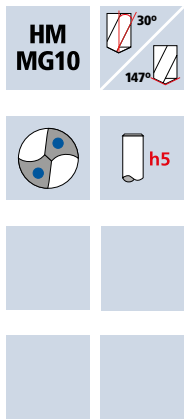


# Micro drills Microdrill NX

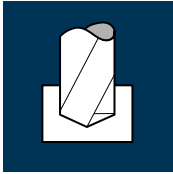
5xd



Rm < 850	Rm 850-1100	Rm 1100-1300					Inox Stainless		GG(G) Aluminium
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Example: Order-N°. <b>B57015 0080</b>							DURO-SD	
							<b>B57015</b>	
∅ Code	d <sub>1</sub> m7	d <sub>2</sub> h5	l <sub>1</sub>	l <sub>2</sub>	L <sub>max</sub>			
0080	0.80	3.0	46.0	5.2	4.0			●
0085	0.85	3.0	46.0	5.5	4.2			●
0090	0.90	3.0	46.0	5.9	4.6			●
0095	0.95	3.0	46.0	6.2	4.8			●
0100	1.00	3.0	48.0	6.5	5.0			●
0105	1.05	3.0	48.0	6.8	5.2			●
0110	1.10	3.0	48.0	7.2	5.6			●
0115	1.15	3.0	48.0	7.5	5.8			●
0120	1.20	3.0	48.0	7.8	6.0			●
0125	1.25	3.0	48.0	8.1	6.2			●
0130	1.30	3.0	48.0	8.5	6.6			●
0135	1.35	3.0	48.0	8.8	6.8			●
0140	1.40	3.0	50.0	9.1	7.0			●
0145	1.45	3.0	50.0	9.4	7.2			●
0150	1.50	3.0	50.0	9.8	7.6			●
0155	1.55	3.0	50.0	10.1	7.8			●
0160	1.60	3.0	50.0	10.4	8.0			●
0165	1.65	3.0	50.0	10.7	8.2			●
0170	1.70	3.0	52.0	11.1	8.6			●
0175	1.75	3.0	52.0	11.4	8.8			●
0180	1.80	3.0	52.0	11.7	9.0			●
0185	1.85	3.0	52.0	12.0	9.2			●

## Application



## Material

Steel  
< 500 N/mm<sup>2</sup>



Steel  
500 - 850 N/mm<sup>2</sup>



Steel  
850 - 1100 N/mm<sup>2</sup>



Stainless steel  
[Cr-Ni-Mo-.../1.4571]



Cast iron  
(lamellar / spheroidal)



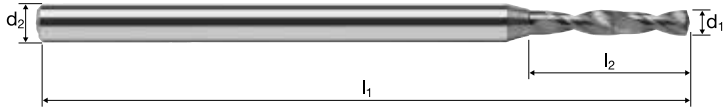
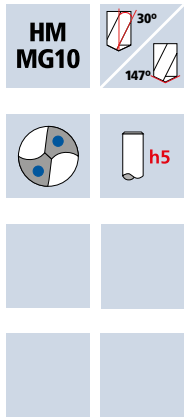
Wrought aluminium alloys  
Si < 6%  
hardened



$d_1$ [mm]	$v_c$ [m/min]	$f$ [mm]	$n$ [min <sup>-1</sup> ]	$v_f$ [mm/min]	$Q$ [mm <sup>3</sup> /min]
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
1.10	160	0.0240	46300	1111	1056.0
1.25	160	0.0280	40745	1141	1400.0
1.40	160	0.0320	36380	1164	1792.0
1.50	160	0.0340	33955	1155	2040.0
1.65	160	0.0390	30865	1204	2574.0
1.80	160	0.0440	28295	1245	3168.0
0.80	120	0.0180	47745	859	432.0
0.90	120	0.0200	42440	849	540.0
1.00	120	0.0220	38195	840	660.0
1.10	120	0.0240	34725	833	792.0
1.25	120	0.0280	30560	856	1050.0
1.40	120	0.0320	27285	873	1344.0
1.50	120	0.0340	25465	866	1530.0
1.65	120	0.0390	23150	903	1930.5
1.80	120	0.0440	21220	934	2376.0
0.80	100	0.0180	39790	716	360.0
0.90	100	0.0200	35370	707	450.0
1.00	100	0.0220	31830	700	550.0
1.10	100	0.0240	28935	694	660.0
1.25	100	0.0280	25465	713	875.0
1.40	100	0.0320	22735	728	1120.0
1.50	100	0.0340	21220	722	1275.0
1.65	100	0.0390	19290	752	1608.5
1.80	100	0.0440	17685	778	1980.0
0.80	70	0.0140	27850	390	196.0
0.90	70	0.0160	24755	396	252.0
1.00	70	0.0180	22280	401	315.0
1.10	70	0.0200	20255	405	385.0
1.25	70	0.0230	17825	410	503.0
1.40	70	0.0260	15915	414	637.0
1.50	70	0.0290	14855	431	761.5
1.65	70	0.0320	13505	432	924.0
1.80	70	0.0360	12380	446	1134.0
0.80	200	0.0210	60000	1260	633.5
0.90	200	0.0230	60000	1380	878.0
1.00	200	0.0260	60000	1560	1225.0
1.10	200	0.0280	57875	1621	1540.0
1.25	200	0.0330	50930	1681	2062.5
1.40	200	0.0370	45475	1683	2590.0
1.50	200	0.0410	42440	1740	3075.0
1.65	200	0.0450	38585	1736	3712.5
1.80	200	0.0500	35370	1769	4500.5
0.80	250	0.0210	60000	1260	633.5
0.90	250	0.0230	60000	1380	878.0
1.00	250	0.0260	60000	1560	1225.0
1.10	250	0.0280	60000	1680	1596.5
1.25	250	0.0330	60000	1980	2430.0
1.40	250	0.0370	56840	2103	3237.5
1.50	250	0.0410	53050	2175	3843.5
1.65	250	0.0450	48230	2170	4641.0
1.80	250	0.0500	44210	2211	5625.0

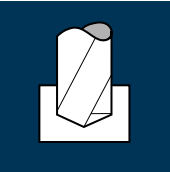






# Micro drills Microdrill NX

5xd



Rm < 850	Rm 850-1100	Rm 1100-1300					Inox Stainless	GG(G) Aluminium
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Example: Order-N°							DURO-SD	
Article-N°							B57015	
σ-Code							0190	
Ø Code	d <sub>1</sub> m7	d <sub>2</sub> h5	l <sub>1</sub>	l <sub>2</sub>	L <sub>max</sub>			
0190	1.90	3.0	52.0	12.4	9.6		●	
0195	1.95	3.0	52.0	12.7	9.8		●	
0200	2.00	3.0	56.0	13.0	10.0		●	
0205	2.05	3.0	56.0	13.3	10.2		●	
0210	2.10	3.0	56.0	13.7	10.6		●	
0215	2.15	3.0	56.0	14.0	10.8		●	
0220	2.20	3.0	56.0	14.3	11.0		●	
0225	2.25	3.0	56.0	14.6	11.2		●	
0230	2.30	3.0	56.0	15.0	11.6		●	
0235	2.35	3.0	56.0	15.3	11.8		●	
0240	2.40	3.0	56.0	15.6	12.0		●	
0245	2.45	3.0	56.0	15.9	12.2		●	
0250	2.50	3.0	56.0	16.3	12.6		●	
0255	2.55	3.0	60.0	16.6	12.8		●	
0260	2.60	3.0	60.0	16.9	13.0		●	
0265	2.65	3.0	60.0	17.2	13.2		●	
0270	2.70	3.0	60.0	17.6	13.6		●	
0275	2.75	3.0	60.0	17.9	13.8		●	
0280	2.80	3.0	60.0	18.2	14.0		●	
0285	2.85	3.0	60.0	18.5	14.2		●	
0290	2.90	3.0	60.0	18.9	14.6		●	
0295	2.95	3.0	60.0	19.2	14.8		●	

Application	Material	$d_1$ [mm]	$v_c$ [m/min]	$f$ [mm]	$n$ [min <sup>-1</sup> ]	$v_f$ [mm/min]	$Q$ [cm <sup>2</sup> /min]
	Steel < 500 N/mm <sup>2</sup> 	2.00	160	0.0490	25465	1248	3.9
		2.10	160	0.0510	24250	1237	4.3
		2.20	160	0.0540	23150	1250	4.8
		2.35	160	0.0590	21670	1279	5.5
		2.50	160	0.0640	20370	1304	6.4
		2.60	160	0.0670	19590	1313	7.0
		2.75	160	0.0720	18520	1333	7.9
		2.85	160	0.0750	17870	1340	8.6
		2.95	160	0.0800	17265	1381	9.4
			Steel 500 - 850 N/mm <sup>2</sup> 	2.00	120	0.0490	19100
2.10	120			0.0510	18190	928	3.2
2.20	120			0.0540	17360	937	3.6
2.35	120			0.0590	16255	959	4.2
2.50	120			0.0640	15280	978	4.8
2.60	120			0.0670	14690	984	5.2
2.75	120			0.0720	13890	1000	5.9
2.85	120			0.0750	13405	1005	6.4
2.95	120			0.0800	12950	1036	7.1
	Steel 850 - 1100 N/mm <sup>2</sup> 			2.00	100	0.0490	15915
		2.10	100	0.0510	15160	773	2.7
		2.20	100	0.0540	14470	781	3.0
		2.35	100	0.0590	13545	799	3.5
		2.50	100	0.0640	12730	815	4.0
		2.60	100	0.0670	12245	820	4.4
		2.75	100	0.0720	11575	833	5.0
		2.85	100	0.0750	11170	838	5.3
		2.95	100	0.0800	10790	863	5.9
			Stainless steel [Cr-Ni-Mo-.../1.4571] 	2.00	70	0.0450	11140
2.10	70			0.0480	10610	509	1.8
2.20	70			0.0500	10130	507	1.9
2.35	70			0.0550	9480	521	2.3
2.50	70			0.0580	8915	517	2.5
2.60	70			0.0620	8570	531	2.8
2.75	70			0.0670	8100	543	3.2
2.85	70			0.0710	7820	555	3.5
2.95	70			0.0740	7555	559	3.8
	Cast iron (lamellar / spheroidal) 			2.00	200	0.0570	31830
		2.10	200	0.0600	30315	1819	6.3
		2.20	200	0.0630	28935	1823	6.9
		2.35	200	0.0690	27090	1869	8.1
		2.50	200	0.0740	25465	1884	9.3
		2.60	200	0.0790	24485	1934	10.3
		2.75	200	0.0830	23150	1922	11.4
		2.85	200	0.0860	22340	1921	12.3
		2.95	200	0.0890	21580	1921	13.1
			Wrought aluminium alloys Si < 6% hardened 	2.00	250	0.0570	39790
2.10	250			0.0600	37895	2274	7.9
2.20	250			0.0630	36170	2279	8.7
2.35	250			0.0690	33865	2337	10.1
2.50	250			0.0740	31830	2355	11.6
2.60	250			0.0790	30605	2418	12.8
2.75	250			0.0830	28935	2402	14.3
2.85	250			0.0860	27920	2401	15.3
2.95	250			0.0890	26975	2401	16.4