810	922	3.5
2.35	130	0.0520	17610	916	4.0
2.50	130	0.0560	16550	927	4.5
2.60	130	0.0580	15915	923	4.9
2.75	130	0.0610	15045	918	5.5
2.85	130	0.0630	14520	915	5.8
2.95	130	0.0660	14025	926	6.3
2.00	160	0.0440	25465	1121	3.5
2.10	160	0.0470	24250	1140	3.9
2.20	160	0.0490	23150	1134	4.3
2.35	160	0.0520	21670	1127	4.9
2.50	160	0.0560	20370	1141	5.6
2.60	160	0.0580	19590	1136	6.0
2.75	160	0.0610	18520	1130	6.7
2.85	160	0.0630	17870	1126	7.2
2.95	160	0.0660	17265	1140	7.8