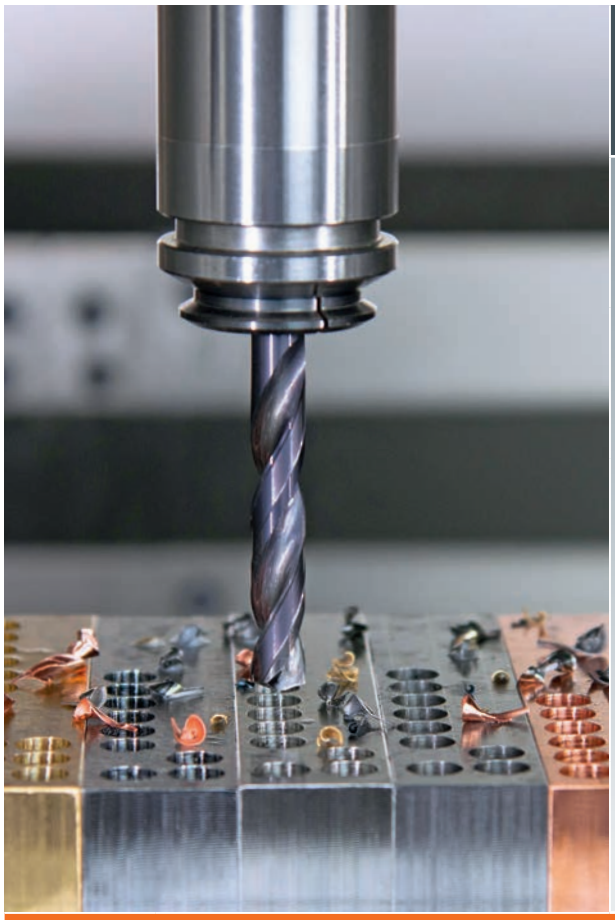
EMUGE FRANKEN

Made in Germany



BasicDrill

EMUGE

Solid Carbide Twist Drills

Main area of application

The twist drill BasicDrill is universally applicable and available in the diameter range from 1.00 to 24.50 mm.

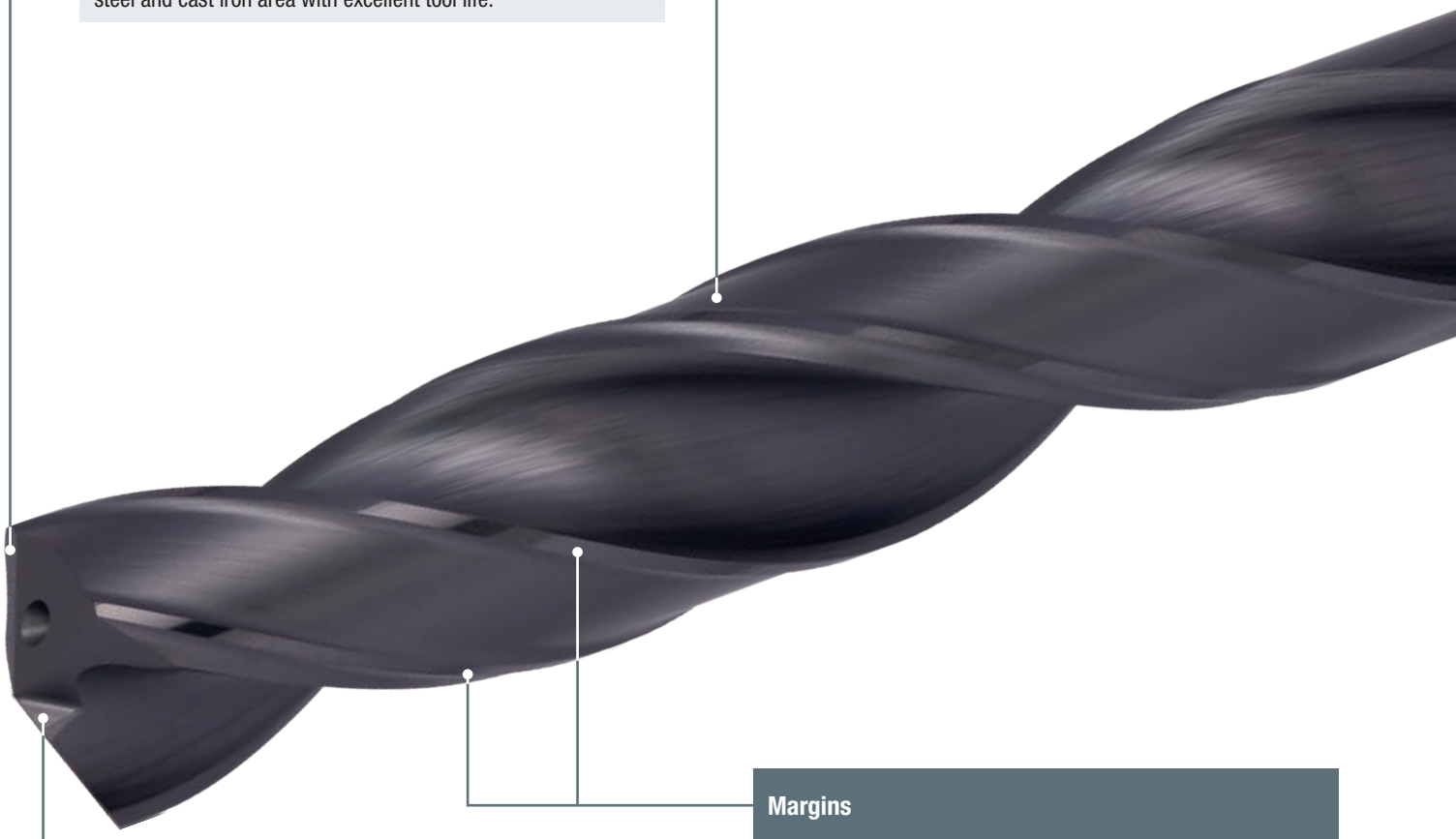
The application area of the BasicDrill covers the material groups steel materials, stainless steel materials, cast materials and non-ferrous materials. Its application focus is the steel area.

Cutting edge shape and edge preparation

The concave main cutting edge combined with an optimised edge preparation enables the best cutting behaviour in the steel and cast iron area with excellent tool life.

Cutting material and coating

The combination of carbide and a high-performance coating enables higher cutting speeds and feed rates.



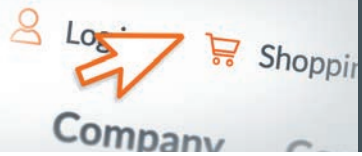
Margins

The design with four margins ensures optimum guidance of the twist drill in the bore. The third and fourth margin are arranged in such a way that they engage at an early stage. The special design prevents jamming even in stainless steel materials.

Point geometry

An optimised point design allows sufficient space for chip forming and coolant distribution.

24/7 Precision Tools on www.emuge-franken.com



The QR code shown with the tools will take you directly to the respective articles in our web store where you can find comprehensive tool information and cutting data.

Registration provides you with additional product data and functions. These include standardised tool data (2D / 3D / characteristics), an order or quotation history and individual watch lists as well as other useful functions.

Shank end

The shank end has been designed in such a way that the drilling tool can be used with emulsion as well as with minimum quantity lubrication (MQL).

Flutes

The open shape of the flute facilitates smooth chip evacuation.

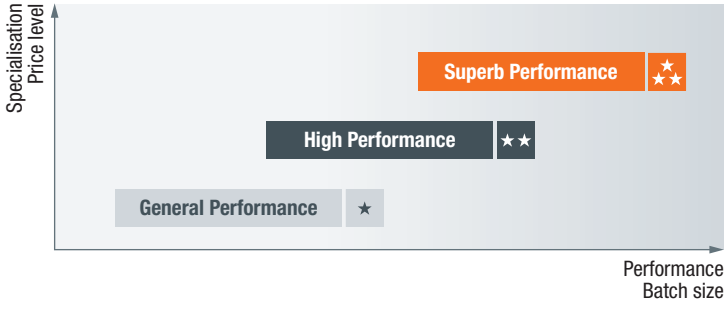
The EMUGE-FRANKEN performance classes of twist drills

The performance classes indicated by stars make it easier to find the right tool for the specific performance requirements and the batch size to be produced.

Tools for standard requirements and versatile use are assigned to the category “General Performance”.

Tools designed for special materials or applications are marked “High Performance”.

Specialists with the highest performance values and the best possible technology are classified as “Superb Performance”.



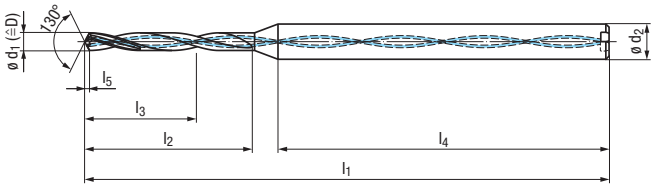
BasicDrill Micro BD108-6xD

★ 6xD

Applications – material	
P	1.1-5.1
M	1.1-4.1
K	1.1-3.2
N	1.1-2.3
S	1.2-1.3, 2.2-2.3
H	1.1-1.2

Solid carbide twist drill for dimensions smaller than 3 mm, 6xD, in Basic geometry for universal application.

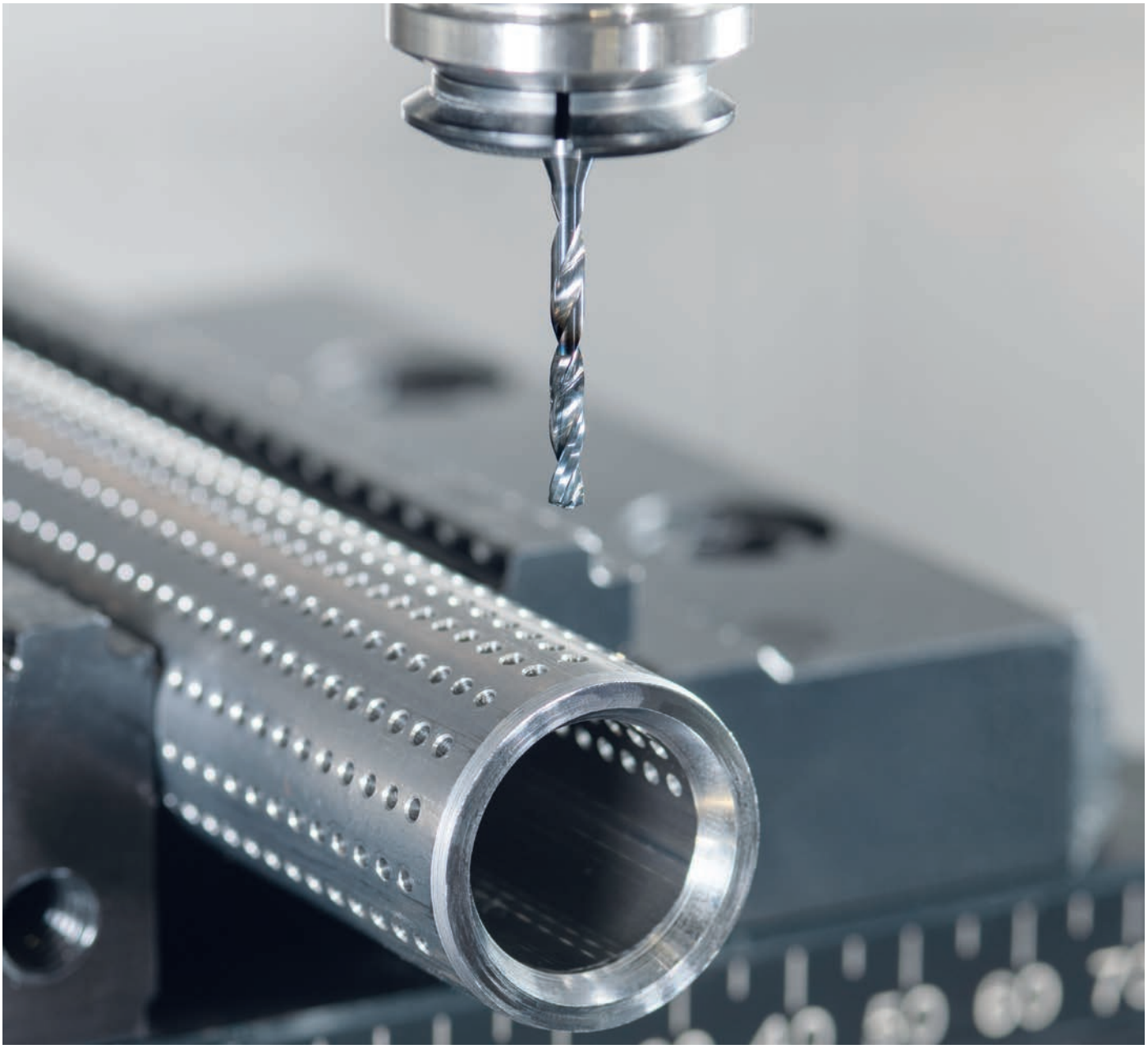
Product features and benefits:
Four margins for better guidance and hole quality.
Internal cooling channels and high-performance coating for high process reliability.
Use in various materials with steel as the main application area.



Information about this product is also available on the web

	Taps	Cold-forming taps	Micro 6xD						
ø d_1 k5			l_1	l_2	l_3	l_4 + 3 mm	l_5	ø d_2 h6	HA
1.00	M1.2x0.2	M1.1	50	9	6	36	0.20	3	**TE211344.0100**
1.05			50	9.5	6.3	36	0.20	3	**TE211344.0105**
1.10	M1.4	M1.2	50	9.9	6.6	36	0.20	3	**TE211344.0110**
1.15			50	10.4	6.9	36	0.20	3	**TE211344.0115**
1.20	M1.4x0.2		50	10.8	7.2	36	0.20	3	**TE211344.0120**
1.25	M1.6 / #0-80		50	11.3	7.5	36	0.20	3	**TE211344.0125**
1.30	MJ1.6x0.35		52	11.7	7.8	36	0.25	3	**TE211344.0130**
1.35	M1.7		52	12.2	8.1	36	0.25	3	**TE211344.0135**
1.40	M1.6x0.2	#0-80	52	12.6	8.4	36	0.25	3	**TE211344.0140**
1.45	M1.8		52	13.1	8.7	36	0.25	3	**TE211344.0145**
1.47		M1.6	52	13.5	8.8	36	0.25	3	**TE211344.0147**
1.50			52	13.5	9	36	0.25	3	**TE211344.0150**
1.55	#1-64		55	14	9.3	36	0.30	3	**TE211344.0155**
1.60	M2 / M1.8x0.2		55	14.4	9.6	36	0.30	3	**TE211344.0160**
1.65			55	14.9	9.9	36	0.30	3	**TE211344.0165**
1.70		#1-64 / #1-72	55	15.3	10.2	36	0.30	3	**TE211344.0170**
1.75	M2.2 / M2x0.25		55	15.8	10.5	36	0.30	3	**TE211344.0175**
1.80			57	16.2	10.8	36	0.30	3	**TE211344.0180**
1.85	#2-56 / #2-64	M2	57	16.7	11.1	36	0.35	3	**TE211344.0185**
1.90	M2.3		57	17.1	11.4	36	0.35	3	**TE211344.0190**
1.95	M2.2x0.25 / M2.3x0.35		57	17.6	11.7	36	0.35	3	**TE211344.0195**
2.00		#2-56	57	18	12	36	0.35	4	**TE211344.0200**
2.03		M2.2	57	18.5	12.2	36	0.35	4	**TE211344.0203**
2.05	M2.5 / M2.3x0.25		60	18.5	12.3	36	0.35	4	**TE211344.0205**
2.10	MJ2.5x0.45 / #3-48		60	18.9	12.6	36	0.40	4	**TE211344.0210**
2.15	M2.6 / M2.5x0.35 / #3-56	M2.3	60	19.4	12.9	36	0.40	4	**TE211344.0215**
2.20			60	19.8	13.2	36	0.40	4	**TE211344.0220**
2.25	M2.6x0.35		60	20.3	13.5	36	0.40	4	**TE211344.0225**
2.30		#3-48	62	20.7	13.8	36	0.40	4	**TE211344.0230**
2.33		M2.5	62	21.2	14	36	0.40	4	**TE211344.0233**
2.35	#4-40		62	21.2	14.1	36	0.40	4	**TE211344.0235**
2.40	#4-48		62	21.6	14.4	36	0.45	4	**TE211344.0240**
2.45			62	22.1	14.7	36	0.45	4	**TE211344.0245**
2.50	M3		62	22.5	15	36	0.45	4	**TE211344.0250**

ø d_1 k5	Taps	Cold-forming taps	Micro 6xD l_1	l_2	l_3	l_4 + 3 mm	l_5	ø d_2 h6	HA
2.55		#4-40	65	23	15.3	36	0.45	4	**TE211344.0255**
2.60	MJ3x0.5		65	23.4	15.6	36	0.45	4	**TE211344.0260**
2.65	M3x0.35 / #5-40		65	23.9	15.9	36	0.45	4	**TE211344.0265**
2.70	#5-44		65	24.3	16.2	36	0.50	4	**TE211344.0270**
2.75	M3x0.25		65	24.8	16.5	36	0.50	4	**TE211344.0275**
2.80		M3	67	25.2	16.8	36	0.50	4	**TE211344.0280**
2.85	#6-32		67	25.7	17.1	36	0.50	4	**TE211344.0285**
2.90	M3.5	#5-40	67	26.1	17.4	36	0.50	4	**TE211344.0290**
2.95			67	26.6	17.7	36	0.55	4	**TE211344.0295**



BasicDrill Micro BD109-12xD new

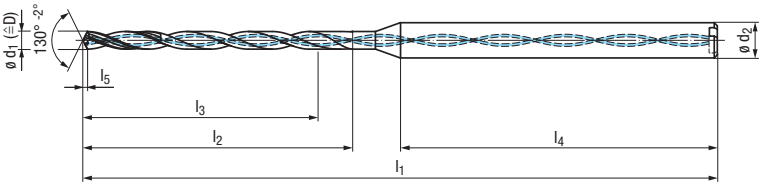
★ 12xD

Applications – material	
P	1.1-5.1
M	1.1-4.1
K	1.1-3.2
N	1.1-2.3
S	1.2-1.3, 2.2-2.3
H	1.1-1.2

Solid carbide twist drill for dimensions smaller than 3 mm, 12xD, in Basic geometry for universal application.

Product features and benefits:
Four margins for better guidance and hole quality.
Internal cooling channels and high-performance coating for high process reliability.
Use in various materials with steel as the main application area.

Piloting with BasicDrill Micro C-Pilot (pages 8 - 9) is recommended.

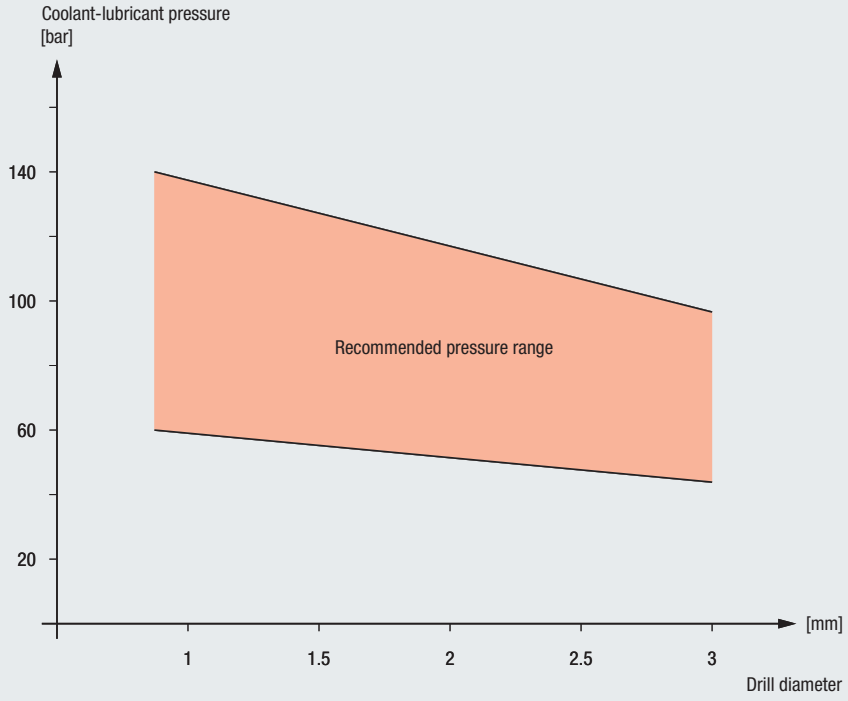


Information about this product is also available on the web

	Taps	Cold-forming taps	Micro 12xD						
ø d_1 k5			l_1 ±0.2	l_2	l_3	l_4 + 3 mm	l_5	ø d_2 h6	HA
1.00	M1.2x0.2	M1.1	58	15.3	12	36	0.20	3	**TE231344.0100**
1.05			58	16.1	12.6	36	0.20	3	**TE231344.0105**
1.10	M1.4	M1.2	58	16.9	13.2	36	0.20	3	**TE231344.0110**
1.15			58	17.6	13.8	36	0.20	3	**TE231344.0115**
1.20	M1.4x0.2		58	18.4	14.4	36	0.20	3	**TE231344.0120**
1.25	M1.6 / #0-80		58	19.2	15.6	36	0.20	3	**TE231344.0125**
1.30	MJ1.6x0.35		64	19.9	16.2	36	0.25	3	**TE231344.0130**
1.35	M1.7		64	20.7	15	36	0.25	3	**TE231344.0135**
1.40	M1.6x0.2	#0-80	64	21.5	16.8	36	0.25	3	**TE231344.0140**
1.45	M1.8		64	22.2	17.4	36	0.25	3	**TE231344.0145**
1.50			64	23	18	36	0.25	3	**TE231344.0150**
1.55	#1-64		68	23.8	18.6	36	0.30	3	**TE231344.0155**
1.60	M2 / M1.8x0.2		68	24.5	19.2	36	0.30	3	**TE231344.0160**
1.65			68	25.3	19.8	36	0.30	3	**TE231344.0165**
1.70		#1-64 / #1-72	68	26.1	20.4	36	0.30	3	**TE231344.0170**
1.75	M2.2 / M2x0.25		68	26.8	21	36	0.30	3	**TE231344.0175**
1.80			72	27.6	21.6	36	0.30	3	**TE231344.0180**
1.85	#2-56 / #2-64	M2	72	28.4	22.2	36	0.35	3	**TE231344.0185**
1.90	M2.3		72	29.1	22.8	36	0.35	3	**TE231344.0190**
1.95	M2.2x0.25 / M2.3x0.35		72	29.9	23.4	36	0.35	3	**TE231344.0195**
2.00		#2-56	72	30.6	24	36	0.35	4	**TE231344.0200**
2.05	M2.5 / M2.3x0.25		76	31.4	24.6	36	0.35	4	**TE231344.0205**
2.10	MJ2.5x0.45 / #3-48		76	32.2	25.2	36	0.40	4	**TE231344.0210**
2.15	M2.6 / M2.5x0.35 / #3-56	M2.3	76	32.9	25.8	36	0.40	4	**TE231344.0215**
2.20			76	33.7	26.4	36	0.40	4	**TE231344.0220**
2.25	M2.6x0.35		76	34.5	27	36	0.40	4	**TE231344.0225**
2.30		#3-48	80	35.2	27.6	36	0.40	4	**TE231344.0230**
2.35	#4-40		80	36	28.2	36	0.40	4	**TE231344.0235**
2.40	#4-48		80	36.8	28.8	36	0.45	4	**TE231344.0240**
2.45			80	37.5	29.4	36	0.45	4	**TE231344.0245**
2.50	M3		80	38.3	30	36	0.45	4	**TE231344.0250**
2.55		#4-40	84	39.1	30.6	36	0.45	4	**TE231344.0255**
2.60	MJ3x0.5		84	39.8	31.2	36	0.45	4	**TE231344.0260**
2.65	M3x0.35 / #5-40		84	40.6	31.8	36	0.45	4	**TE231344.0265**

ø d_1 k5	Taps	Cold-forming taps	Micro 12xD l_1 ±0.2	l_2	l_3	l_4 + 3 mm	l_5	ø d_2 h6	HA
2.70	#5-44		84	41.4	32.4	36	0.50	4	**TE231344.0270**
2.75	M3x0.25		84	42.1	33	36	0.50	4	**TE231344.0275**
2.80		M3	88	42.9	33.6	36	0.50	4	**TE231344.0280**
2.85	#6-32		88	43.7	34.2	36	0.50	4	**TE231344.0285**
2.90	M3.5	#5-40	88	44.4	34.8	36	0.50	4	**TE231344.0290**
2.95			88	45.2	35	36	0.55	4	**TE231344.0295**

Recommended coolant-lubricant pressure for BasicDrill Micro



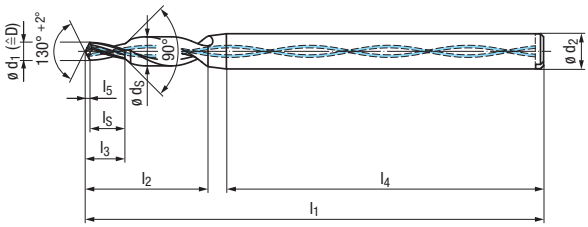
BasicDrill Micro C-Pilot BD110-2xD new

★ 2xD

Applications – material	
P	1.1-5.1
M	1.1-4.1
K	1.1-3.2
N	1.1-2.3
S	1.2-1.3, 2.2-2.3
H	1.1-1.2

Solid carbide chamfer drill, in Basic geometry for universal application.

Product features and benefits:
With countersinking step for optional chamfering of the drilled hole at 45°.
Internal cooling channels and high-performance coating for high process reliability.
Use in various materials with steel as the main application area.



Information about this product is also available on the web

Micro C-Pilot 2xD

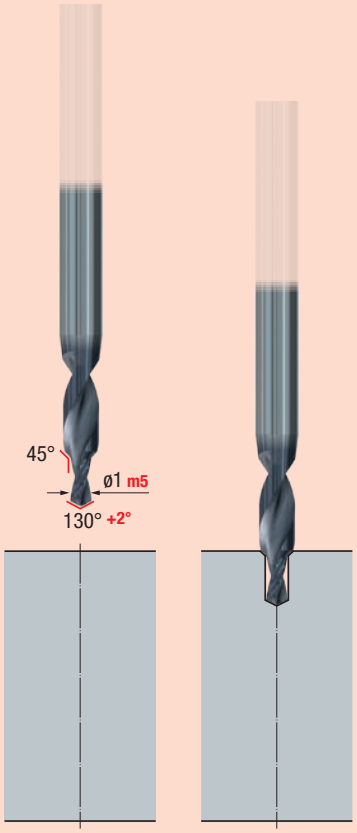
ø d_1 m5	ø d_S	l_1	l_2 max.	l_4 + 3 mm	l_5	l_S	ø d_2 h6	HA
1.00	1.80	45	7.3	36	0.20	2.00	4	**TF201324.0100**
1.05	1.80	45	7.7	36	0.20	2.10	4	**TF201324.0105**
1.10	1.80	45	8.05	36	0.20	2.20	4	**TF201324.0110**
1.15	1.80	45	8.4	36	0.20	2.30	4	**TF201324.0115**
1.20	2.10	45	8.8	36	0.20	2.40	4	**TF201324.0120**
1.25	2.10	45	9.15	36	0.25	2.50	4	**TF201324.0125**
1.30	2.10	45	9.5	36	0.25	2.60	4	**TF201324.0130**
1.35	2.10	45	9.9	36	0.20	2.70	4	**TF201324.0135**
1.40	2.10	45	10.25	36	0.25	2.80	4	**TF201324.0140**
1.45	2.45	45	10.6	36	0.25	2.90	4	**TF201324.0145**
1.50	2.45	48	10.95	36	0.25	3.00	4	**TF201324.0150**
1.55	2.45	48	11.35	36	0.30	3.10	4	**TF201324.0155**
1.60	2.45	48	11.7	36	0.30	3.20	4	**TF201324.0160**
1.65	2.45	48	12.05	36	0.30	3.30	4	**TF201324.0165**
1.70	2.80	48	12.45	36	0.30	3.40	4	**TF201324.0170**
1.75	2.80	48	12.8	36	0.30	3.50	4	**TF201324.0175**
1.80	2.80	48	13.15	36	0.30	3.60	4	**TF201324.0180**
1.85	2.80	48	13.55	36	0.35	3.70	4	**TF201324.0185**
1.90	2.80	48	13.9	36	0.35	3.80	4	**TF201324.0190**
1.95	2.80	48	14.25	36	0.35	3.90	4	**TF201324.0195**
2.00	3.30	52	14.6	36	0.35	4.00	4	**TF201324.0200**
2.05	3.30	52	15	36	0.35	4.10	4	**TF201324.0205**
2.10	3.30	52	15.35	36	0.40	4.20	4	**TF201324.0210**
2.15	3.30	52	15.7	36	0.40	4.30	4	**TF201324.0215**
2.20	3.30	52	16.1	36	0.40	4.40	4	**TF201324.0220**
2.25	3.30	52	16.45	36	0.40	4.50	4	**TF201324.0225**
2.30	3.60	52	16.8	36	0.40	4.60	4	**TF201324.0230**
2.35	3.60	52	17.2	36	0.40	4.70	4	**TF201324.0235**
2.40	3.60	52	17.55	36	0.45	4.80	4	**TF201324.0240**
2.45	3.60	52	17.9	36	0.45	4.90	4	**TF201324.0245**
2.50	3.60	56	18.25	36	0.45	5.00	4	**TF201324.0250**
2.55	3.60	56	18.65	36	0.45	5.10	4	**TF201324.0255**
2.60	4.00	56	19	36	0.45	5.20	4	**TF201324.0260**
2.65	4.00	56	19.5	36	0.45	5.30	4	**TF201324.0265**

Micro C-Pilot 2xD								
ø d_1 m5	ø d_S	l_1	l_2 max.	l_4 + 3 mm	l_5	l_S	ø d_2 h6	HA
2.70	4.00	56	20	36	0.50	5.40	4	**TF201324.0270**
2.75	4.00	56	20	36	0.50	5.50	4	**TF201324.0275**
2.80	4.00	56	20	36	0.50	5.60	4	**TF201324.0280**
2.85	4.00	56	20	36	0.50	5.70	4	**TF201324.0285**
2.90	4.00	56	20	36	0.50	5.80	4	**TF201324.0290**
2.95	4.00	56	20	36	0.55	5.90	4	**TF201324.0295**

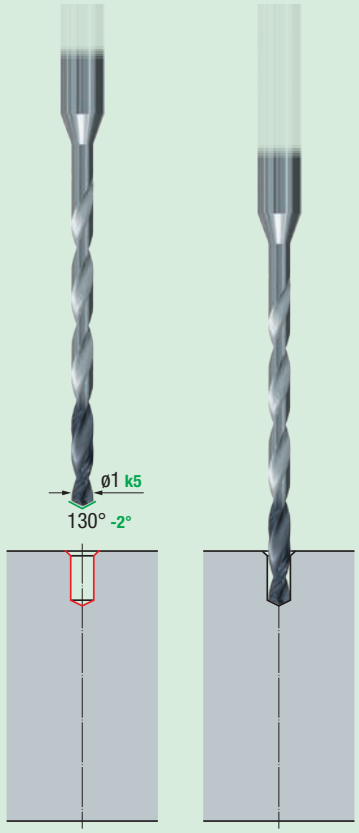
Production of a pilot hole for the BasicDrill Micro 12xD twist drill

The BasicDrill Micro C-Pilot creates a **pilot hole** with a drilling depth of 2xD, **optionally with** a 45° **chamfer**.
This pilot hole ensures precise guidance, maximum positioning accuracy and perfect straightness when deep drilling with the BasicDrill Micro 12xD.
The coordinated tip angle and drill diameter tolerances increase tool life and prevent cutting edge damage.
The nominal diameter of the pilot drill and the follow-up drill must be identical!

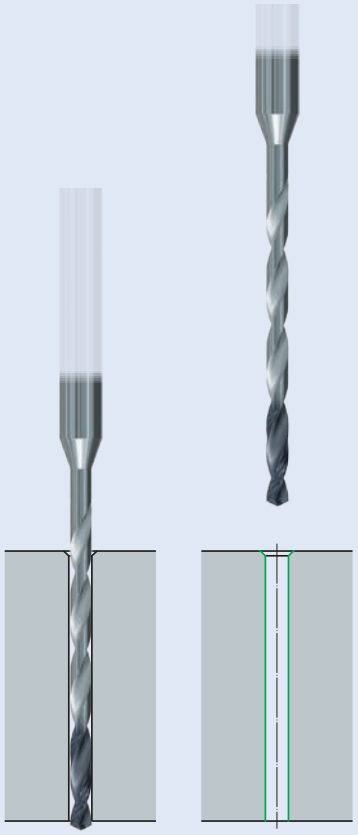
Drilling the pilot hole with the BasicDrill Micro C-Pilot 2xD



The pilot hole serves as a guidance for the BasicDrill Micro 12xD, which should be fed into the pilot hole at a **reduced speed**

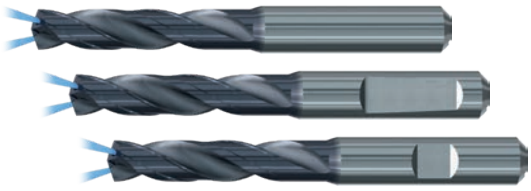


Deep drilling to maximum drilling depth with the BasicDrill Micro 12xD



BasicDrill-BD101-3xD

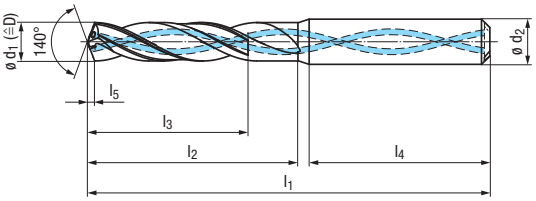
★ 3xD



Applications – material	
P	1.1-5.1
M	1.1-3.1
K	1.1-4.2
N	1.1-2.3
S	1.2-1.3, 2.2-2.3
H	1.1-1.3

Solid carbide twist drill, 3xD, in Basic geometry for universal application.

Product features and benefits:
Four margins for better guidance and hole quality.
Internal cooling channels and high-performance coating for high process reliability.
Use in various materials with steel as the main application area.



Information about this product is also available on the web

DIN 6537 – Short design

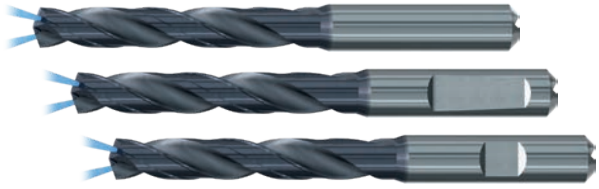
	ø d1 m7	Taps	Cold-forming taps	3xD l1	l2	l3	l4	l5	ø d2 h6	DIN 6535 HA	DIN 6535 HE	DIN 6535 HB
	3.00	M3.5x0.5 / MJ3.5x0.6		62	20	14	36	0.5	6	**TA201344.0300**	**TA501344.0300**	**TA601344.0300**
	3.10			62	20	14	36	0.5	6	**TA201344.0310**	**TA501344.0310**	**TA601344.0310**
	3.20	MJ3.5x0.35		62	20	14	36	0.5	6	**TA201344.0320**	**TA501344.0320**	**TA601344.0320**
	3.30	M4	M3.5x0.5	62	20	14	36	0.6	6	**TA201344.0330**	**TA501344.0330**	**TA601344.0330**
	3.40	MJ4x0.7		62	20	14	36	0.6	6	**TA201344.0340**	**TA501344.0340**	**TA601344.0340**
	3.50	M4x0.5 / #8-32 / #8-36		62	20	14	36	0.6	6	**TA201344.0350**	**TA501344.0350**	**TA601344.0350**
	3.60	MJ4x0.5		62	20	14	36	0.6	6	**TA201344.0360**	**TA501344.0360**	**TA601344.0360**
	3.65	M4x0.35		62	20	14	36	0.6	6	**TA201344.0365**	**TA501344.0365**	**TA601344.0365**
	3.70	M4.5	M4	62	20	14	36	0.6	6	**TA201344.0370**	**TA501344.0370**	**TA601344.0370**
	3.80		M4x0.5 / #8-32	66	24	17	36	0.6	6	**TA201344.0380**	**TA501344.0380**	**TA601344.0380**
	3.90	MJ4.5x0.75 / #10-24		66	24	17	36	0.7	6	**TA201344.0390**	**TA501344.0390**	**TA601344.0390**
	4.00			66	24	17	36	0.7	6	**TA201344.0400**	**TA501344.0400**	**TA601344.0400**
	4.10	MJ4.5x0.5 / #10-32		66	24	17	36	0.7	6	**TA201344.0410**	**TA501344.0410**	**TA601344.0410**
new	**4.15**	M5x0.9		66	24	17	36	0.7	6	**TA201344.0415**	**TA501344.0415**	**TA601344.0415**
	4.20	M5 / M5x0.75	M4.5	66	24	17	36	0.7	6	**TA201344.0420**	**TA501344.0420**	**TA601344.0420**
	4.30	MJ5x0.8	M4.5x0.5 / #10-24 (GAL)	66	24	17	36	0.7	6	**TA201344.0430**	**TA501344.0430**	**TA601344.0430**
	4.40			66	24	17	36	0.7	6	**TA201344.0440**	**TA501344.0440**	**TA601344.0440**
	4.50	M5x0.5 / #12-24		66	24	17	36	0.8	6	**TA201344.0450**	**TA501344.0450**	**TA601344.0450**
	4.60	M5.5 / MJ5x0.5 / #12-28		66	24	17	36	0.8	6	**TA201344.0460**	**TA501344.0460**	**TA601344.0460**
	4.65		M5	66	24	17	36	0.8	6	**TA201344.0465**	**TA501344.0465**	**TA601344.046x5**
	4.70		M5x0.75	66	24	17	36	0.8	6	**TA201344.0470**	**TA501344.0470**	**TA601344.0470**
	4.80		M5x0.5	66	28	20	36	0.8	6	**TA201344.0480**	**TA501344.0480**	**TA601344.0480**
	4.90			66	28	20	36	0.8	6	**TA201344.0490**	**TA501344.0490**	**TA601344.0490**
	5.00	M6	#12-24	66	28	20	36	0.8	6	**TA201344.0500**	**TA501344.0500**	**TA601344.0500**
	5.05			66	28	20	36	0.9	6	**TA201344.0505**	**TA501344.0505**	**TA601344.0505**
	5.10	MJ6x1 / 1/4-20	M5.5 / #12-28	66	28	20	36	0.9	6	**TA201344.0510**	**TA501344.0510**	**TA601344.0510**
	5.20	M6x0.75		66	28	20	36	0.9	6	**TA201344.0520**	**TA501344.0520**	**TA601344.0520**
	5.30		M5.5x0.5	66	28	20	36	0.9	6	**TA201344.0530**	**TA501344.0530**	**TA601344.0530**
	5.40			66	28	20	36	0.9	6	**TA201344.0540**	**TA501344.0540**	**TA601344.0540**
	5.50	M6x0.5 / 1/4-28		66	28	20	36	0.9	6	**TA201344.0550**	**TA501344.0550**	**TA601344.0550**
	5.55		M6 (GAL)	66	28	20	36	0.9	6	**TA201344.0555**	**TA501344.0555**	**TA601344.0555**
	5.60	MJ6x0.5	M6	66	28	20	36	1.0	6	**TA201344.0560**	**TA501344.0560**	**TA601344.0560**
	5.70		M6x0.75 / 1/4-20 (GAL)	66	28	20	36	1.0	6	**TA201344.0570**	**TA501344.0570**	**TA601344.0570**
	5.80		M6x0.5	66	28	20	36	1.0	6	**TA201344.0580**	**TA501344.0580**	**TA601344.0580**

	ø d_1 m7	Taps	Cold-forming taps	3xD l_1	l_2	l_3	l_4	l_5	ø d_2 h6	DIN 6535 HA	DIN 6535 HE	DIN 6535 HB
	5.90			66	28	20	36	1.0	6	**TA201344.0590**	**TA501344.0590**	**TA601344.0590**
	6.00	M7		66	28	20	36	1.0	6	**TA201344.0600**	**TA501344.0600**	**TA601344.0600**
	6.05			79	34	24	36	1.0	8	**TA201344.0605**	**TA501344.0605**	**TA601344.0605**
new	**6.10**	MJ7x1		79	34	24	36	1.0	8	**TA201344.0610**	**TA501344.0610**	**TA601344.0610**
	6.15			79	34	24	36	1.1	8	**TA201344.0615**	**TA501344.0615**	**TA601344.0615**
	6.20	M7x0.75		79	34	24	36	1.1	8	**TA201344.0620**	**TA501344.0620**	**TA601344.0620**
	6.30			79	34	24	36	1.1	8	**TA201344.0630**	**TA501344.0630**	**TA601344.0630**
	6.35	MJ7x0.75		79	34	24	36	1.1	8	**TA201344.0635**	**TA501344.0635**	**TA601344.0635**
	6.40			79	34	24	36	1.1	8	**TA201344.0640**	**TA501344.0640**	**TA601344.0640**
	6.50	M7x0.5		79	34	24	36	1.1	8	**TA201344.0650**	**TA501344.0650**	**TA601344.0650**
	6.60	5/16-18	M7	79	34	24	36	1.1	8	**TA201344.0660**	**TA501344.0660**	**TA601344.0660**
	6.70		M7x0.75	79	34	24	36	1.1	8	**TA201344.0670**	**TA501344.0670**	**TA601344.0670**
	6.80	M8 / G1/16	M7x0.5	79	34	24	36	1.2	8	**TA201344.0680**	**TA501344.0680**	**TA601344.0680**
	6.90	MJ8x1.25 / 5/16-24		79	34	24	36	1.2	8	**TA201344.0690**	**TA501344.0690**	**TA601344.0690**
	7.00	M8x1		79	34	24	36	1.2	8	**TA201344.0700**	**TA501344.0700**	**TA601344.0700**
new	**7.10**	MJ8x1		79	41	29	36	1.2	8	**TA201344.0720**	**TA501344.0720**	**TA601344.0720**
	7.20	M8x0.75		79	41	29	36	1.2	8	**TA201344.0720**	**TA501344.0720**	**TA601344.0720**
	7.40		M8 (GAL) / 5/16-24 (GAL)	79	41	29	36	1.3	8	**TA201344.0740**	**TA501344.0740**	**TA601344.0740**
	7.45		M8 / 5/16-24	79	41	29	36	1.3	8	**TA201344.0745**	**TA501344.0745**	**TA601344.0745**
	7.50	M8x0.5		79	41	29	36	1.3	8	**TA201344.0750**	**TA501344.0750**	**TA601344.0750**
	7.60		M8x1	79	41	29	36	1.3	8	**TA201344.0760**	**TA501344.0760**	**TA601344.0760**
	7.70		M8x0.75	79	41	29	36	1.3	8	**TA201344.0770**	**TA501344.0770**	**TA601344.0770**
	7.80	M9	M8x0.5	79	41	29	36	1.3	8	**TA201344.0780**	**TA501344.0780**	**TA601344.0780**
	7.90	MJ9x1.25		79	41	29	36	1.3	8	**TA201344.0790**	**TA501344.0790**	**TA601344.0790**
	8.00	M9x1 / 3/8-16		79	41	29	36	1.4	8	**TA201344.0800**	**TA501344.0800**	**TA601344.0800**
	8.10	MJ9x1		89	47	35	40	1.4	10	**TA201344.0810**	**TA501344.0810**	**TA601344.0810**
	8.20	M9x0.75		89	47	35	40	1.4	10	**TA201344.0820**	**TA501344.0820**	**TA601344.0820**
	8.30			89	47	35	40	1.4	10	**TA201344.0830**	**TA501344.0830**	**TA601344.0830**
	8.40		M9 (GAL)	89	47	35	40	1.4	10	**TA201344.0840**	**TA501344.0840**	**TA601344.0840**
	8.50	M10 / M9x0.5 / 3/8-24		89	47	35	40	1.4	10	**TA201344.0850**	**TA501344.0850**	**TA601344.0850**
	8.60	MJ10x1.5	M9x1	89	47	35	40	1.5	10	**TA201344.0860**	**TA501344.0860**	**TA601344.0860**
	8.70		M9x0.75	89	47	35	40	1.5	10	**TA201344.0870**	**TA501344.0870**	**TA601344.0870**
	8.80	M10x1.25 / G1/8	M9x0.5 / 3/8-16	89	47	35	40	1.5	10	**TA201344.0880**	**TA501344.0880**	**TA601344.0880**
	9.00	M10x1	3/8-24 (GAL)	89	47	35	40	1.5	10	**TA201344.0900**	**TA501344.0900**	**TA601344.0900**
	9.10	MJ10x1		89	47	35	40	1.5	10	**TA201344.0910**	**TA501344.0910**	**TA601344.0910**
	9.20	M10x0.75		89	47	35	40	1.6	10	**TA201344.0920**	**TA501344.0920**	**TA601344.0920**
	9.25			89	47	35	40	1.6	10	**TA201344.0925**	**TA501344.0925**	**TA601344.0925**
	9.30		M10 (GAL)	89	47	35	40	1.6	10	**TA201344.0930**	**TA501344.0930**	**TA601344.0930**
	9.35	MJ10x0.75	M10	89	47	35	40	1.6	10	**TA201344.0935**	**TA501344.0935**	**TA601344.0935**
	9.40	7/16-14	M10x1.25 (GAL)	89	47	35	40	1.6	10	**TA201344.0940**	**TA501344.0940**	**TA601344.0940**
	9.50	M11 / M10x0.5		89	47	35	40	1.6	10	**TA201344.0950**	**TA501344.0950**	**TA601344.0950**
	9.60	MJ10x0.5 / MJ11x1.5	M10x1	89	47	35	40	1.6	10	**TA201344.0960**	**TA501344.0960**	**TA601344.0960**
	9.80		M10x0.5	89	47	35	40	1.7	10	**TA201344.0980**	**TA501344.0980**	**TA601344.0980**
	9.90	MJ11x1.25 / 7/16-20		89	47	35	40	1.7	10	**TA201344.0990**	**TA501344.0990**	**TA601344.0990**
	10.00	M11x1		89	47	35	40	1.7	10	**TA201344.1000**	**TA501344.1000**	**TA601344.1000**
	10.05			102	55	40	45	1.7	12	**TA201344.1005**	**TA501344.1005**	**TA601344.1005**
	10.10	MJ11x1		102	55	40	45	1.7	12	**TA201344.1010**	**TA501344.1010**	**TA601344.1010**
	10.15			102	55	40	45	1.7	12	**TA201344.1015**	**TA501344.1015**	**TA601344.1015**
	10.20	M12 / M11x0.75	7/16-14 (GAL)	102	55	40	45	1.7	12	**TA201344.1020**	**TA501344.1020**	**TA601344.1020**
	10.30		M11 (GAL)	102	55	40	45	1.7	12	**TA201344.1030**	**TA501344.1030**	**TA601344.1030**
	10.40			102	55	40	45	1.8	12	**TA201344.1040**	**TA501344.1040**	**TA601344.1040**
	10.50	M12x1.5	7/16-20 (GAL)	102	55	40	45	1.8	12	**TA201344.1050**	**TA501344.1050**	**TA601344.1050**
	10.60		M11x1	102	55	40	45	1.8	12	**TA201344.1060**	**TA501344.1060**	**TA601344.1060**
new	**10.70**		M11x0.75	102	55	40	45	1.8	12	**TA201344.1070**	**TA501344.1070**	**TA601344.1070**
	10.80	M12x1.25 / 1/2-13		102	55	40	45	1.8	12	**TA201344.1080**	**TA501344.1080**	**TA601344.1080**
	11.00	M12x1		102	55	40	45	1.9	12	**TA201344.1100**	**TA501344.1100**	**TA601344.1100**
	11.10			102	55	40	45	1.9	12	**TA201344.1110**	**TA501344.1110**	**TA601344.1110**

	ø d_1 m7	Taps	Cold-forming taps	3xD l_1	l_2	l_3	l_4	l_5	ø d_2 h6	DIN 6535 HA	DIN 6535 HE	DIN 6535 HB
	11.20	M12x0.75	M12 (GAL)	102	55	40	45	1.9	12	**TA201344.1120**	**TA501344.1120**	**TA601344.1120**
	11.25		M12	102	55	40	45	1.9	12	**TA201344.1125**	**TA501344.1125**	**TA601344.1125**
	11.30		M12x1.5 (GAL)	102	55	40	45	1.9	12	**TA201344.1130**	**TA501344.1130**	**TA601344.1130**
	11.35		M12x1.5	102	55	40	45	1.9	12	**TA201344.1135**	**TA501344.1135**	**TA601344.1135**
	11.40		M12x1.25 (GAL)	102	55	40	45	2.0	12	**TA201344.1140**	**TA501344.1140**	**TA601344.1140**
	11.50	1/2-20		102	55	40	45	2.0	12	**TA201344.1150**	**TA501344.1150**	**TA601344.1150**
	11.60		M12x1	102	55	40	45	2.0	12	**TA201344.1160**	**TA501344.1160**	**TA601344.1160**
	11.70		M12x0.75	102	55	40	45	2.0	12	**TA201344.1170**	**TA501344.1170**	**TA601344.1170**
	11.80	G1/4	1/2-13	102	55	40	45	2.0	12	**TA201344.1180**	**TA501344.1180**	**TA601344.1180**
new	**11.90**			102	55	40	45	2.0	12	**TA201344.1190**	**TA501344.1190**	**TA601344.1190**
	12.00	M14		102	55	40	45	2.0	12	**TA201344.1200**	**TA501344.1200**	**TA601344.1200**
	12.10	MJ13x1	1/2-20 (GAL)	107	60	43	45	2.1	14	**TA201344.1210**	**TA501344.1210**	**TA601344.1210**
	12.20	9/16-12		107	60	43	45	2.1	14	**TA201344.1220**	**TA501344.1220**	**TA601344.1220**
	12.50	M14x1.5	G1/4 (GAL)	107	60	43	45	2.1	14	**TA201344.1250**	**TA501344.1250**	**TA601344.1250**
	12.55		M13x1 (GAL) / G1/4	107	60	43	45	2.1	14	**TA201344.1255**	**TA501344.1255**	**TA601344.1255**
	12.70		M13x0.75	107	60	43	45	2.2	14	**TA201344.1270**	**TA501344.1270**	**TA601344.1270**
	12.90	MJ14x1.25 / 9/16-18		107	60	43	45	2.2	14	**TA201344.1290**	**TA501344.1290**	**TA601344.1290**
	13.00	M14x1		107	60	43	45	2.2	14	**TA201344.1300**	**TA501344.1300**	**TA601344.1300**
	13.10	MJ14x1	M14	107	60	43	45	2.2	14	**TA201344.1310**	**TA501344.1310**	**TA601344.1310**
	13.30		9/16-12	107	60	43	45	2.3	14	**TA201344.1330**	**TA501344.1330**	**TA601344.1330**
	13.35		M14x1.5	107	60	43	45	2.3	14	**TA201344.1335**	**TA501344.1335**	**TA601344.1335**
	13.50	5/8-11		107	60	43	45	2.3	14	**TA201344.1350**	**TA501344.1350**	**TA601344.1350**
new	**13.80**			107	60	43	45	2.4	14	**TA201344.1380**	**TA501344.1380**	**TA601344.1380**
	14.00	M16 / M15x1		107	60	43	45	2.4	14	**TA201344.1400**	**TA501344.1400**	**TA601344.1400**
	14.10	MJ15x1		115	65	45	48	2.4	16	**TA201344.1410**	**TA501344.1410**	**TA601344.1410**
	14.20	M15x0.75		115	65	45	48	2.4	16	**TA201344.1420**	**TA501344.1420**	**TA601344.1420**
	14.50	M16x1.5 / 5/8-18		115	65	45	48	2.5	16	**TA201344.1450**	**TA501344.1450**	**TA601344.1450**
	14.60	MJ16x1.5	M15x1	115	65	45	48	2.5	16	**TA201344.1460**	**TA501344.1460**	**TA601344.1460**
	14.70		M15x0.75	115	65	45	48	2.5	16	**TA201344.1470**	**TA501344.1470**	**TA601344.1470**
	15.00	M16x1		115	65	45	48	2.5	16	**TA201344.1500**	**TA501344.1500**	**TA601344.1500**
	15.10	MJ16x1	M16	115	65	45	48	2.6	16	**TA201344.1510**	**TA501344.1510**	**TA601344.1510**
	15.20	M16x0.75	5/8-18 (GAL)	115	65	45	48	2.6	16	**TA201344.1520**	**TA501344.1520**	**TA601344.1520**
	15.25	G3/8	5/8-18	115	65	45	48	2.6	16	**TA201344.1525**	**TA501344.1525**	**TA601344.1525**
	15.30			115	65	45	48	2.6	16	**TA201344.1530**	**TA501344.1530**	**TA601344.1530**
	15.35		M16x1.5	115	65	45	48	2.6	16	**TA201344.1535**	**TA501344.1535**	**TA601344.1535**
	15.50	M18		115	65	45	48	2.6	16	**TA201344.1550**	**TA501344.1550**	**TA601344.1550**
	15.80	MJ18x2.5		115	65	45	48	2.7	16	**TA201344.1580**	**TA501344.1580**	**TA601344.1580**
	16.00	M18x2		115	65	45	48	2.7	16	**TA201344.1600**	**TA501344.1600**	**TA601344.1600**
	16.50	M18x1.5 / 3/4-10		123	73	51	48	2.8	18	**TA201344.1650**	**TA501344.1650**	**TA601344.1650**
	17.00	M18x1		123	73	51	48	2.9	18	**TA201344.1700**	**TA501344.1700**	**TA601344.1700**
	17.50	M20 / 3/4-16		123	73	51	48	3.0	18	**TA201344.1750**	**TA501344.1750**	**TA601344.1750**
	18.00	M20x2		123	73	51	48	3.1	18	**TA201344.1800**	**TA501344.1800**	**TA601344.1800**
	18.50			131	79	55	50	3.2	20	**TA201344.1850**	**TA501344.1850**	**TA601344.1850**
	18.85		M20	131	79	55	50	3.2	20	**TA201344.1885**	**TA501344.1885**	**TA601344.1885**
	19.00	M20x1		131	79	55	50	3.3	20	**TA201344.1900**	**TA501344.1900**	**TA601344.1900**
	19.05			131	79	55	50	3.3	20	**TA201344.1905**	**TA501344.1905**	**TA601344.1905**
	19.50	M22		131	79	55	50	3.4	20	**TA201344.1950**	**TA501344.1950**	**TA601344.1950**
new	**19.70**			131	79	55	50	3.4	20	**TA201344.1970**	**TA501344.1970**	**TA601344.1970**
new	**19.80**			131	79	55	50	3.4	20	**TA201344.1980**	**TA501344.1980**	**TA601344.1980**
	20.00	M22x2		131	79	55	50	3.4	20	**TA201344.2000**	**TA501344.2000**	**TA601344.2000**
	20.50	M22x1.5		146	85	59	56	3.5	25	**TA201344.2050**	**TA501344.2050**	**TA601344.2050**
	21.00	M24		146	85	59	56	3.6	25	**TA201344.2100**	**TA501344.2100**	**TA601344.2100**
	21.50			146	85	59	56	3.7	25	**TA201344.2150**	**TA501344.2150**	**TA601344.2150**
	22.00	M24x2		146	85	59	56	3.8	25	**TA201344.2200**	**TA501344.2200**	**TA601344.2200**
	22.25	1"-8		150	91	63	56	3.8	25	**TA201344.2225**	**TA501344.2225**	**TA601344.2225**
	22.50	M24x1.5		150	91	63	56	3.9	25	**TA201344.2250**	**TA501344.2250**	**TA601344.2250**
	24.50	M26x1.5		150	91	63	56	4.2	25	**TA201344.2450**	**TA501344.2450**	**TA601344.2450**

BasicDrill-BD101-5xD

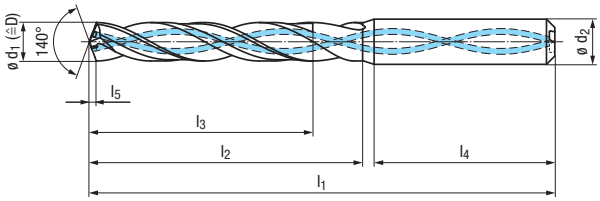
★ 5xD



Solid carbide twist drill, 5xD, in Basic geometry for universal application.

Product features and benefits:
Four margins for better guidance and hole quality.
Internal cooling channels and high-performance coating for high process reliability.
Use in various materials with steel as the main application area.

Applications – material	
P	1.1-5.1
M	1.1-3.1
K	1.1-4.2
N	1.1-2.3
S	1.2-1.3, 2.2-2.3
H	1.1-1.3



DIN 6537 – Long design

Information about this product is also available on the web

	ø d1 m7	Taps	Cold-forming taps	5xD l1	l2	l3	l4	l5	ø d2 h6	DIN 6535 HA	DIN 6535 HE	DIN 6535 HB
	3.00	M3.5x0.5 / MJ3.5x0.6		66	28	23	36	0.5	6	**TA211344.0300**	**TA511344.0300**	**TA611344.0300**
	3.10			66	28	23	36	0.5	6	**TA211344.0310**	**TA511344.0310**	**TA611344.0310**
	3.20	MJ3.5x0.35		66	28	23	36	0.5	6	**TA211344.0320**	**TA511344.0320**	**TA611344.0320**
	3.30	M4	M3.5x0.5	66	28	23	36	0.6	6	**TA211344.0330**	**TA511344.0330**	**TA611344.0330**
	3.40	MJ4x0.7		66	28	23	36	0.6	6	**TA211344.0340**	**TA511344.0340**	**TA611344.0340**
	3.50	M4x0.5 / #8-32 / #8-36		66	28	23	36	0.6	6	**TA211344.0350**	**TA511344.0350**	**TA611344.0350**
	3.60	MJ4x0.5		66	28	23	36	0.6	6	**TA211344.0360**	**TA511344.0360**	**TA611344.0360**
	3.65	M4x0.35		66	28	23	36	0.6	6	**TA211344.0365**	**TA511344.0365**	**TA611344.0365**
	3.70	M4.5	M4	66	28	23	36	0.6	6	**TA211344.0370**	**TA511344.0370**	**TA611344.0370**
	3.80		M4x0.5 / #8-32	74	36	29	36	0.6	6	**TA211344.0380**	**TA511344.0380**	**TA611344.0380**
	3.90	MJ4.5x0.75 / #10-24		74	36	29	36	0.7	6	**TA211344.0390**	**TA511344.0390**	**TA611344.0390**
	4.00			74	36	29	36	0.7	6	**TA211344.0400**	**TA511344.0400**	**TA611344.0400**
	4.10	MJ4.5x0.5 / #10-32		74	36	29	36	0.7	6	**TA211344.0410**	**TA511344.0410**	**TA611344.0410**
new	**4.15**	M5x0.9		74	36	29	36	0.7	6	**TA211344.0415**	**TA511344.0415**	**TA611344.0415**
	4.20	M5 / M5x0.75	M4.5	74	36	29	36	0.7	6	**TA211344.0420**	**TA511344.0420**	**TA611344.0420**
	4.30	MJ5x0.8	M4.5x0.5 / #10-24 (GAL)	74	36	29	36	0.7	6	**TA211344.0430**	**TA511344.0430**	**TA611344.0430**
	4.40			74	36	29	36	0.7	6	**TA211344.0440**	**TA511344.0440**	**TA611344.0440**
	4.50	M5x0.5 / #12-24		74	36	29	36	0.8	6	**TA211344.0450**	**TA511344.0450**	**TA611344.0450**
	4.60	M5.5 / MJ5x0.5 / #12-28		74	36	29	36	0.8	6	**TA211344.0460**	**TA511344.0460**	**TA611344.0460**
	4.65		M5	74	36	29	36	0.8	6	**TA211344.0465**	**TA511344.0465**	**TA611344.0465**
	4.70		M5x0.75	74	36	29	36	0.8	6	**TA211344.0470**	**TA511344.0470**	**TA611344.0470**
	4.80		M5x0.5	82	44	35	36	0.8	6	**TA211344.0480**	**TA511344.0480**	**TA611344.0480**
	4.90			82	44	35	36	0.8	6	**TA211344.0490**	**TA511344.0490**	**TA611344.0490**
	5.00	M6	#12-24	82	44	35	36	0.8	6	**TA211344.0500**	**TA511344.0500**	**TA611344.0500**
	5.05			82	44	35	36	0.9	6	**TA211344.0505**	**TA511344.0505**	**TA611344.0505**
	5.10	MJ6x1 / 1/4-20	M5.5 / #12-28	82	44	35	36	0.9	6	**TA211344.0510**	**TA511344.0510**	**TA611344.0510**
	5.20	M6x0.75		82	44	35	36	0.9	6	**TA211344.0520**	**TA511344.0520**	**TA611344.0520**
	5.30		M5.5x0.5	82	44	35	36	0.9	6	**TA211344.0530**	**TA511344.0530**	**TA611344.0530**
	5.40			82	44	35	36	0.9	6	**TA211344.0540**	**TA511344.0540**	**TA611344.0540**
	5.50	M6x0.5 / 1/4-28		82	44	35	36	0.9	6	**TA211344.0550**	**TA511344.0550**	**TA611344.0550**
	5.55		M6 (GAL)	82	44	35	36	0.9	6	**TA211344.0555**	**TA511344.0555**	**TA611344.0555**
	5.60	MJ6x0.5	M6	82	44	35	36	1.0	6	**TA211344.0560**	**TA511344.0560**	**TA611344.0560**
	5.70		M6x0.75 / 1/4-20 (GAL)	82	44	35	36	1.0	6	**TA211344.0570**	**TA511344.0570**	**TA611344.0570**
	5.80		M6x0.5	82	44	35	36	1.0	6	**TA211344.0580**	**TA511344.0580**	**TA611344.0580**

	ø d_1 m7	Taps	Cold-forming taps	5xD l_1	l_2	l_3	l_4	l_5	ø d_2 h6	DIN 6535 HA	DIN 6535 HE	DIN 6535 HB
	5.90			82	44	35	36	1.0	6	**TA211344.0590**	**TA511344.0590**	**TA611344.0590**
	6.00	M7		82	44	35	36	1.0	6	**TA211344.0600**	**TA511344.0600**	**TA611344.0600**
	6.05			91	53	43	36	1.0	8	**TA211344.0605**	**TA511344.0605**	**TA611344.0605**
new	**6.10**	MJ7x1		91	53	43	36	1.0	8	**TA211344.0610**	**TA511344.0610**	**TA611344.0610**
	6.15			91	53	43	36	1.1	8	**TA211344.0615**	**TA511344.0615**	**TA611344.0615**
	6.20	M7x0.75		91	53	43	36	1.1	8	**TA211344.0620**	**TA511344.0620**	**TA611344.0620**
	6.30			91	53	43	36	1.1	8	**TA211344.0630**	**TA511344.0630**	**TA611344.0630**
	6.35	MJ7x0.75		91	53	43	36	1.1	8	**TA211344.0635**	**TA511344.0635**	**TA611344.0635**
	6.40			91	53	43	36	1.1	8	**TA211344.0640**	**TA511344.0640**	**TA611344.0640**
	6.50	M7x0.5		91	53	43	36	1.1	8	**TA211344.0650**	**TA511344.0650**	**TA611344.0650**
	6.60	5/16-18	M7	91	53	43	36	1.1	8	**TA211344.0660**	**TA511344.0660**	**TA611344.0660**
	6.70		M7x0.75	91	53	43	36	1.1	8	**TA211344.0670**	**TA511344.0670**	**TA611344.0670**
	6.80	M8 / G1/16	M7x0.5	91	53	43	36	1.2	8	**TA211344.0680**	**TA511344.0680**	**TA611344.0680**
	6.90	MJ8x1.25 / 5/16-24		91	53	43	36	1.2	8	**TA211344.0690**	**TA511344.0690**	**TA611344.0690**
	7.00	M8x1		91	53	43	36	1.2	8	**TA211344.0700**	**TA511344.0700**	**TA611344.0700**
new	**7.10**	MJ8x1		91	53	43	36	1.2	8	**TA211344.0710**	**TA511344.0710**	**TA611344.0710**
	7.20	M8x0.75		91	53	43	36	1.2	8	**TA211344.0720**	**TA511344.0720**	**TA611344.0720**
	7.40		M8 (GAL) / 5/16-24 (GAL)	91	53	43	36	1.3	8	**TA211344.0740**	**TA511344.0740**	**TA611344.0740**
	7.45		M8 / 5/16-24	91	53	43	36	1.3	8	**TA211344.0745**	**TA511344.0745**	**TA611344.0745**
	7.50	M8x0.5		91	53	43	36	1.3	8	**TA211344.0750**	**TA511344.0750**	**TA611344.0750**
	7.60		M8x1	91	53	43	36	1.3	8	**TA211344.0760**	**TA511344.0760**	**TA611344.0760**
	7.70		M8x0.75	91	53	43	36	1.3	8	**TA211344.0770**	**TA511344.0770**	**TA611344.0770**
	7.80	M9	M8x0.5	91	53	43	36	1.3	8	**TA211344.0780**	**TA511344.0780**	**TA611344.0780**
	7.90	MJ9x1.25		91	53	43	36	1.3	8	**TA211344.0790**	**TA511344.0790**	**TA611344.0790**
	8.00	M9x1 / 3/8-16		91	53	43	36	1.4	8	**TA211344.0800**	**TA511344.0800**	**TA611344.0800**
	8.10	MJ9x1		103	61	49	40	1.4	10	**TA211344.0810**	**TA511344.0810**	**TA611344.0810**
	8.20	M9x0.75		103	61	49	40	1.4	10	**TA211344.0820**	**TA511344.0820**	**TA611344.0820**
	8.30			103	61	49	40	1.4	10	**TA211344.0830**	**TA511344.0830**	**TA611344.0830**
	8.40		M9 (GAL)	103	61	49	40	1.4	10	**TA211344.0840**	**TA511344.0840**	**TA611344.0840**
	8.50	M10 / M9x0.5 / 3/8-24		103	61	49	40	1.4	10	**TA211344.0850**	**TA511344.0850**	**TA611344.0850**
	8.60	MJ10x1.5	M9x1	103	61	49	40	1.5	10	**TA211344.0860**	**TA511344.0860**	**TA611344.0860**
	8.70		M9x0.75	103	61	49	40	1.5	10	**TA211344.0870**	**TA511344.0870**	**TA611344.0870**
	8.80	M10x1.25 / G1/8	M9x0.5 / 3/8-16	103	61	49	40	1.5	10	**TA211344.0880**	**TA511344.0880**	**TA611344.0880**
	9.00	M10x1	3/8-24 (GAL)	103	61	49	40	1.5	10	**TA211344.0900**	**TA511344.0900**	**TA611344.0900**
	9.10	MJ10x1		103	61	49	40	1.5	10	**TA211344.0910**	**TA511344.0910**	**TA611344.0910**
	9.20	M10x0.75		103	61	49	40	1.6	10	**TA211344.0920**	**TA511344.0920**	**TA611344.0920**
	9.25			103	61	49	40	1.6	10	**TA211344.0925**	**TA511344.0925**	**TA611344.0925**
	9.30		M10 (GAL)	103	61	49	40	1.6	10	**TA211344.0930**	**TA511344.0930**	**TA611344.0930**
	9.35	MJ10x0.75	M10	103	61	49	40	1.6	10	**TA211344.0935**	**TA511344.0935**	**TA611344.0935**
	9.40	7/16-14	M10x1.25 (GAL)	103	61	49	40	1.6	10	**TA211344.0940**	**TA511344.0940**	**TA611344.0940**
	9.50	M11 / M10x0.5		103	61	49	40	1.6	10	**TA211344.0950**	**TA511344.0950**	**TA611344.0950**
	9.60	MJ10x0.5 / MJ11x1.5	M10x1	103	61	49	40	1.6	10	**TA211344.0960**	**TA511344.0960**	**TA611344.0960**
	9.80		M10x0.5	103	61	49	40	1.7	10	**TA211344.0980**	**TA511344.0980**	**TA611344.0980**
	9.90	MJ11x1.25 / 7/16-20		103	61	49	40	1.7	10	**TA211344.0990**	**TA511344.0990**	**TA611344.0990**
	10.00	M11x1		103	61	49	40	1.7	10	**TA211344.1000**	**TA511344.1000**	**TA611344.1000**
	10.05			118	71	56	45	1.7	12	**TA211344.1005**	**TA511344.1005**	**TA611344.1005**
	10.10	MJ11x1		118	71	56	45	1.7	12	**TA211344.1010**	**TA511344.1010**	**TA611344.1010**
	10.15			118	71	56	45	1.7	12	**TA211344.1015**	**TA511344.1015**	**TA611344.1015**
	10.20	M12 / M11x0.75	7/16-14 (GAL)	118	71	56	45	1.7	12	**TA211344.1020**	**TA511344.1020**	**TA611344.1020**
	10.30		M11 (GAL)	118	71	56	45	1.7	12	**TA211344.1030**	**TA511344.1030**	**TA611344.1030**
	10.40			118	71	56	45	1.8	12	**TA211344.1040**	**TA511344.1040**	**TA611344.1040**
	10.50	M12x1.5	7/16-20 (GAL)	118	71	56	45	1.8	12	**TA211344.1050**	**TA511344.1050**	**TA611344.1050**
	10.60		M11x1	118	71	56	45	1.8	12	**TA211344.1060**	**TA511344.1060**	**TA611344.1060**
new	**10.70**		M11x0.75	118	71	56	45	1.8	12	**TA211344.1070**	**TA511344.1070**	**TA611344.1070**
	10.80	M12x1.25 / 1/2-13		118	71	56	45	1.8	12	**TA211344.1080**	**TA511344.1080**	**TA611344.1080**
	11.00	M12x1		118	71	56	45	1.9	12	**TA211344.1100**	**TA511344.1100**	**TA611344.1100**
	11.10			118	71	56	45	1.9	12	**TA211344.1110**	**TA511344.1110**	**TA611344.1110**

	ø d_1 m7	Taps	Cold-forming taps	5xD l_1	l_2	l_3	l_4	l_5	ø d_2 h6	DIN 6535 HA	DIN 6535 HE	DIN 6535 HB
	11.20	M12x0.75	M12 (GAL)	118	71	56	45	1.9	12	**TA211344.1120**	**TA511344.1120**	**TA611344.1120**
	11.25		M12	118	71	56	45	1.9	12	**TA211344.1125**	**TA511344.1125**	**TA611344.1125**
	11.30		M12x1.5 (GAL)	118	71	56	45	1.9	12	**TA211344.1130**	**TA511344.1130**	**TA611344.1130**
	11.35		M12x1.5	118	71	56	45	1.9	12	**TA211344.1135**	**TA511344.1135**	**TA611344.1135**
	11.40		M12x1.25 (GAL)	118	71	56	45	2.0	12	**TA211344.1140**	**TA511344.1140**	**TA611344.1140**
	11.50	1/2-20		118	71	56	45	2.0	12	**TA211344.1150**	**TA511344.1150**	**TA611344.1150**
	11.60		M12x1	118	71	56	45	2.0	12	**TA211344.1160**	**TA511344.1160**	**TA611344.1160**
	11.70		M12x0.75	118	71	56	45	2.0	12	**TA211344.1170**	**TA511344.1170**	**TA611344.1170**
	11.80	G1/4	1/2-13	118	71	56	45	2.0	12	**TA211344.1180**	**TA511344.1180**	**TA611344.1180**
new	**11.90**			118	71	56	45	2.0	12	**TA211344.1190**	**TA511344.1190**	**TA611344.1190**
	12.00	M14		118	71	56	45	2.0	12	**TA211344.1200**	**TA511344.1200**	**TA611344.1200**
	12.10	MJ13x1	1/2-20 (GAL)	124	77	60	45	2.1	14	**TA211344.1210**	**TA511344.1210**	**TA611344.1210**
	12.20	9/16-12		124	77	60	45	2.1	14	**TA211344.1220**	**TA511344.1220**	**TA611344.1220**
	12.50	M14x1.5	G1/4 (GAL)	124	77	60	45	2.1	14	**TA211344.1250**	**TA511344.1250**	**TA611344.1250**
	12.55		M13x1 (GAL) / G1/4	124	77	60	45	2.1	14	**TA211344.1255**	**TA511344.1255**	**TA611344.1255**
	12.70		M13x0.75	124	77	60	45	2.2	14	**TA211344.1270**	**TA511344.1270**	**TA611344.1270**
	12.90	MJ14x1.25 / 9/16-18		124	77	60	45	2.2	14	**TA211344.1290**	**TA511344.1290**	**TA611344.1290**
	13.00	M14x1		124	77	60	45	2.2	14	**TA211344.1300**	**TA511344.1300**	**TA611344.1300**
	13.10	MJ14x1	M14	124	77	60	45	2.2	14	**TA211344.1310**	**TA511344.1310**	**TA611344.1310**
	13.30		9/16-12	124	77	60	45	2.3	14	**TA211344.1330**	**TA511344.1330**	**TA611344.1330**
	13.35		M14x1.5	124	77	60	45	2.3	14	**TA211344.1335**	**TA511344.1335**	**TA611344.1335**
	13.50	5/8-11		124	77	60	45	2.3	14	**TA211344.1350**	**TA511344.1350**	**TA611344.1350**
new	**13.80**			124	77	60	45	2.4	14	**TA211344.1380**	**TA511344.1380**	**TA611344.1380**
	14.00	M16 / M15x1		124	77	60	45	2.4	14	**TA211344.1400**	**TA511344.1400**	**TA611344.1400**
	14.10	MJ15x1		133	83	63	48	2.4	16	**TA211344.1410**	**TA511344.1410**	**TA611344.1410**
	14.20	M15x0.75		133	83	63	48	2.4	16	**TA211344.1420**	**TA511344.1420**	**TA611344.1420**
	14.50	M16x1.5 / 5/8-18		133	83	63	48	2.5	16	**TA211344.1450**	**TA511344.1450**	**TA611344.1450**
	14.60	MJ16x1.5	M15x1	133	83	63	48	2.5	16	**TA211344.1460**	**TA511344.1460**	**TA611344.1460**
	14.70		M15x0.75	133	83	63	48	2.5	16	**TA211344.1470**	**TA511344.1470**	**TA611344.1470**
	15.00	M16x1		133	83	63	48	2.5	16	**TA211344.1500**	**TA511344.1500**	**TA611344.1500**
	15.10	MJ16x1	M16	133	83	63	48	2.6	16	**TA211344.1510**	**TA511344.1510**	**TA611344.1510**
	15.20	M16x0.75	5/8-18 (GAL)	133	83	63	48	2.6	16	**TA211344.1520**	**TA511344.1520**	**TA611344.1520**
	15.25	G3/8	5/8-18	133	83	63	48	2.6	16	**TA211344.1525**	**TA511344.1525**	**TA611344.1525**
	15.30			133	83	63	48	2.6	16	**TA211344.1530**	**TA511344.1530**	**TA611344.1530**
	15.35		M16x1.5	133	83	63	48	2.6	16	**TA211344.1535**	**TA511344.1535**	**TA611344.1535**
	15.50	M18		133	83	63	48	2.6	16	**TA211344.1550**	**TA511344.1550**	**TA611344.1550**
	15.80	MJ18x2.5		133	83	63	48	2.7	16	**TA211344.1580**	**TA511344.1580**	**TA611344.1580**
	16.00	M18x2		133	83	63	48	2.7	16	**TA211344.1600**	**TA511344.1600**	**TA611344.1600**
	16.50	M18x1.5 / 3/4-10		143	93	71	48	2.8	18	**TA211344.1650**	**TA511344.1650**	**TA611344.1650**
	17.00	M18x1		143	93	71	48	2.9	18	**TA211344.1700**	**TA511344.1700**	**TA611344.1700**
	17.50	M20 / 3/4-16		143	93	71	48	3.0	18	**TA211344.1750**	**TA511344.1750**	**TA611344.1750**
	18.00	M20x2		143	93	71	48	3.1	18	**TA211344.1800**	**TA511344.1800**	**TA611344.1800**
	18.50			153	101	77	50	3.2	20	**TA211344.1850**	**TA511344.1850**	**TA611344.1850**
	18.85		M20	153	101	77	50	3.2	20	**TA211344.1885**	**TA511344.1885**	**TA611344.1885**
	19.00	M20x1		153	101	77	50	3.3	20	**TA211344.1900**	**TA511344.1900**	**TA611344.1900**
	19.05			153	101	77	50	3.3	20	**TA211344.1905**	**TA511344.1905**	**TA611344.1905**
	19.50	M22		153	101	77	50	3.4	20	**TA211344.1950**	**TA511344.1950**	**TA611344.1950**
new	**19.70**			153	101	77	50	3.4	20	**TA211344.1970**	**TA511344.1970**	**TA611344.1970**
new	**19.80**			153	101	77	50	3.4	20	**TA211344.1980**	**TA511344.1980**	**TA611344.1980**
	20.00	M22x2		153	101	77	50	3.4	20	**TA211344.2000**	**TA511344.2000**	**TA611344.2000**
	20.50	M22x1.5		170	109	85	56	3.5	25	**TA211344.2050**	**TA511344.2050**	**TA611344.2050**
	21.00	M24		170	109	85	56	3.6	25	**TA211344.2100**	**TA511344.2100**	**TA611344.2100**
	21.50			170	109	85	56	3.7	25	**TA211344.2150**	**TA511344.2150**	**TA611344.2150**
	22.00	M24x2		170	109	85	56	3.8	25	**TA211344.2200**	**TA511344.2200**	**TA611344.2200**
	22.25	1"-8		176	117	89	56	3.8	25	**TA211344.2225**	**TA511344.2225**	**TA611344.2225**
	22.50	M24x1.5		176	117	89	56	3.9	25	**TA211344.2250**	**TA511344.2250**	**TA611344.2250**
	24.50	M26x1.5		176	117	89	56	4.2	25	**TA211344.2450**	**TA511344.2450**	**TA611344.2450**

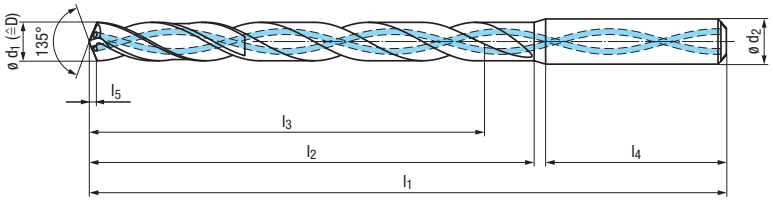
BasicDrill-BD106-8xD

★ 8xD

Applications – material	
P	1.1-5.1
M	1.1-3.1
K	1.1-4.2
N	1.1-2.3
S	1.2-1.3, 2.2-2.3
H	1.1-1.3

Solid carbide twist drill, 8xD, in Basic geometry for universal application.

Product features and benefits:
Four margins for better guidance and hole quality.
Internal cooling channels and high-performance coating for high process reliability.
Use in various materials with steel as the main application area.



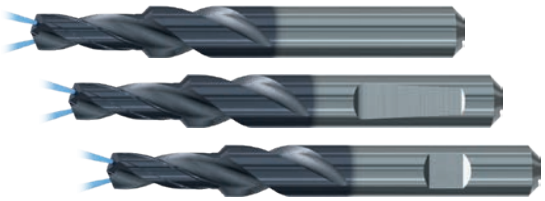
Extra long design

Information about this product is also available on the web

ø d_1 m7	Taps	Cold-forming taps	8xD l_1	l_2	l_3	l_4	l_5	ø d_2 h6	DIN 6535 HA	DIN 6535 HE	DIN 6535 HB
3.00	M3.5x0.5 / MJ3.5x0.6		78	38	30	36	0.7	6	**TA221344.0300**	**TA521344.0300**	**TA621344.0300**
3.10			78	38	30	36	0.7	6	**TA221344.0310**	**TA521344.0310**	**TA621344.0310**
3.20	MJ3.5x0.35		78	38	30	36	0.7	6	**TA221344.0320**	**TA521344.0320**	**TA621344.0320**
3.30	M4	M3.5x0.5	78	38	30	36	0.7	6	**TA221344.0330**	**TA521344.0330**	**TA621344.0330**
3.40	MJ4x0.7		78	38	30	36	0.8	6	**TA221344.0340**	**TA521344.0340**	**TA621344.0340**
3.50	M4x0.5 / #8-32 / #8-36		78	38	30	36	0.8	6	**TA221344.0350**	**TA521344.0350**	**TA621344.0350**
3.60	MJ4x0.5		78	38	30	36	0.8	6	**TA221344.0360**	**TA521344.0360**	**TA621344.0360**
3.70	M4.5	M4	78	38	30	36	0.8	6	**TA221344.0370**	**TA521344.0370**	**TA621344.0370**
3.80		M4x0.5 / #8-32	88	48	38	36	0.8	6	**TA221344.0380**	**TA521344.0380**	**TA621344.0380**
3.90	MJ4.5x0.75 / #10-24		88	48	38	36	0.9	6	**TA221344.0390**	**TA521344.0390**	**TA621344.0390**
4.00			88	48	38	36	0.9	6	**TA221344.0400**	**TA521344.0400**	**TA621344.0400**
4.10	MJ4.5x0.5 / #10-32		88	48	38	36	0.9	6	**TA221344.0410**	**TA521344.0410**	**TA621344.0410**
4.20	M5 / M5x0.75	M4.5	88	48	38	36	0.9	6	**TA221344.0420**	**TA521344.0420**	**TA621344.0420**
4.30	MJ5x0.8	M4.5x0.5 / #10-24 (GAL)	88	48	38	36	0.9	6	**TA221344.0430**	**TA521344.0430**	**TA621344.0430**
4.50	M5x0.5 / #12-24		88	48	38	36	1.0	6	**TA221344.0450**	**TA521344.0450**	**TA621344.0450**
4.65		M5	88	48	38	36	1.0	6	**TA221344.0465**	**TA521344.0465**	**TA621344.0465**
4.80		M5x0.5	88	48	38	36	1.0	6	**TA221344.0480**	**TA521344.0480**	**TA621344.0480**
5.00	M6	#12-24	97	60	48	36	1.1	6	**TA221344.0500**	**TA521344.0500**	**TA621344.0500**
5.10	MJ6x1 / 1/4-20	M5.5 / #12-28	97	60	48	36	1.1	6	**TA221344.0510**	**TA521344.0510**	**TA621344.0510**
5.20	M6x0.75		97	60	48	36	1.1	6	**TA221344.0520**	**TA521344.0520**	**TA621344.0520**
5.30		M5.5x0.5	97	60	48	36	1.1	6	**TA221344.0530**	**TA521344.0530**	**TA621344.0530**
5.40			97	60	48	36	1.2	6	**TA221344.0540**	**TA521344.0540**	**TA621344.0540**
5.50	M6x0.5 / 1/4-28		97	60	48	36	1.2	6	**TA221344.0550**	**TA521344.0550**	**TA621344.0550**
5.60	MJ6x0.5	M6	97	60	48	36	1.2	6	**TA221344.0560**	**TA521344.0560**	**TA621344.0560**
5.80		M6x0.5	97	60	48	36	1.3	6	**TA221344.0580**	**TA521344.0580**	**TA621344.0580**
5.90			97	60	48	36	1.3	6	**TA221344.0590**	**TA521344.0590**	**TA621344.0590**
6.00	M7		97	60	48	36	1.3	6	**TA221344.0600**	**TA521344.0600**	**TA621344.0600**
6.10			107	70	56	36	1.3	8	**TA221344.0610**	**TA521344.0610**	**TA621344.0610**
6.20	M7x0.75		107	70	56	36	1.3	8	**TA221344.0620**	**TA521344.0620**	**TA621344.0620**
6.30			107	70	56	36	1.4	8	**TA221344.0630**	**TA521344.0630**	**TA621344.0630**
6.50	M7x0.5		107	70	56	36	1.4	8	**TA221344.0650**	**TA521344.0650**	**TA621344.0650**
6.60	5/16-18	M7	107	70	56	36	1.4	8	**TA221344.0660**	**TA521344.0660**	**TA621344.0660**
6.80	M8 / G1/16	M7x0.5	107	70	56	36	1.5	8	**TA221344.0680**	**TA521344.0680**	**TA621344.0680**

	ø d_1 m7	Taps	Cold-forming taps	8xD l_1	l_2	l_3	l_4	l_5	ø d_2 h6	DIN 6535 HA	DIN 6535 HE	DIN 6535 HB
	6.90	MJ8x1.25 / 5/16-24		107	70	56	36	1.5	8	**TA221344.0690**	**TA521344.0690**	**TA621344.0690**
	7.00	M8x1		107	70	56	36	1.5	8	**TA221344.0700**	**TA521344.0700**	**TA621344.0700**
	7.40		M8 (GAL) / 5/16-24 (GAL)	117	80	64	36	1.6	8	**TA221344.0740**	**TA521344.0740**	**TA621344.0740**
	7.45		M8 / 5/16-24	117	80	64	36	1.6	8	**TA221344.0745**	**TA521344.0745**	**TA621344.0745**
	7.50	M8x0.5		117	80	64	36	1.6	8	**TA221344.0750**	**TA521344.0750**	**TA621344.0750**
new	**7.60**		M8x1	117	80	64	36	1.6	8	**TA221344.0760**	**TA521344.0760**	**TA621344.0760**
	7.80	M9	M8x0.5	117	80	64	36	1.7	8	**TA221344.0780**	**TA521344.0780**	**TA621344.0780**
	8.00	M9x1 / 3/8-16		117	80	64	36	1.7	8	**TA221344.0800**	**TA521344.0800**	**TA621344.0800**
	8.10	MJ9x1		141	100	80	40	1.7	10	**TA221344.0810**	**TA521344.0810**	**TA621344.0810**
	8.20	M9x0.75		141	100	80	40	1.7	10	**TA221344.0820**	**TA521344.0820**	**TA621344.0820**
	8.50	M10 / M9x0.5 / 3/8-24		141	100	80	40	1.8	10	**TA221344.0850**	**TA521344.0850**	**TA621344.0850**
	8.60	MJ10x1.5	M9x1	141	100	80	40	1.8	10	**TA221344.0860**	**TA521344.0860**	**TA621344.0860**
	8.70		M9x0.75	141	100	80	40	1.9	10	**TA221344.0870**	**TA521344.0870**	**TA621344.0870**
	8.80	M10x1.25 / G1/8	M9x0.5 / 3/8-16	141	100	80	40	1.9	10	**TA221344.0880**	**TA521344.0880**	**TA621344.0880**
	9.00	M10x1	3/8-24 (GAL)	141	100	80	40	1.9	10	**TA221344.0900**	**TA521344.0900**	**TA621344.0900**
	9.30		M10 (GAL)	141	100	80	40	2.0	10	**TA221344.0930**	**TA521344.0930**	**TA621344.0930**
	9.35	MJ10x0.75	M10	141	100	80	40	2.0	10	**TA221344.0935**	**TA521344.0935**	**TA621344.0935**
new	**9.40**	7/16-14	M10x1.25 (GAL)	141	100	80	40	2.0	10	**TA221344.0940**	**TA521344.0940**	**TA621344.0940**
	9.50	M11 / M10x0.5		141	100	80	40	2.0	10	**TA221344.0950**	**TA521344.0950**	**TA621344.0950**
	9.60	MJ10x0.5 / MJ11x1.5	M10x1	141	100	80	40	2.0	10	**TA221344.0960**	**TA521344.0960**	**TA621344.0960**
	9.80		M10x0.5	141	100	80	40	2.1	10	**TA221344.0980**	**TA521344.0980**	**TA621344.0980**
	9.90	MJ11x1.25 / 7/16-20		141	100	80	40	2.1	10	**TA221344.0990**	**TA521344.0990**	**TA621344.0990**
	10.00	M11x1		141	100	80	40	2.1	10	**TA221344.1000**	**TA521344.1000**	**TA621344.1000**
	10.20	M12 / M11x0.75	7/16-14 (GAL)	166	120	96	45	2.2	12	**TA221344.1020**	**TA521344.1020**	**TA621344.1020**
	10.30		M11 (GAL)	166	120	96	45	2.2	12	**TA221344.1030**	**TA521344.1030**	**TA621344.1030**
	10.40			166	120	96	45	2.2	12	**TA221344.1040**	**TA521344.1040**	**TA621344.1040**
	10.50	M12x1.5	7/16-20 (GAL)	166	120	96	45	2.2	12	**TA221344.1050**	**TA521344.1050**	**TA621344.1050**
new	**10.70**		M11x0.75	166	120	96	45	2.2	12	**TA221344.1070**	**TA521344.1070**	**TA621344.1070**
	11.00	M12x1		166	120	96	45	2.3	12	**TA221344.1100**	**TA521344.1100**	**TA621344.1100**
	11.20	M12x0.75	M12 (GAL)	166	120	96	45	2.4	12	**TA221344.1120**	**TA521344.1120**	**TA621344.1120**
	11.25		M12	166	120	96	45	2.4	12	**TA221344.1125**	**TA521344.1125**	**TA621344.1125**
	11.50	1/2-20		166	120	96	45	2.4	12	**TA221344.1150**	**TA521344.1150**	**TA621344.1150**
	11.80	G1/4	1/2-13	166	120	96	45	2.5	12	**TA221344.1180**	**TA521344.1180**	**TA621344.1180**
new	**11.90**			166	120	96	45	2.5	12	**TA221344.1190**	**TA521344.1190**	**TA621344.1190**
	12.00	M14		166	120	96	45	2.5	12	**TA221344.1200**	**TA521344.1200**	**TA621344.1200**
new	**12.10**	MJ13x1	1/2-20 (GAL)	186	140	112	45	2.5	14	**TA221344.1210**	**TA521344.1210**	**TA621344.1210**
	12.50	M14x1.5	G1/4 (GAL)	186	140	112	45	2.6	14	**TA221344.1250**	**TA521344.1250**	**TA621344.1250**
	13.00	M14x1		186	140	112	45	2.7	14	**TA221344.1300**	**TA521344.1300**	**TA621344.1300**
	13.10	MJ14x1	M14	186	140	112	45	2.8	14	**TA221344.1310**	**TA521344.1310**	**TA621344.1310**
	13.50	5/8-11		186	140	112	45	2.8	14	**TA221344.1350**	**TA521344.1350**	**TA621344.1350**
new	**13.80**			186	140	112	45	2.9	14	**TA221344.1380**	**TA521344.1380**	**TA621344.1380**
	14.00	M16 / M15x1		186	140	112	45	2.9	14	**TA221344.1400**	**TA521344.1400**	**TA621344.1400**
	14.50	M16x1.5 / 5/8-18		209	160	128	48	3.1	16	**TA221344.1450**	**TA521344.1450**	**TA621344.1450**
	15.00	M16x1		209	160	128	48	3.2	16	**TA221344.1500**	**TA521344.1500**	**TA621344.1500**
	15.50	M18		209	160	128	48	3.3	16	**TA221344.1550**	**TA521344.1550**	**TA621344.1550**
	16.00	M18x2		209	160	128	48	3.4	16	**TA221344.1600**	**TA521344.1600**	**TA621344.1600**

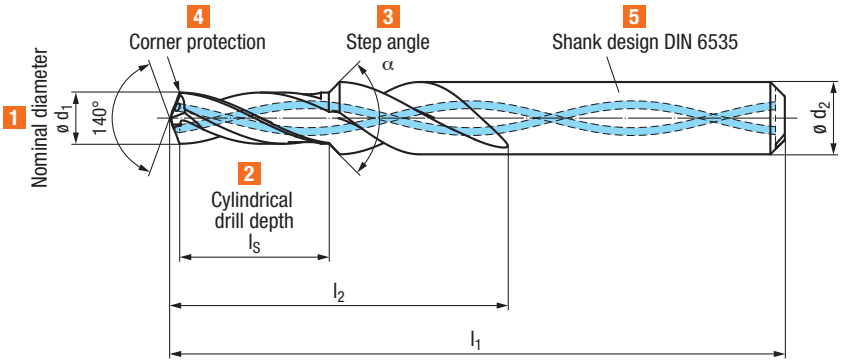
BasicDrill CM C-Quickline



Solid carbide chamfer drill, in Basic geometry for universal application.

Product features and benefits:
Four margins for better guidance and hole quality.
Internal cooling channels and high-performance coating for high process reliability.
Use in various materials with steel as the main application area.

Applications – material	
P	1.1-5.1
M	1.1-3.1
K	1.1-4.2
N	1.1-2.3
S	1.2-1.3, 2.2-2.3
H	1.1-1.3



In order to obtain a complete configuration of the desired chamfer drill, the characteristics 1 - 5 must be defined in the respective specified area.

1	2	3	4	5				
ø d_1 m7	l_S ±0,1	α ±2°	Corner protection	Shank design DIN 6535	l_1	l_2	ø d_2 h6	
2.80 - 3.10	4.00 - 11.00	30 - 160°	yes / no	HA HB HE	57	20	6	**TG001344.060001**
3.11 - 3.40	4.00 - 12.00	30 - 160°	yes / no	HA HB HE	62	25	6	**TG001344.060002**
3.41 - 3.80	4.00 - 13.00	30 - 160°	yes / no	HA HB HE	62	25	6	**TG001344.060003**
3.81 - 4.50	4.00 - 16.00	30 - 160°	yes / no	HA HB HE	66	29	6	**TG001344.060004**
4.51 - 5.00	4.00 - 18.00	30 - 160°	yes / no	HA HB HE	79	42	8	**TG001344.080001**
5.01 - 6.00	4.00 - 25.00	30 - 160°	yes / no	HA HB HE	79	42	8	**TG001344.080002**
6.01 - 7.00	4.00 - 25.00	30 - 160°	yes / no	HA HB HE	89	48	10	**TG001344.100001**
7.01 - 8.00	4.00 - 28.00	30 - 160°	yes / no	HA HB HE	89	48	10	**TG001344.100002**
8.01 - 10.00	4.00 - 35.00	30 - 160°	yes / no	HA HB HE	102	56	12	**TG001344.120001**
10.01 - 12.00	4.00 - 42.00	30 - 160°	yes / no	HA HB HE	107	61	14	**TG001344.140001**
12.01 - 14.00	4.00 - 49.00	30 - 160°	yes / no	HA HB HE	115	66	16	**TG001344.160001**
14.01 - 16.00	4.00 - 54.00	30 - 160°	yes / no	HA HB HE	123	74	18	**TG001344.180001**
16.01 - 18.00	4.00 - 54.00	30 - 160°	yes / no	HA HB HE	131	80	20	**TG001344.200001**

Not a stock tool, minimum order quantity = 3 pieces. Short delivery time for orders of 3 to 30 pieces.

Please visit our website for more information on our BasicDrill twist drills and configurable chamfer drills.

ef-g.de/a/basic-drill-details

Regrinding and recoating service

Regrinding and recoating form an essential contribution to the economically efficient use of drilling tools.

The EMUGE regrinding and recoating service guarantees the restoration of the original geometry and the original coating of the tool.

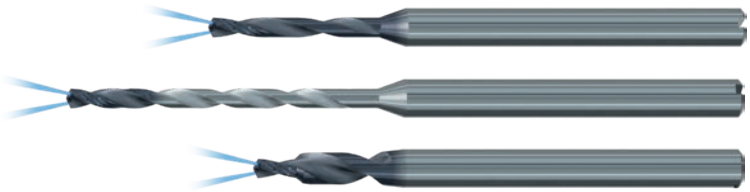
If you are interested, please contact us.

Application recommendation and cutting data

Please note:
The cutting values listed in the respective columns are standard values which have to be adjusted to individual work conditions (material, lubrication, machine etc.).

v_c = Cutting speed [m/min]
f = Feed per revolution [mm/rev.]

		Applications – material		Material examples	Material numbers	Coolant-lubricant recommendation: Emulsion	Oil	Minimum quantity lubrication (MQL)	Dry / Pressurised air
P		**Steel materials**							
	1.1	Cold-extrusion steels, Construction steels, Free-cutting steels, etc.	≤ 600 N/mm²	Cq15	1.1132				
				S235JR (St37-2)	1.0037	■	■	■	
				10SPb20	1.0722				
	2.1	Construction steels, Cementation steels, Steel castings, etc.	≤ 800 N/mm²	E360 (St70-2)	1.0070				
				16MnCr5	1.7131	■	■	■	
				GS-25CrMo4	1.7218				
	3.1	Cementation steels, Heat-treatable steels, Cold work steels, etc.	≤ 1000 N/mm²	20MoCr3	1.7320				
				42CrMo4	1.7225	■	■	■	
				102Cr6	1.2067				
	4.1	Heat-treatable steels, Cold work steels, Nitriding steels, etc.	≤ 1200 N/mm²	50CrMo4	1.7228				
				X45NiCrMo4	1.2767	■	■	■	
				31CrMo12	1.8515				
	5.1	High-alloyed steels, Cold work steels, Hot work steels, etc.	≤ 1400 N/mm²	X38CrMoV5-3	1.2367				
				X100CrMoV8-1-1	1.2990	■	■	■	
				X40CrMoV5-1	1.2344				
M		**Stainless steel materials**							
	1.1	Ferritic, martensitic	≤ 950 N/mm²	X2CrTi12	1.4512	■	■		
	2.1	Austenitic	≤ 950 N/mm²	X6CrNiMoTi17-12-2	1.4571	■	■		
	3.1	Austenitic-ferritic (Duplex)	≤ 1100 N/mm²	X2CrNiMoN22-5-3	1.4462	■	■		
	4.1	Austenitic-ferritic heat-resistant (Super Duplex)	≤ 1250 N/mm²	X2CrNiMoN25-7-4	1.4410	■	■		
K		**Cast materials**							
	1.1	Cast iron with lamellar graphite (GJL)	100-250 N/mm²	EN-GJL-200 (GG20)	EN-JL-1030	■	■	■	■
	1.2		250-450 N/mm²	EN-GJL-300 (GG30)	EN-JL-1050	■	■	■	
	2.1	Cast iron with nodular graphite (GJS)	350-500 N/mm²	EN-GJS-400-15 (GGG40)	EN-JS-1030	■	■	■	■
	2.2		500-900 N/mm²	EN-GJS-700-2 (GGG70)	EN-JS-1070	■	■	■	
	3.1	Cast iron with vermicular graphite (GJV)	300-400 N/mm²	GJV 300		■	■	■	
	3.2		400-500 N/mm²	GJV 450		■	■	■	
	4.1	Malleable cast iron (GTMW, GTMB)	250-500 N/mm²	EN-GJMW-350-4 (GTW-35)	EN-JM-1010				
	4.2		500-800 N/mm²	EN-GJMB-450-6 (GTS-45)	EN-JM-1140				
N		**Non ferrous materials**							
		Aluminium alloys							
	1.1	Aluminium wrought alloys	≤ 200 N/mm²	EN AW-AlMn1	EN AW-3103	■	■	■	
	1.2		≤ 350 N/mm²	EN AW-AlMgSi	EN AW-6060	■	■	■	
	1.3		≤ 550 N/mm²	EN AW-AlZn5Mg3Cu	EN AW-7022	■	■	■	
	1.4	Aluminium cast alloys	Si ≤ 7%	EN AC-AlMg5	EN AC-51300	■	■	■	
	1.5		7% < Si ≤ 12%	EN AC-AlSi9Cu3	EN AC-46500	■	■	■	
	1.6		12% < Si ≤ 17%	GD-AlSi17Cu4FeMg		■	■	■	
		Copper alloys							
	2.1	Pure copper, low-alloyed copper	≤ 400 N/mm²	E-Cu 57	EN CW 004 A	■	■		
	2.2	Copper-zinc alloys (brass, long-chipping)	≤ 550 N/mm²	CuZn37 (Ms63)	EN CW 508 L	■	■		
	2.3	Copper-zinc alloys (brass, short-chipping)	≤ 550 N/mm²	CuZn36Pb3 (Ms58)	EN CW 603 N	■	■		
	2.4	Copper-aluminium alloys (alu bronze, long-chipping)	≤ 800 N/mm²	CuAl10Ni5Fe4	EN CW 307 G				
	2.5	Copper-tin alloys (tin bronze, long-chipping)	≤ 700 N/mm²	CuSn8P	EN CW 459 K				
	2.6	Copper-tin alloys (tin bronze, short-chipping)	≤ 400 N/mm²	CuSn7 ZnPb (Rg7)	2.1090				
	2.7	Special copper alloys	≤ 600 N/mm²	(AMPCO® 8)					
	2.8		≤ 1400 N/mm²	(AMPCO® 45)					
		Magnesium alloys							
	3.1	Magnesium wrought alloys	≤ 500 N/mm²	MgAl6Zn	3.5612				
	3.2	Magnesium cast alloys	≤ 500 N/mm²	EN-MCMgAl9Zn1	EN-MC21120				
		Synthetics							
	4.1	Duroplastics (short-chipping)		Bakelit, Pertinax					
	4.2	Thermoplastics (long-chipping)		PMMA, POM, PVC					
	4.3	Fibre-reinforced synthetics (fibre content ≤ 30%)		GFK, CFK, AFK					
	4.4	Fibre-reinforced synthetics (fibre content > 30%)		GFK, CFK, AFK					
		Special materials							
	5.1	Graphite		C 8000					
	5.2	Tungsten-copper alloys		W-Cu 80/20					
	5.3	Composite materials		Hylite, Alucobond					
S		**Special materials**							
		Titanium alloys							
	1.1	Pure titanium	≤ 450 N/mm²	Ti1	3.7025				
	1.2	Titanium alloys	≤ 900 N/mm²	TiAl6V4	3.7165	■	■		
	1.3		≤ 1250 N/mm²	TiAl4Mo4Sn2	3.7185	■	■		
		Nickel alloys, cobalt alloys and iron alloys							
	2.1	Pure nickel	≤ 600 N/mm²	Ni 99,6	2.4060				
	2.2	Nickel-base alloys	≤ 1000 N/mm²	Monel 400	2.4360	■	■		
	2.3		≤ 1600 N/mm²	Inconel 718	2.4668	■	■		
	2.4	Cobalt-base alloys	≤ 1000 N/mm²	Udimet 605					
	2.5		≤ 1600 N/mm²	Haynes 25	2.4964				
	2.6	Iron-base alloys	≤ 1500 N/mm²	Incoloy 800	1.4958				
H		**Hard materials**							
	1.1	High strength steels, hardened steels, hard castings	44 - 50 HRC	Weldox 1100		■	■		
	1.2		50 - 55 HRC	Hardox 550		■	■		
	1.3		55 - 60 HRC	Armox 600T					
	1.4		60 - 63 HRC	Ferro-Titanit					
	1.5		63 - 66 HRC	HSSE					



Micro 6xD

Micro 12xD

Micro C-Pilot 2xD

	v_c [m/min]			d_1 [mm]												
				1.00 mm - 1.49 mm			1.50 mm - 1.99 mm			2.00 - 2.49 mm			2.50 - 2.99 mm			
				f [mm/rev.]												
	min.	**rec.**	max.	min.	**rec.**	max.	min.	**rec.**	max.	min.	**rec.**	max.	min.	**rec.**	max.	
	50	**65**	80	0.05	**0.07**	0.09	0.07	**0.09**	0.11	0.09	**0.11**	0.13	0.11	**0.13**	0.15	1.1
	45	**55**	65	0.05	**0.07**	0.09	0.07	**0.09**	0.11	0.09	**0.11**	0.13	0.11	**0.13**	0.15	2.1
	40	**50**	60	0.04	**0.06**	0.08	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	3.1
	30	**40**	50	0.04	**0.06**	0.08	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	4.1
	30	**35**	40	0.03	**0.05**	0.06	0.05	**0.07**	0.09	0.07	**0.09**	0.11	0.09	**0.11**	0.13	5.1
	30	**40**	50	0.025	**0.03**	0.04	0.03	**0.05**	0.07	0.05	**0.07**	0.09	0.07	**0.09**	0.11	1.1
	25	**35**	45	0.025	**0.03**	0.04	0.03	**0.05**	0.07	0.05	**0.07**	0.09	0.07	**0.09**	0.11	2.1
	25	**35**	45	0.025	**0.03**	0.04	0.03	**0.05**	0.07	0.05	**0.07**	0.09	0.07	**0.09**	0.11	3.1
	20	**30**	40	0.025	**0.03**	0.04	0.03	**0.05**	0.07	0.05	**0.07**	0.09	0.07	**0.09**	0.11	4.1
	80	**90**	100	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	0.12	**0.14**	0.16	1.1
	80	**90**	100	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	0.12	**0.14**	0.16	1.2
	80	**90**	100	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	0.12	**0.14**	0.16	2.1
	70	**80**	90	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	0.12	**0.14**	0.16	2.2
	80	**90**	100	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	0.12	**0.14**	0.16	3.1
	60	**70**	90	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	0.12	**0.14**	0.16	3.2
																4.1
																4.2
	100	**130**	160	0.04	**0.06**	0.08	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	1.1
	100	**130**	160	0.04	**0.06**	0.08	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	1.2
	100	**130**	160	0.04	**0.06**	0.08	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	1.3
	100	**130**	160	0.04	**0.06**	0.08	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	1.4
	100	**130**	160	0.04	**0.06**	0.08	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	1.5
	100	**130**	160	0.04	**0.06**	0.08	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.10	**0.12**	0.14	1.6
	80	**110**	140	0.03	**0.04**	0.06	0.04	**0.06**	0.08	0.06	**0.08**	0.10	0.08	**0.10**	0.12	2.1
	80	**110**	140	0.03	**0.04**	0.06	0.04	**0.06**	0.08	0.06	**0.08**	0.10	0.08	**0.10**	0.12	2.2
	80	**110**	140	0.04	**0.06**	0.08	0.06	**0.08**	0.10	0.08	**0.10**	0.12	0.08	**0.10**	0.12	2.3
																2.4
																2.5
																2.6
																2.7
																2.8
																3.1
																3.2
																4.1
																4.2
																4.3
																4.4
																5.1
																5.2
																5.3
																1.1
	30	**40**	50	0.02	**0.03**	0.04	0.03	**0.04**	0.06	0.04	**0.06**	0.08	0.06	**0.08**	0.10	1.2
	20	**30**	40	0.02	**0.03**	0.04	0.03	**0.04**	0.06	0.04	**0.06**	0.08	0.06	**0.08**	0.10	1.3
																2.1
	30	**40**	50	0.02	**0.03**	0.04	0.03	**0.04**	0.06	0.04	**0.06**	0.08	0.06	**0.08**	0.10	2.2
	20	**25**	40	0.02	**0.03**	0.04	0.03	**0.04**	0.06	0.04	**0.06**	0.08	0.06	**0.08**	0.10	2.3
																2.4
																2.5
																2.6
	20	**25**	30	0.005	**0.010**	0.015	0.010	**0.015**	0.020	0.015	**0.020**	0.025	0.020	**0.025**	0.030	1.1
	20	**25**	30	0.005	**0.010**	0.015	0.008	**0.010**	0.012	0.012	**0.014**	0.016	0.020	**0.025**	0.030	1.2
																1.3
																1.4
																1.5

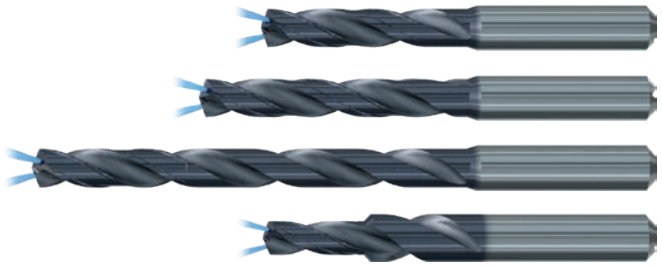
P M K N S H

Application recommendation and cutting data

Please note:
The cutting values listed in the respective columns are standard values which have to be adjusted to individual work conditions (material, lubrication, machine etc.).

v_c = Cutting speed [m/min]
f = Feed per revolution [mm/rev.]

		Applications – material		Material examples	Material numbers	Coolant-lubricant recommendation: Emulsion	Oil	Minimum quantity lubrication (MQL)	Dry / Pressurised air
P		**Steel materials**							
	1.1	Cold-extrusion steels, Construction steels, Free-cutting steels, etc.	≤ 600 N/mm²	Cq15	1.1132	■	■	■	
				S235JR (St37-2)	1.0037				
				10SPb20	1.0722				
	2.1	Construction steels, Cementation steels, Steel castings, etc.	≤ 800 N/mm²	E360 (St70-2)	1.0070	■	■	■	
				16MnCr5	1.7131				
				GS-25CrMo4	1.7218				
	3.1	Cementation steels, Heat-treatable steels, Cold work steels, etc.	≤ 1000 N/mm²	20MoCr3	1.7320	■	■	■	
				42CrMo4	1.7225				
				102Cr6	1.2067				
	4.1	Heat-treatable steels, Cold work steels, Nitriding steels, etc.	≤ 1200 N/mm²	50CrMo4	1.7228	■	■	■	
				X45NiCrMo4	1.2767				
				31CrMo12	1.8515				
	5.1	High-alloyed steels, Cold work steels, Hot work steels, etc.	≤ 1400 N/mm²	X38CrMoV5-3	1.2367	■	■	■	
				X100CrMoV8-1-1	1.2990				
				X40CrMoV5-1	1.2344				
M		**Stainless steel materials**							
	1.1	Ferritic, martensitic	≤ 950 N/mm²	X2CrTi12	1.4512	■	■		
	2.1	Austenitic	≤ 950 N/mm²	X6CrNiMoTi17-12-2	1.4571	■	■		
	3.1	Austenitic-ferritic (Duplex)	≤ 1100 N/mm²	X2CrNiMoN22-5-3	1.4462	■	■		
	4.1	Austenitic-ferritic heat-resistant (Super Duplex)	≤ 1250 N/mm²	X2CrNiMoN25-7-4	1.4410				
K		**Cast materials**							
	1.1	Cast iron with lamellar graphite (GJL)	100-250 N/mm²	EN-GJL-200 (GG20)	EN-JL-1030	■	■	■	■
	1.2		250-450 N/mm²	EN-GJL-300 (GG30)	EN-JL-1050	■	■	■	
	2.1	Cast iron with nodular graphite (GJS)	350-500 N/mm²	EN-GJS-400-15 (GGG40)	EN-JS-1030	■	■	■	■
	2.2		500-900 N/mm²	EN-GJS-700-2 (GGG70)	EN-JS-1070	■	■	■	
	3.1	Cast iron with vermicular graphite (GJV)	300-400 N/mm²	GJV 300		■	■	■	
	3.2		400-500 N/mm²	GJV 450		■	■	■	
	4.1	Malleable cast iron (GTMW, GTMB)	250-500 N/mm²	EN-GJMW-350-4 (GTW-35)	EN-JM-1010	■	■	■	
	4.2		500-800 N/mm²	EN-GJMB-450-6 (GTS-45)	EN-JM-1140	■	■	■	
N		**Non ferrous materials**							
		Aluminium alloys							
	1.1	Aluminium wrought alloys	≤ 200 N/mm²	EN AW-AlMn1	EN AW-3103	■	■	■	
	1.2		≤ 350 N/mm²	EN AW-AlMgSi	EN AW-6060	■	■	■	
	1.3		≤ 550 N/mm²	EN AW-AlZn5Mg3Cu	EN AW-7022	■	■	■	
	1.4	Aluminium cast alloys	Si ≤ 7%	EN AC-AlMg5	EN AC-51300	■	■	■	
	1.5		7% < Si ≤ 12%	EN AC-AlSi9Cu3	EN AC-46500	■	■	■	
	1.6		12% < Si ≤ 17%	GD-AlSi17Cu4FeMg		■	■	■	
		Copper alloys							
	2.1	Pure copper, low-alloyed copper	≤ 400 N/mm²	E-Cu 57	EN CW 004 A	■	■		
	2.2	Copper-zinc alloys (brass, long-chipping)	≤ 550 N/mm²	CuZn37 (Ms63)	EN CW 508 L	■	■		
	2.3	Copper-zinc alloys (brass, short-chipping)	≤ 550 N/mm²	CuZn36Pb3 (Ms58)	EN CW 603 N	■	■		
	2.4	Copper-aluminium alloys (alu bronze, long-chipping)	≤ 800 N/mm²	CuAl10Ni5Fe4	EN CW 307 G				
	2.5	Copper-tin alloys (tin bronze, long-chipping)	≤ 700 N/mm²	CuSn8P	EN CW 459 K				
	2.6	Copper-tin alloys (tin bronze, short-chipping)	≤ 400 N/mm²	CuSn7 ZnPb (Rg7)	2.1090				
	2.7	Special copper alloys	≤ 600 N/mm²	(AMPCO® 8)					
	2.8		≤ 1400 N/mm²	(AMPCO® 45)					
		Magnesium alloys							
	3.1	Magnesium wrought alloys	≤ 500 N/mm²	MgAl6Zn	3.5612				
	3.2	Magnesium cast alloys	≤ 500 N/mm²	EN-MCMgAl9Zn1	EN-MC21120				
		Synthetics							
	4.1	Duroplastics (short-chipping)		Bakelit, Pertinax					
	4.2	Thermoplastics (long-chipping)		PMMA, POM, PVC					
	4.3	Fibre-reinforced synthetics (fibre content ≤ 30%)		GFK, CFK, AFK					
	4.4	Fibre-reinforced synthetics (fibre content > 30%)		GFK, CFK, AFK					
		Special materials							
	5.1	Graphite		C 8000					
	5.2	Tungsten-copper alloys		W-Cu 80/20					
	5.3	Composite materials		Hylite, Alucobond					
S		**Special materials**							
		Titanium alloys							
	1.1	Pure titanium	≤ 450 N/mm²	Ti1	3.7025				
	1.2	Titanium alloys	≤ 900 N/mm²	TiAl6V4	3.7165	■	■		
	1.3		≤ 1250 N/mm²	TiAl4Mo4Sn2	3.7185	■	■		
		Nickel alloys, cobalt alloys and iron alloys							
	2.1	Pure nickel	≤ 600 N/mm²	Ni 99,6	2.4060				
	2.2	Nickel-base alloys	≤ 1000 N/mm²	Monel 400	2.4360	■	■		
	2.3		≤ 1600 N/mm²	Inconel 718	2.4668	■	■		
	2.4	Cobalt-base alloys	≤ 1000 N/mm²	Udimet 605					
	2.5		≤ 1600 N/mm²	Haynes 25	2.4964				
	2.6	Iron-base alloys	≤ 1500 N/mm²	Incoloy 800	1.4958				
H		**Hard materials**							
	1.1	High strength steels, hardened steels, hard castings	44 - 50 HRC	Weldox 1100		■	■		
	1.2		50 - 55 HRC	Hardox 550		■	■		
	1.3		55 - 60 HRC	Armox 600T		■	■		
	1.4		60 - 63 HRC	Ferro-Titanit					
	1.5		63 - 66 HRC	HSSE					



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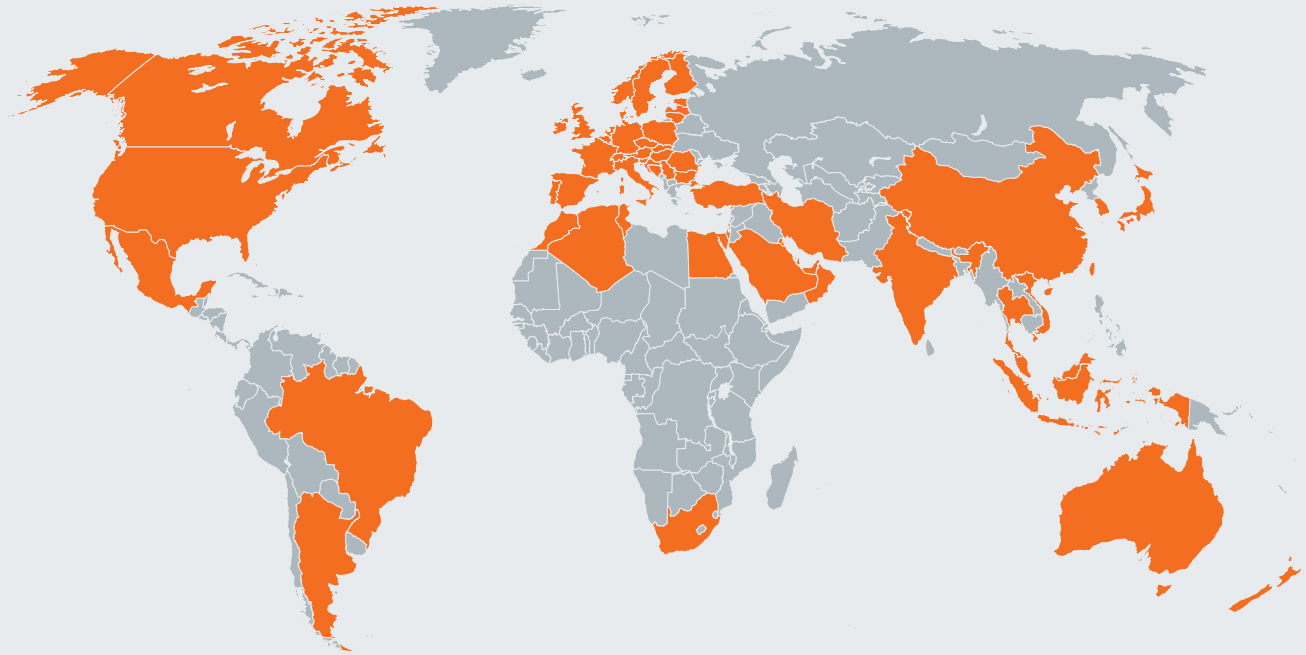

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