

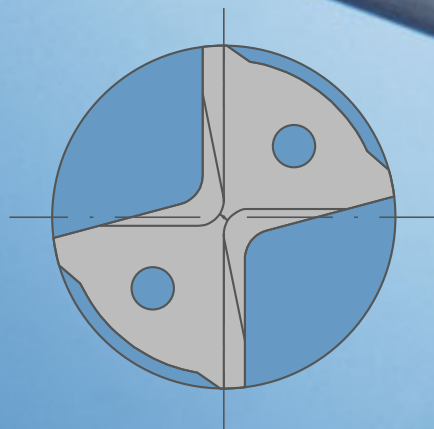
Drills with straight flutes –

... in solid carbide or PCD-tipped

In addition to spiral drills, MAPAL supplies drills with straight flutes. These tools have four margins as a supporting feature. The straight flute design significantly adds to the strength of the tool and helps to reduce the distance the chip must travel to escape the bore when compared to helical tools. With a polished flute and a strong design, these styles of tools perform extremely well in abrasive materials. It also allows the drill to be fed aggressively in key material groups, while maintaining hole straightness and accuracy with the help of four margins as a support feature.

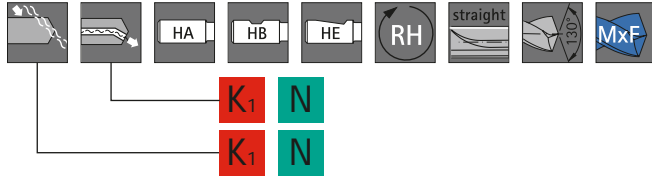
The solid carbide version of the drills with straight flutes is specifically designed for use in grey cast iron, aluminium and aluminium alloys together with other non-ferrous metals.

Because of its excellent properties, MAPAL also offers drills with PCD-tipped cutting edges. The PCD-tips are in the center of a solid carbide drill. Drill center and chisel point are protected. Maximum tool life, cutting values for economic production and excellent surface qualities for best machining result from this cutting material.



Solid carbide drill with straight flutes

M2503 / M2603

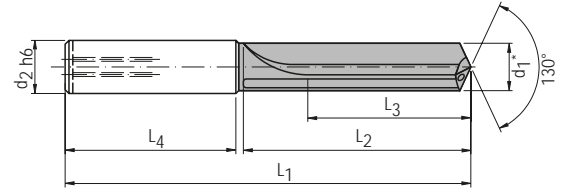
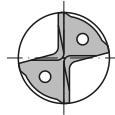
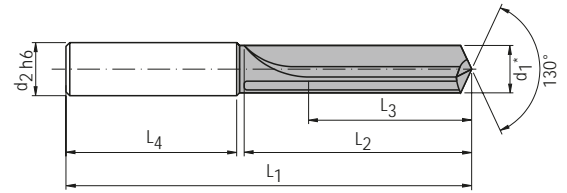
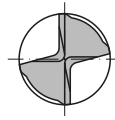


Design:

Drill diameter: 3.00 – 20.00 mm
0.1181 – 0.7874 Inch

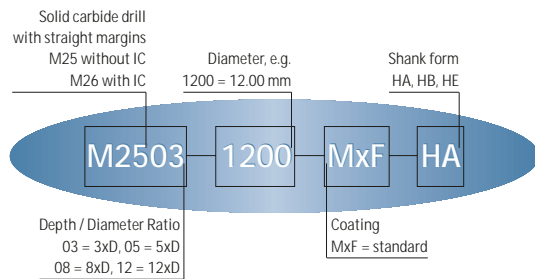
Bore tolerance: IT9 (achievable)

No. of margins: 2



Product is built-to-order!

To order, use the following order code:



M2503



M2603



3xD

Drill diameter		Dimensions					
mm	Dec. equivalent Inch	Shank diameter d ₂ h ₆ mm	Total length L ₁ mm	Margin length L ₂ mm	Maximum drilling depth L ₃ mm	Shank length L ₄ mm	
3.00 – 3.70	0.1181 – 0.1457	6	62	20	14	36	<input type="checkbox"/>
3.80 – 4.70	0.1496 – 0.1850	6	66	24	17	36	<input type="checkbox"/>
4.80 – 6.00	0.1890 – 0.2362	6	66	28	20	36	<input type="checkbox"/>
6.10 – 7.00	0.2402 – 0.2756	8	79	34	24	36	<input type="checkbox"/>
7.10 – 8.00	0.2795 – 0.3150	8	79	41	29	36	<input type="checkbox"/>
8.10 – 10.00	0.3189 – 0.3937	10	89	47	35	40	<input type="checkbox"/>
10.10 – 12.00	0.3976 – 0.4724	12	102	55	40	45	<input type="checkbox"/>
12.50 – 14.00	0.4921 – 0.5512	14	107	60	43	45	<input type="checkbox"/>
14.50 – 16.00	0.5709 – 0.6299	16	115	65	45	48	<input type="checkbox"/>
16.50 – 18.00	0.6496 – 0.7087	18	123	73	51	48	<input type="checkbox"/>
18.50 – 20.00	0.7283 – 0.7874	20	131	79	55	50	<input type="checkbox"/>

Solid carbide drill with straight flutes

M2605 / M2608 / M2612



M2605

5xD

Drill diameter d ₁ *		Dimensions					
mm	Dec. equivalent Inch	Shank diameter d ₂ h ₆ mm	Total length L ₁ mm	Margin length L ₂ mm	Maximum drilling depth L ₃ mm	Shank length L ₄ mm	
3.00 – 3.70	0.1181 – 0.1457	6	66	28	23	36	<input type="checkbox"/>
3.80 – 4.70	0.1496 – 0.1850	6	74	36	29	36	<input type="checkbox"/>
4.80 – 6.00	0.1890 – 0.2362	6	82	44	35	36	<input type="checkbox"/>
6.10 – 8.00	0.2402 – 0.3150	8	91	53	43	36	<input type="checkbox"/>
8.10 – 10.00	0.3189 – 0.3937	10	103	61	49	40	<input type="checkbox"/>
10.10 – 12.00	0.3976 – 0.4724	12	118	71	56	45	<input type="checkbox"/>
12.50 – 14.00	0.4921 – 0.5512	14	124	77	60	45	<input type="checkbox"/>
14.50 – 16.00	0.5709 – 0.6299	16	133	83	63	48	<input type="checkbox"/>
16.50 – 18.00	0.6496 – 0.7087	18	143	93	71	48	<input type="checkbox"/>
18.50 – 20.00	0.7283 – 0.7874	20	153	101	77	50	<input type="checkbox"/>



M2608

8xD

Drill diameter d ₁ *		Dimensions					
mm	Dec. equivalent Inch	Shank diameter d ₂ h ₆ mm	Total length L ₁ mm	Margin length L ₂ mm	Maximum drilling depth L ₃ mm	Shank length L ₄ mm	
3.00 – 3.70	0.1181 – 0.1457	6	72	34	29	36	<input type="checkbox"/>
3.80 – 4.70	0.1496 – 0.1850	6	81	43	36	36	<input type="checkbox"/>
4.80 – 6.00	0.1890 – 0.2362	6	95	57	48	36	<input type="checkbox"/>
6.10 – 8.00	0.2402 – 0.3150	8	114	76	64	36	<input type="checkbox"/>
8.10 – 10.00	0.3189 – 0.3937	10	142	95	80	40	<input type="checkbox"/>
10.10 – 12.00	0.3976 – 0.4724	12	162	114	96	45	<input type="checkbox"/>
12.50 – 14.00	0.4921 – 0.5512	14	178	133	112	45	<input type="checkbox"/>
14.50 – 16.00	0.5709 – 0.6299	16	203	152	128	48	<input type="checkbox"/>
16.50 – 18.00	0.6496 – 0.7087	18	222	171	144	48	<input type="checkbox"/>
18.50 – 20.00	0.7283 – 0.7874	20	243	190	160	50	<input type="checkbox"/>



M2612

12xD

Drill diameter d ₁ *		Dimensions					
mm	Dec. equivalent Inch	Shank diameter d ₂ h ₆ mm	Total length L ₁ mm	Margin length L ₂ mm	Maximum drilling depth L ₃ mm	Shank length L ₄ mm	
3.00 – 3.70	0.1181 – 0.1457	6	92	54	48	36	<input type="checkbox"/>
3.80 – 4.70	0.1496 – 0.1850	6	102	64	58	36	<input type="checkbox"/>
4.80 – 6.00	0.1890 – 0.2362	6	116	78	70	36	<input type="checkbox"/>
6.10 – 8.00	0.2402 – 0.3150	8	146	108	94	36	<input type="checkbox"/>
8.10 – 10.00	0.3189 – 0.3937	10	162	120	110	40	<input type="checkbox"/>
10.10 – 12.00	0.3976 – 0.4724	12	204	156	142	45	<input type="checkbox"/>
12.50 – 14.00	0.4921 – 0.5512	14	230	182	166	45	<input type="checkbox"/>
14.50 – 16.00	0.5709 – 0.6299	16	260	208	192	48	<input type="checkbox"/>
16.50 – 18.00	0.6496 – 0.7087	18	285	234	216	48	<input type="checkbox"/>
18.50 – 20.00	0.7283 – 0.7874	20	310	258	240	50	<input type="checkbox"/>

* The bore diameter tolerance d₁ is within the bore tolerance field H7.

For machining values see Page 92.