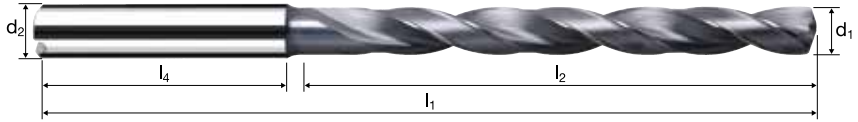
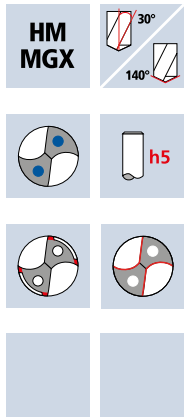


# Spiral flute drills XDrill®

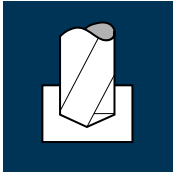
8xd



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500				Inox Stainless	Ti Titanium	GG(G)
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Example: Order-N°.							Article-N°.    ø-Code		DURO-X	
							<b>B72020 0300</b>		<b>B72020</b>	
Ø Code	d <sub>1</sub> m7	d <sub>2</sub> h5	l <sub>1</sub>	l <sub>2</sub>	l <sub>4</sub>	L <sub>max</sub>				
0300	3.00	6.0	73.0	34.0	36	27.2			●	
0310	3.10	6.0	73.0	34.0	36	27.2			●	
0320	3.20	6.0	73.0	34.0	36	27.0			●	
0330	3.30	6.0	73.0	34.0	36	27.0			●	
0340	3.40	6.0	73.0	34.0	36	26.8			●	
0350	3.50	6.0	73.0	34.0	36	26.8			●	
0360	3.60	6.0	73.0	34.0	36	26.6			●	
0370	3.70	6.0	73.0	34.0	36	26.6			●	
0380	3.80	6.0	82.0	43.0	36	35.4			●	
0390	3.90	6.0	82.0	43.0	36	35.4			●	
0400	4.00	6.0	82.0	43.0	36	34.9			●	
0410	4.10	6.0	82.0	43.0	36	34.9			●	
0420	4.20	6.0	82.0	43.0	36	34.8			●	
0430	4.30	6.0	82.0	43.0	36	34.7			●	
0440	4.40	6.0	82.0	43.0	36	34.6			●	
0450	4.50	6.0	82.0	43.0	36	34.6			●	
0460	4.60	6.0	82.0	43.0	36	34.5			●	
0470	4.70	6.0	82.0	43.0	36	34.5			●	
0480	4.80	6.0	95.0	56.0	36	47.4			●	
0490	4.90	6.0	95.0	56.0	36	47.3			●	
0500	5.00	6.0	95.0	56.0	36	47.7			●	
0510	5.10	6.0	95.0	56.0	36	47.7			●	
0520	5.20	6.0	95.0	56.0	36	47.6			●	

## 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>



Steel  
1100 - 1300 N/mm<sup>2</sup>



Steel  
1300 - 1500 N/mm<sup>2</sup>



Cold work tool steel  
(12% Cr),  
high alloyed  
[1.2379]



Titanium alloys  
> 300 HB  
[Ti6Al4V]



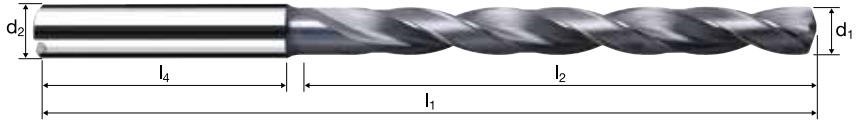
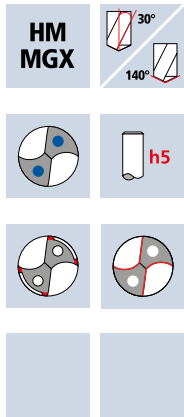
Cast iron  
(lamellar / spheroidal)



d <sub>1</sub> [mm]	v <sub>c</sub> [m/min]	f [mm]	n [min <sup>-1</sup> ]	v <sub>f</sub> [mm/min]	Q [cm <sup>3</sup> /min]
3.00	150	0.0800	15915	1273	9.0
3.30	150	0.0900	14470	1302	11.1
3.50	150	0.0950	13640	1296	12.5
3.80	150	0.1050	12565	1319	15.0
4.00	150	0.1100	11935	1313	16.5
4.20	150	0.1200	11370	1364	18.9
4.50	150	0.1400	10610	1485	23.6
4.80	150	0.1450	9945	1442	26.1
5.00	150	0.1550	9550	1480	29.1
3.00	120	0.0700	12730	891	6.3
3.30	120	0.0750	11575	868	7.4
3.50	120	0.0800	10915	873	8.4
3.80	120	0.0900	10050	905	10.3
4.00	120	0.0950	9550	907	11.4
4.20	120	0.1050	9095	955	13.2
4.50	120	0.1200	8490	1019	16.2
4.80	120	0.1250	7960	995	18.0
5.00	120	0.1300	7640	993	19.5
3.00	100	0.0650	10610	690	4.9
3.30	100	0.0700	9645	675	5.8
3.50	100	0.0750	9095	682	6.6
3.80	100	0.0800	8375	670	7.6
4.00	100	0.0900	7960	716	9.0
4.20	100	0.0950	7580	720	10.0
4.50	100	0.1100	7075	778	12.4
4.80	100	0.1150	6630	763	13.8
5.00	100	0.1200	6365	764	15.0
3.00	70	0.0500	7425	371	2.6
3.30	70	0.0550	6750	371	3.2
3.50	70	0.0550	6365	350	3.4
3.80	70	0.0600	5865	352	4.0
4.00	70	0.0650	5570	362	4.6
4.20	70	0.0700	5305	371	5.1
4.50	70	0.0850	4950	421	6.7
4.80	70	0.0900	4640	418	7.6
5.00	70	0.0900	4455	401	7.9
3.00	40	0.0350	4245	149	1.1
3.30	40	0.0400	3860	154	1.3
3.50	40	0.0450	3640	164	1.6
3.80	40	0.0450	3350	151	1.7
4.00	40	0.0500	3185	159	2.0
4.20	40	0.0550	3030	167	2.3
4.50	40	0.0650	2830	184	2.9
4.80	40	0.0700	2655	186	3.4
5.00	40	0.0700	2545	178	3.5
3.00	60	0.0350	6365	223	1.6
3.30	60	0.0400	5785	231	2.0
3.50	60	0.0450	5455	246	2.4
3.80	60	0.0450	5025	226	2.6
4.00	60	0.0500	4775	239	3.0
4.20	60	0.0550	4545	250	3.5
4.50	60	0.0650	4245	276	4.4
4.80	60	0.0700	3980	279	5.0
5.00	60	0.0700	3820	267	5.3
3.00	35	0.0350	3715	130	0.9
3.30	35	0.0400	3375	135	1.2
3.50	35	0.0450	3185	143	1.4
3.80	35	0.0450	2930	132	1.5
4.00	35	0.0500	2785	139	1.8
4.20	35	0.0550	2655	146	2.0
4.50	35	0.0650	2475	161	2.6
4.80	35	0.0700	2320	162	2.9
5.00	35	0.0700	2230	156	3.1
3.00	220	0.0750	23345	1751	12.4
3.30	220	0.0800	21220	1698	14.5
3.50	220	0.0850	20010	1701	16.4
3.80	220	0.0950	18430	1751	19.9
4.00	220	0.1000	17505	1751	22.0
4.20	220	0.1100	16675	1834	25.4
4.50	220	0.1250	15560	1945	30.9
4.80	220	0.1350	14590	1970	35.6
5.00	220	0.1400	14005	1961	38.5

# Spiral flute drills XDrill®

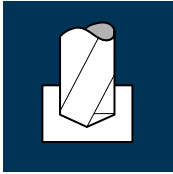
8xd



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500				Inox Stainless	Ti Titanium	GG(G)
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Example: Order-N°.							DURO-X <b>B72020</b>	
∅ Code	d <sub>1</sub> m7	d <sub>2</sub> h5	l <sub>1</sub>	l <sub>2</sub>	l <sub>4</sub>	L <sub>max</sub>		
0530	5.30	6.0	95.0	56.0	36	47.6		●
0540	5.40	6.0	95.0	56.0	36	47.5		●
0550	5.50	6.0	95.0	56.0	36	47.5		●
0560	5.60	6.0	95.0	56.0	36	47.4		●
0570	5.70	6.0	95.0	56.0	36	47.4		●
0580	5.80	6.0	95.0	56.0	36	47.3		●
0590	5.90	6.0	95.0	56.0	36	47.4		●
0600	6.00	6.0	95.0	56.0	36	47.2		●
0610	6.10	8.0	105.0	66.0	36	55.3		●
0620	6.20	8.0	105.0	66.0	36	55.2		●
0630	6.30	8.0	105.0	66.0	36	55.2		●
0640	6.40	8.0	105.0	66.0	36	55.1		●
0650	6.50	8.0	105.0	66.0	36	55.1		●
0660	6.60	8.0	105.0	66.0	36	55.0		●
0670	6.70	8.0	105.0	66.0	36	55.0		●
0680	6.80	8.0	105.0	66.0	36	54.8		●
0690	6.90	8.0	105.0	66.0	36	54.8		●
0700	7.00	8.0	105.0	66.0	36	54.7		●
0710	7.10	8.0	115.0	76.0	36	64.7		●
0720	7.20	8.0	115.0	76.0	36	64.6		●
0730	7.30	8.0	115.0	76.0	36	64.6		●
0740	7.40	8.0	115.0	76.0	36	64.4		●
0750	7.50	8.0	115.0	76.0	36	64.4		●

## 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>



Steel  
1100 - 1300 N/mm<sup>2</sup>



Steel  
1300 - 1500 N/mm<sup>2</sup>



Cold work tool steel  
(12% Cr),  
high alloyed  
[1.2379]



Titanium alloys  
> 300 HB  
[Ti6Al4V]



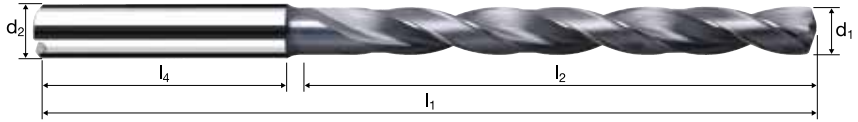
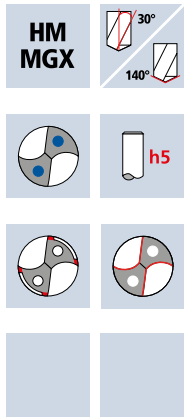
Cast iron  
(lamellar / spheroidal)



d <sub>1</sub> [mm]	v <sub>c</sub> [m/min]	f [mm]	n [min <sup>-1</sup> ]	v <sub>f</sub> [mm/min]	Q [cm <sup>3</sup> /min]
5.50	150	0.1700	8680	1476	35.1
5.80	150	0.1800	8230	1481	39.1
6.00	150	0.1900	7960	1512	42.8
6.20	150	0.2050	7700	1579	47.7
6.50	150	0.2100	7345	1543	51.2
6.80	150	0.2200	7020	1544	56.1
7.00	150	0.2300	6820	1569	60.4
7.20	150	0.2350	6630	1558	63.4
7.50	150	0.2450	6365	1559	68.9
5.50	120	0.1450	6945	1007	23.9
5.80	120	0.1500	6585	988	26.1
6.00	120	0.1650	6365	1050	29.7
6.20	120	0.1750	6160	1078	32.5
6.50	120	0.1800	5875	1058	35.1
6.80	120	0.1900	5615	1067	38.7
7.00	120	0.1950	5455	1064	40.9
7.20	120	0.2000	5305	1061	43.2
7.50	120	0.2100	5095	1070	47.3
5.50	100	0.1350	5785	781	18.6
5.80	100	0.1400	5490	769	20.3
6.00	100	0.1500	5305	796	22.5
6.20	100	0.1600	5135	822	24.8
6.50	100	0.1700	4895	832	27.6
6.80	100	0.1750	4680	819	29.7
7.00	100	0.1800	4545	818	31.5
7.20	100	0.1850	4420	818	33.3
7.50	100	0.1950	4245	828	36.6
5.50	70	0.1000	4050	405	9.6
5.80	70	0.1050	3840	403	10.7
6.00	70	0.1150	3715	427	12.1
6.20	70	0.1200	3595	431	13.0
6.50	70	0.1250	3430	429	14.2
6.80	70	0.1350	3275	442	16.1
7.00	70	0.1350	3185	430	16.5
7.20	70	0.1400	3095	433	17.6
7.50	70	0.1450	2970	431	19.0
5.50	40	0.0800	2315	185	4.4
5.80	40	0.0800	2195	176	4.6
6.00	40	0.0900	2120	191	5.4
6.20	40	0.0950	2055	195	5.9
6.50	40	0.1000	1960	196	6.5
6.80	40	0.1050	1870	196	7.1
7.00	40	0.1050	1820	191	7.4
7.20	40	0.1100	1770	195	7.9
7.50	40	0.1150	1700	196	8.6
5.50	60	0.0800	3470	278	6.6
5.80	60	0.0800	3295	264	7.0
6.00	60	0.0900	3185	287	8.1
6.20	60	0.0950	3080	293	8.8
6.50	60	0.1000	2940	294	9.8
6.80	60	0.1050	2810	295	10.7
7.00	60	0.1050	2730	287	11.0
7.20	60	0.1100	2655	292	11.9
7.50	60	0.1150	2545	293	12.9
5.50	35	0.0800	2025	162	3.8
5.80	35	0.0800	1920	154	4.1
6.00	35	0.0900	1855	167	4.7
6.20	35	0.0950	1795	171	5.1
6.50	35	0.1000	1715	172	5.7
6.80	35	0.1050	1640	172	6.3
7.00	35	0.1050	1590	167	6.4
7.20	35	0.1100	1545	170	6.9
7.50	35	0.1150	1485	171	7.5
5.50	220	0.1550	12730	1973	46.9
5.80	220	0.1600	12075	1932	51.0
6.00	220	0.1750	11670	2042	57.7
6.20	220	0.1850	11295	2090	63.1
6.50	220	0.1950	10775	2101	69.7
6.80	220	0.2000	10300	2060	74.8
7.00	220	0.2100	10005	2101	80.9
7.20	220	0.2150	9725	2091	85.1
7.50	220	0.2250	9335	2100	92.8

# Spiral flute drills XDrill®

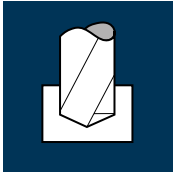
8xd



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500				Inox Stainless	Ti Titanium	GG(G)
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Example: Order-N°.							DURO-X <b>B72020</b>	
∅ Code	d <sub>1</sub> m7	d <sub>2</sub> h5	l <sub>1</sub>	l <sub>2</sub>	l <sub>4</sub>	L <sub>max</sub>		
0760	7.60	8.0	115.0	76.0	36	64.3		●
0770	7.70	8.0	115.0	76.0	36	64.4		●
0780	7.80	8.0	115.0	76.0	36	64.3		●
0790	7.90	8.0	115.0	76.0	36	64.3		●
0800	8.00	8.0	115.0	76.0	36	64.1		●
0810	8.10	10.0	129.0	86.0	40	72.3		●
0820	8.20	10.0	129.0	86.0	40	72.2		●
0830	8.30	10.0	129.0	86.0	40	72.2		●
0840	8.40	10.0	129.0	86.0	40	72.1		●
0850	8.50	10.0	129.0	86.0	40	72.0		●
0860	8.60	10.0	129.0	86.0	40	71.9		●
0870	8.70	10.0	129.0	86.0	40	71.9		●
0880	8.80	10.0	129.0	86.0	40	71.8		●
0890	8.90	10.0	129.0	86.0	40	71.8		●
0900	9.00	10.0	129.0	86.0	40	71.7		●
0910	9.10	10.0	138.0	95.0	40	80.7		●
0920	9.20	10.0	138.0	95.0	40	80.5		●
0930	9.30	10.0	138.0	95.0	40	80.5		●
0940	9.40	10.0	138.0	95.0	40	80.4		●
0950	9.50	10.0	138.0	95.0	40	80.4		●
0960	9.60	10.0	138.0	95.0	40	80.3		●
0970	9.70	10.0	138.0	95.0	40	80.3		●
0980	9.80	10.0	138.0	95.0	40	80.2		●

## 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>



Steel  
1100 - 1300 N/mm<sup>2</sup>



Steel  
1300 - 1500 N/mm<sup>2</sup>



Cold work tool steel  
(12% Cr),  
high alloyed  
[1.2379]



Titanium alloys  
> 300 HB  
[Ti6Al4V]



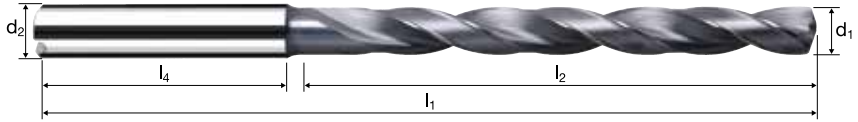
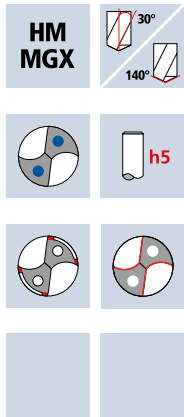
Cast iron  
(lamellar / spheroidal)



d <sub>1</sub> [mm]	v <sub>c</sub> [m/min]	f [mm]	n [min <sup>-1</sup> ]	v <sub>f</sub> [mm/min]	Q [cm <sup>3</sup> /min]
7.60	150	0.2500	6280	1570	71.2
8.00	150	0.2600	5970	1552	78.0
8.20	150	0.2700	5825	1573	83.1
8.50	150	0.2800	5615	1572	89.2
8.80	150	0.2850	5425	1546	94.0
9.00	150	0.2950	5305	1565	99.6
9.20	150	0.3000	5190	1557	103.5
9.50	150	0.3100	5025	1558	110.4
9.80	150	0.3200	4870	1558	117.5
7.60	120	0.2150	5025	1080	49.0
8.00	120	0.2250	4775	1074	54.0
8.20	120	0.2300	4660	1072	56.6
8.50	120	0.2400	4495	1079	61.2
8.80	120	0.2450	4340	1063	64.7
9.00	120	0.2500	4245	1061	67.5
9.20	120	0.2600	4150	1079	71.7
9.50	120	0.2650	4020	1065	75.5
9.80	120	0.2750	3900	1073	80.9
7.60	100	0.1950	4190	817	37.1
8.00	100	0.2050	3980	816	41.0
8.20	100	0.2100	3880	815	43.0
8.50	100	0.2200	3745	824	46.8
8.80	100	0.2250	3615	813	49.5
9.00	100	0.2300	3535	813	51.7
9.20	100	0.2350	3460	813	54.1
9.50	100	0.2450	3350	821	58.2
9.80	100	0.2550	3250	829	62.5
7.60	70	0.1500	2930	440	19.9
8.00	70	0.1550	2785	432	21.7
8.20	70	0.1600	2715	434	22.9
8.50	70	0.1650	2620	432	24.5
8.80	70	0.1700	2530	430	26.2
9.00	70	0.1750	2475	433	27.6
9.20	70	0.1800	2420	436	29.0
9.50	70	0.1850	2345	434	30.7
9.80	70	0.1900	2275	432	32.6
7.60	40	0.1150	1675	193	8.7
8.00	40	0.1200	1590	191	9.6
8.20	40	0.1250	1555	194	10.3
8.50	40	0.1300	1500	195	11.1
8.80	40	0.1350	1445	195	11.9
9.00	40	0.1350	1415	191	12.2
9.20	40	0.1400	1385	194	12.9
9.50	40	0.1450	1340	194	13.8
9.80	40	0.1500	1300	195	14.7
7.60	60	0.1150	2515	289	13.1
8.00	60	0.1200	2385	286	14.4
8.20	60	0.1250	2330	291	15.4
8.50	60	0.1300	2245	292	16.6
8.80	60	0.1350	2170	293	17.8
9.00	60	0.1350	2120	286	18.2
9.20	60	0.1400	2075	291	19.3
9.50	60	0.1450	2010	292	20.7
9.80	60	0.1500	1950	293	22.1
7.60	35	0.1150	1465	169	7.6
8.00	35	0.1200	1395	167	8.4
8.20	35	0.1250	1360	170	9.0
8.50	35	0.1300	1310	170	9.7
8.80	35	0.1350	1265	171	10.4
9.00	35	0.1350	1240	167	10.6
9.20	35	0.1400	1210	169	11.3
9.50	35	0.1450	1175	170	12.1
9.80	35	0.1500	1135	170	12.8
7.60	220	0.2250	9215	2073	94.1
8.00	220	0.2400	8755	2101	105.6
8.20	220	0.2450	8540	2092	110.5
8.50	220	0.2500	8240	2060	116.9
8.80	220	0.2600	7960	2070	125.9
9.00	220	0.2650	7780	2062	131.2
9.20	220	0.2750	7610	2093	139.1
9.50	220	0.2800	7370	2064	146.3
9.80	220	0.2900	7145	2072	156.3

# Spiral flute drills XDrill®

8xd

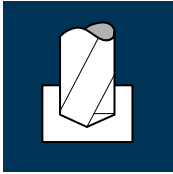



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500				Inox Stainless	Ti Titanium	GG(G)
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Example: Order-N°.							DURO-X <b>B72020</b>	
		Article-N°.		ø-Code				
		<b>B72020</b>		<b>0990</b>				
Ø Code	d <sub>1</sub> m7	d <sub>2</sub> h5	l <sub>1</sub>	l <sub>2</sub>	l <sub>4</sub>	L <sub>max</sub>		
0990	9.90	10.0	138.0	95.0	40	80.3	●	
1000	10.00	10.0	138.0	95.0	40	80.0	●	
1010	10.10	12.0	153.0	105.0	45	88.3	●	
1020	10.20	12.0	153.0	105.0	45	88.2	●	
1030	10.30	12.0	153.0	105.0	45	88.1	●	
1040	10.40	12.0	153.0	105.0	45	88.0	●	
1050	10.50	12.0	153.0	105.0	45	88.0	●	
1060	10.60	12.0	153.0	105.0	45	87.9	●	
1070	10.70	12.0	153.0	105.0	45	87.9	●	
1080	10.80	12.0	153.0	105.0	45	87.8	●	
1090	10.90	12.0	153.0	105.0	45	87.8	●	
1100	11.00	12.0	153.0	105.0	45	87.6	●	
1110	11.10	12.0	162.0	114.0	45	96.6	●	
1120	11.20	12.0	162.0	114.0	45	96.5	●	
1130	11.30	12.0	162.0	114.0	45	96.5	●	
1140	11.40	12.0	162.0	114.0	45	96.4	●	
1150	11.50	12.0	162.0	114.0	45	96.4	●	
1160	11.60	12.0	162.0	114.0	45	96.3	●	
1170	11.70	12.0	162.0	114.0	45	96.3	●	
1180	11.80	12.0	162.0	114.0	45	96.2	●	
1190	11.90	12.0	162.0	114.0	45	96.2	●	
1200	12.00	12.0	162.0	114.0	45	95.9	●	
1250	12.50	14.0	181.0	133.0	45	113.0	●	


## Application

## Material




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



d <sub>1</sub> [mm]	v <sub>c</sub> [m/min]	f [mm]	n [min <sup>-1</sup> ]	v <sub>f</sub> [mm/min]	Q [cm <sup>3</sup> /min]
10.00	150	0.3250	4775	1552	121.9
10.20	150	0.3350	4680	1568	128.1
10.50	150	0.3450	4545	1568	135.8
10.80	150	0.3500	4420	1547	141.7
11.00	150	0.3550	4340	1541	146.4
11.50	150	0.3600	4150	1494	155.2
11.80	150	0.3600	4045	1456	159.2
12.00	150	0.3700	3980	1473	166.5
12.50	150	0.3850	3820	1471	180.5

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



10.00	120	0.2800	3820	1070	84.0
10.20	120	0.2850	3745	1067	87.2
10.50	120	0.2950	3640	1074	93.0
10.80	120	0.3000	3535	1061	97.2
11.00	120	0.3050	3470	1058	100.6
11.50	120	0.3100	3320	1029	106.9
11.80	120	0.3100	3235	1003	109.7
12.00	120	0.3150	3185	1003	113.5
12.50	120	0.3300	3055	1008	123.7

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



10.00	100	0.2600	3185	828	65.0
10.20	100	0.2650	3120	827	67.6
10.50	100	0.2700	3030	818	70.8
10.80	100	0.2750	2945	810	74.2
11.00	100	0.2800	2895	811	77.0
11.50	100	0.2850	2770	790	82.0
11.80	100	0.2850	2700	770	84.2
12.00	100	0.2900	2655	770	87.1
12.50	100	0.3050	2545	776	95.3

Steel 1100 - 1300 N/mm <sup>2</sup>



10.00	70	0.1950	2230	435	34.2
10.20	70	0.2000	2185	437	35.7
10.50	70	0.2050	2120	435	37.6
10.80	70	0.2100	2065	434	39.7
11.00	70	0.2150	2025	435	41.4
11.50	70	0.2150	1940	417	43.3
11.80	70	0.2150	1890	406	44.4
12.00	70	0.2200	1855	408	46.2
12.50	70	0.2300	1785	411	50.4

Steel 1300 - 1500 N/mm <sup>2</sup>




10.00	40	0.1500	1275	191	15.0
10.20	40	0.1550	1250	194	15.8
10.50	40	0.1600	1215	194	16.8
10.80	40	0.1600	1180	189	17.3
11.00	40	0.1650	1155	191	18.1
11.50	40	0.1650	1105	182	18.9
11.80	40	0.1650	1080	178	19.5
12.00	40	0.1700	1060	180	20.4
12.50	40	0.1750	1020	179	21.9

Cold work tool steel (12% Cr), high alloyed [1.2379]


10.00	60	0.1500	1910	287	22.5
10.20	60	0.1550	1870	290	23.7
10.50	60	0.1600	1820	291	25.2
10.80	60	0.1600	1770	283	25.9
11.00	60	0.1650	1735	286	27.2
11.50	60	0.1650	1660	274	28.4
11.80	60	0.1650	1620	267	29.2
12.00	60	0.1700	1590	270	30.6
12.50	60	0.1750	1530	268	32.9

Titanium alloys > 300 HB [Ti6Al4V]


10.00	35	0.1500	1115	167	13.1
10.20	35	0.1550	1090	169	13.8
10.50	35	0.1600	1060	170	14.7
10.80	35	0.1600	1030	165	15.1
11.00	35	0.1650	1015	168	15.9
11.50	35	0.1650	970	160	16.6
11.80	35	0.1650	945	156	17.0
12.00	35	0.1700	930	158	17.9
12.50	35	0.1750	890	156	19.1

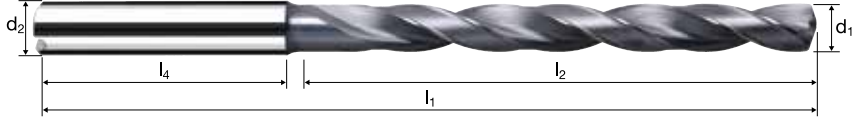
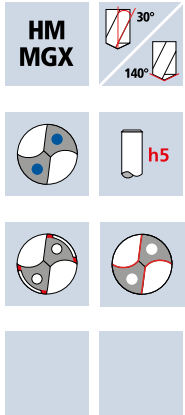
Cast iron (lamellar / spheroidal)
 

10.00	220	0.2950	7005	2067	162.3
10.20	220	0.3050	6865	2094	171.1
10.50	220	0.3100	6670	2068	179.0
10.80	220	0.3150	6485	2043	187.1
11.00	220	0.3250	6365	2069	196.6
11.50	220	0.3300	6090	2010	208.7
11.80	220	0.3300	5935	1959	214.2
12.00	220	0.3350	5835	1955	221.1
12.50	220	0.3500	5600	1960	240.5



# Spiral flute drills XDrill®

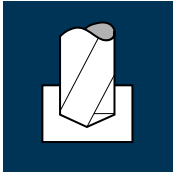
8xd



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500				Inox Stainless	Ti Titanium	GG(G)
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Example:							DURO-X	
Order-N°:							B72020	
Ø Code	d <sub>1</sub> m7	d <sub>2</sub> h5	l <sub>1</sub>	l <sub>2</sub>	l <sub>4</sub>	L <sub>max</sub>		
1280	12.80	14.0	181.0	133.0	45	112.7	●	
1300	13.00	14.0	181.0	133.0	45	112.6	●	
1350	13.50	14.0	181.0	133.0	45	112.3	●	
1380	13.80	14.0	181.0	133.0	45	112.1	●	
1400	14.00	14.0	181.0	133.0	45	111.9	●	
1450	14.50	16.0	203.0	152.0	48	128.9	●	
1480	14.80	16.0	203.0	152.0	48	128.7	●	
1500	15.00	16.0	203.0	152.0	48	128.6	●	
1550	15.50	16.0	203.0	152.0	48	128.3	●	
1580	15.80	16.0	203.0	152.0	48	128.1	●	
1600	16.00	16.0	203.0	152.0	48	127.8	●	

## 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>



Steel  
1100 - 1300 N/mm<sup>2</sup>



Steel  
1300 - 1500 N/mm<sup>2</sup>



Cold work tool steel  
(12% Cr),  
high alloyed  
[1.2379]



Titanium alloys  
> 300 HB  
[Ti6Al4V]



Cast iron  
(lamellar / spheroidal)



d <sub>1</sub> [mm]	v <sub>c</sub> [m/min]	f [mm]	n [min <sup>-1</sup> ]	v <sub>f</sub> [mm/min]	Q [cm <sup>3</sup> /min]
12.80	150	0.3950	3730	1473	189.6
13.00	150	0.4000	3675	1470	195.1
13.50	150	0.4050	3535	1432	204.9
14.00	150	0.4100	3410	1398	215.2
14.50	150	0.4200	3295	1384	228.5
14.80	150	0.4250	3225	1371	235.8
15.00	150	0.4300	3185	1370	242.0
15.50	150	0.4400	3080	1355	255.7
16.00	150	0.4500	2985	1343	270.1
12.80	120	0.3350	2985	1000	128.7
13.00	120	0.3400	2940	1000	132.7
13.50	120	0.3450	2830	976	139.8
14.00	120	0.3500	2730	956	147.1
14.50	120	0.3600	2635	949	156.6
14.80	120	0.3650	2580	942	162.0
15.00	120	0.3700	2545	942	166.4
15.50	120	0.3750	2465	924	174.4
16.00	120	0.3850	2385	918	184.6
12.80	100	0.3100	2485	770	99.1
13.00	100	0.3150	2450	772	102.4
13.50	100	0.3200	2360	755	108.1
14.00	100	0.3250	2275	739	113.8
14.50	100	0.3300	2195	724	119.6
14.80	100	0.3350	2150	720	123.9
15.00	100	0.3400	2120	721	127.4
15.50	100	0.3450	2055	709	133.8
16.00	100	0.3550	1990	707	142.1
12.80	70	0.2350	1740	409	52.6
13.00	70	0.2400	1715	412	54.6
13.50	70	0.2450	1650	404	57.9
14.00	70	0.2450	1590	390	60.0
14.50	70	0.2500	1535	384	63.4
14.80	70	0.2550	1505	384	66.0
15.00	70	0.2600	1485	386	68.2
15.50	70	0.2650	1440	382	72.0
16.00	70	0.2700	1395	377	75.7
12.80	40	0.1800	995	179	23.0
13.00	40	0.1850	980	181	24.1
13.50	40	0.1850	945	175	25.0
14.00	40	0.1900	910	173	26.6
14.50	40	0.1950	880	172	28.3
14.80	40	0.1950	860	168	28.9
15.00	40	0.2000	850	170	30.0
15.50	40	0.2050	820	168	31.7
16.00	40	0.2050	795	163	32.8
12.80	60	0.1800	1490	268	34.5
13.00	60	0.1850	1470	272	36.1
13.50	60	0.1850	1415	262	37.5
14.00	60	0.1900	1365	259	39.9
14.50	60	0.1950	1315	256	42.3
14.80	60	0.1950	1290	252	43.3
15.00	60	0.2000	1275	255	45.1
15.50	60	0.2050	1230	252	47.6
16.00	60	0.2050	1195	245	49.3
12.80	35	0.1800	870	157	20.2
13.00	35	0.1850	855	158	21.0
13.50	35	0.1850	825	153	21.8
14.00	35	0.1900	795	151	23.3
14.50	35	0.1950	770	150	24.8
14.80	35	0.1950	755	147	25.3
15.00	35	0.2000	745	149	26.3
15.50	35	0.2050	720	148	27.9
16.00	35	0.2050	695	143	28.7
12.80	220	0.3550	5470	1942	249.9
13.00	220	0.3600	5385	1939	257.3
13.50	220	0.3700	5185	1919	274.6
14.00	220	0.3750	5000	1875	288.6
14.50	220	0.3800	4830	1835	303.1
14.80	220	0.3850	4730	1821	313.3
15.00	220	0.3900	4670	1821	321.9
15.50	220	0.4000	4520	1808	341.2
16.00	220	0.4050	4375	1772	356.3