

INOX-PILOT 130°

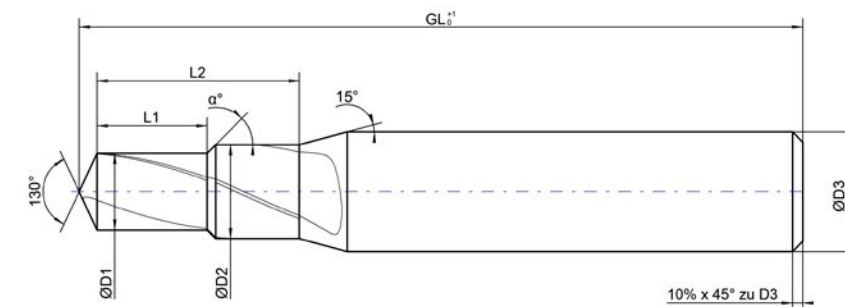
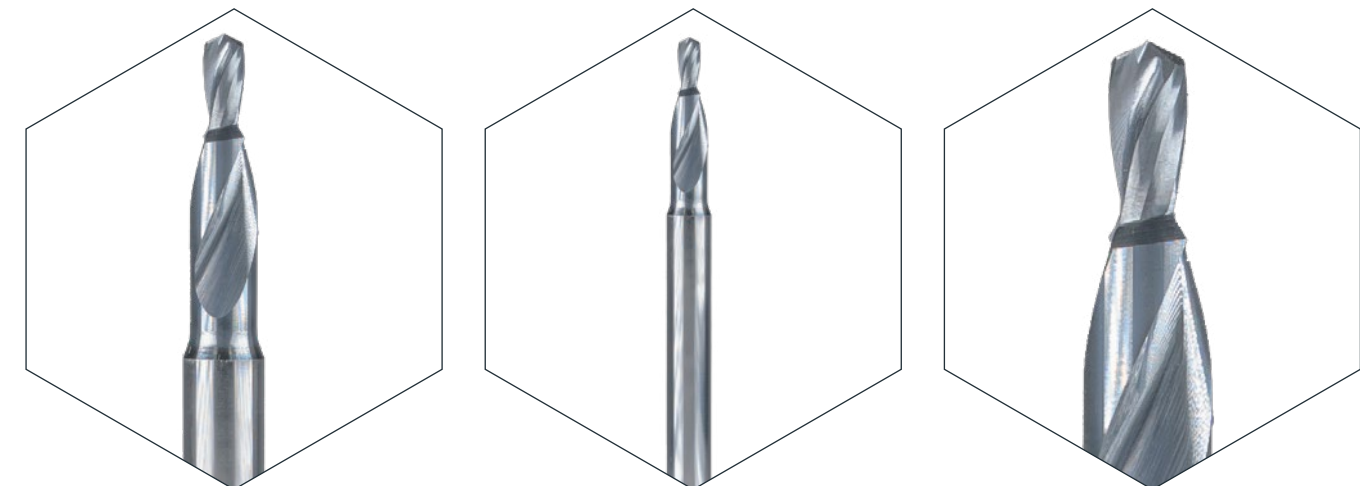
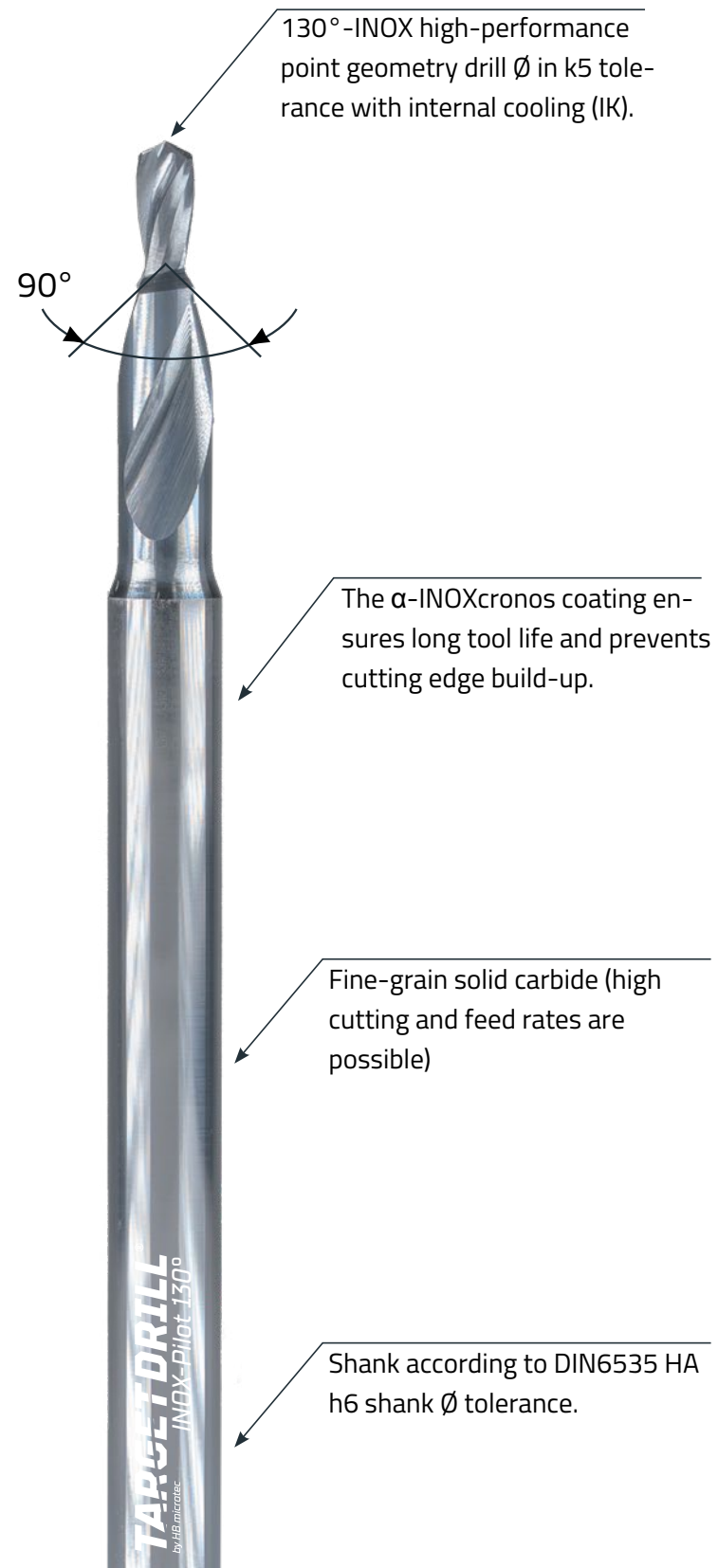
HBmicrotec[®]
ACTIONTOOLS & ENGINEERING



TARGET DRILL[®]
by HB microtec
INOX-Pilot 130°



Pilot drill
2xD
 $130^\circ + 4^\circ / + 2^\circ$



☐ Inquiry

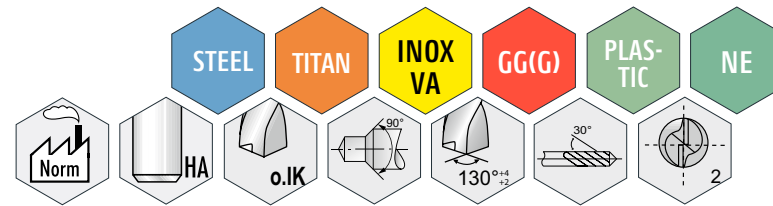
☐ Order

Order number: _____ Other: _____

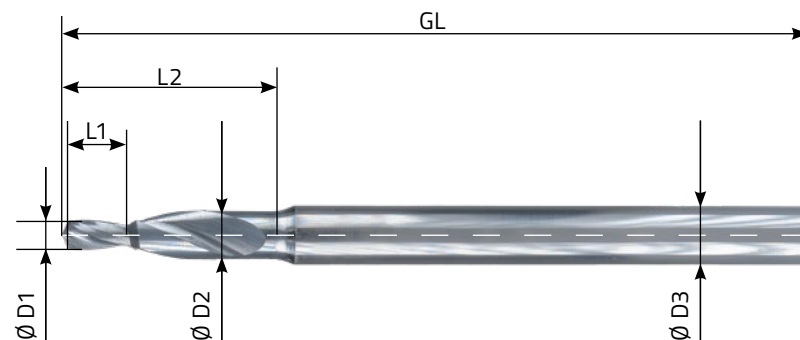
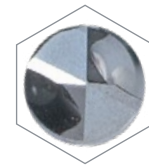
Dimensions: D ₁ : _____ GL: _____ α: _____ D ₃ : _____ L ₁ : _____ β: _____ L ₂ : _____ Z: _____	Coating: ☐ Coated*: _____ ☐ Uncoated	Cooling channels: ☐ Yes ☐ No Cutting direction: ☐ Left ☐ Right
Material to be machined: _____	Shank shape: _____	Quantity: _____
Date, signature & company stamp: _____		Contact person: _____

* Without further information, the most suitable coating will be used.

INOX-Pilot 130°



TARGETDRILL INOX-Pilot
TD.IP.100.200.90 ← 90° chamfer
D1: Ø 1.00mm L1: 2.00mm



■ α-INOXcronos coated



5 PRO's of the ACTIONDRILL:

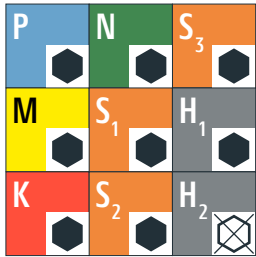
- Combination tool: centering + drilling + chamfering
- Perfect positional accuracy
- 2xD drilling + chamfering
- Pilot drill (tolerance Øm5) for deep-hole drilling
- Shorter process times and high process reliability

Article number	D1 m5 (mm)	D1 m5 (inch)	D2 (mm)	D3 (mm)	L1 (mm)	L2 (mm)	GL (mm)
TD.IP.075.150.90	Ø 0.750	-	Ø 1.80	Ø 3.00	1.50	7.30	45.00
TD.IP.080.160.90	Ø 0.800	-	Ø 1.80	Ø 3.00	1.60	7.30	45.00
TD.IP.085.170.90	Ø 0.850	-	Ø 1.80	Ø 3.00	1.70	7.30	45.00
TD.IP.090.180.90	Ø 0.900	-	Ø 1.80	Ø 3.00	1.80	8.30	45.00
TD.IP.095.190.90	Ø 0.950	-	Ø 1.80	Ø 3.00	1.90	7.30	45.00
TD.IP.100.200.90	Ø 1.000	-	Ø 1.80	Ø 4.00	2.00	7.30	45.00
TD.IP.105.210.90	Ø 1.050	-	Ø 1.80	Ø 4.00	2.10	7.70	45.00
TD.IP.110.220.90	Ø 1.100	-	Ø 1.80	Ø 4.00	2.20	8.05	45.00
TD.IP.115.230.90	Ø 1.150	-	Ø 1.80	Ø 4.00	2.30	8.40	45.00
TD.IP.120.240.90	Ø 1.200	-	Ø 2.10	Ø 4.00	2.40	8.80	45.00
TD.IP.125.250.90	Ø 1.250	-	Ø 2.10	Ø 4.00	2.50	9.15	45.00
TD.IP.130.260.90	Ø 1.300	-	Ø 2.10	Ø 4.00	2.60	9.50	45.00
TD.IP.135.270.90	Ø 1.350	-	Ø 2.10	Ø 4.00	2.70	9.90	45.00
TD.IP.140.280.90	Ø 1.400	-	Ø 2.10	Ø 4.00	2.80	10.25	45.00
TD.IP.145.290.90	Ø 1.450	-	Ø 2.45	Ø 4.00	2.90	10.60	45.00
TD.IP.150.300.90	Ø 1.500	-	Ø 2.45	Ø 4.00	3.00	10.95	48.00
TD.IP.155.310.90	Ø 1.550	-	Ø 2.45	Ø 4.00	3.10	11.35	48.00
TD.IP.1588.3175.90	Ø 1.588	1/16"	Ø 2.45	Ø 4.00	3.175	11.70	48.00
TD.IP.160.320.90	Ø 1.600	-	Ø 2.45	Ø 4.00	3.20	11.70	48.00
TD.IP.165.330.90	Ø 1.650	-	Ø 2.45	Ø 4.00	3.30	12.05	48.00
TD.IP.170.340.90	Ø 1.700	-	Ø 2.80	Ø 4.00	3.40	12.45	48.00
TD.IP.175.350.90	Ø 1.750	-	Ø 2.80	Ø 4.00	3.50	12.80	48.00
TD.IP.180.360.90	Ø 1.800	-	Ø 2.80	Ø 4.00	3.60	13.15	48.00
TD.IP.185.370.90	Ø 1.850	-	Ø 2.80	Ø 4.00	3.70	13.55	48.00
TD.IP.190.380.90	Ø 1.900	-	Ø 2.80	Ø 4.00	3.80	13.90	48.00
TD.IP.195.390.90	Ø 1.950	-	Ø 2.80	Ø 4.00	3.90	14.25	48.00
TD.IP.200.400.90	Ø 2.000	-	Ø 3.30	Ø 4.00	4.00	14.60	52.00
TD.IP.203.4060.90	Ø 2.030	-	Ø 3.30	Ø 4.00	4.06	15.00	52.00
TD.IP.205.410.90	Ø 2.050	-	Ø 3.30	Ø 4.00	4.10	15.00	52.00
TD.IP.210.420.90	Ø 2.100	-	Ø 3.30	Ø 4.00	4.20	15.35	52.00
TD.IP.215.430.90	Ø 2.150	-	Ø 3.30	Ø 4.00	4.30	15.70	52.00
TD.IP.220.440.90	Ø 2.200	-	Ø 3.30	Ø 4.00	4.40	16.10	52.00
TD.IP.225.450.90	Ø 2.250	-	Ø 3.30	Ø 4.00	4.50	16.45	52.00
TD.IP.230.460.90	Ø 2.300	-	Ø 3.60	Ø 4.00	4.60	16.80	52.00
TD.IP.233.4660.90	Ø 2.330	-	Ø 3.60	Ø 4.00	4.66	17.20	52.00
TD.IP.235.470.90	Ø 2.350	-	Ø 3.60	Ø 4.00	4.70	17.20	52.00
TD.IP.2381.4762.90	Ø 2.381	3/32"	Ø 3.60	Ø 4.00	4.762	17.55	52.00
TD.IP.240.480.90	Ø 2.400	-	Ø 3.60	Ø 4.00	4.80	17.55	52.00
TD.IP.245.490.90	Ø 2.450	-	Ø 3.60	Ø 4.00	4.90	17.90	52.00
TD.IP.250.500.90	Ø 2.500	-	Ø 3.60	Ø 4.00	5.00	18.25	56.00
TD.IP.255.510.90	Ø 2.550	-	Ø 3.60	Ø 4.00	5.10	18.65	56.00
TD.IP.260.520.90	Ø 2.600	-	Ø 4.00	Ø 4.00	5.20	-	56.00
TD.IP.265.530.90	Ø 2.650	-	Ø 4.00	Ø 4.00	5.30	-	56.00
TD.IP.270.540.90	Ø 2.700	-	Ø 4.00	Ø 4.00	5.40	-	56.00
TD.IP.275.550.90	Ø 2.750	-	Ø 4.00	Ø 4.00	5.50	-	56.00
TD.IP.280.560.90	Ø 2.800	-	Ø 4.00	Ø 4.00	5.60	-	56.00
TD.IP.285.570.90	Ø 2.850	-	Ø 4.00	Ø 4.00	5.70	-	56.00
TD.IP.290.580.90	Ø 2.900	-	Ø 4.00	Ø 4.00	5.80	-	56.00
TD.IP.295.590.90	Ø 2.950	-	Ø 4.00	Ø 4.00	5.90	-	56.00
TD.IP.300.600.90	Ø 3.000	-	Ø 4.80	Ø 6.00	6.00	21.90	60.00
TD.IP.305.610.90	Ø 3.050	-	Ø 4.80	Ø 6.00	6.10	22.30	60.00
TD.IP.310.620.90	Ø 3.100	-	Ø 4.80	Ø 6.00	6.20	22.65	60.00
TD.IP.315.630.90	Ø 3.150	-	Ø 4.80	Ø 6.00	6.30	23.00	60.00

Article number	D1 m5 (mm)	D1 m5 (inch)	D2 (mm)	D3 (mm)	L1 (mm)	L2 (mm)	GL (mm)
TD.IP.3175.6350.90	Ø 3.175	1/8"	Ø 4.80	Ø 6.00	6.35	23.40	60.00
TD.IP.320.640.90	Ø 3.200	-	Ø 4.80	Ø 6.00	6.40	23.40	60.00
TD.IP.325.650.90	Ø 3.250	-	Ø 4.80	Ø 6.00	6.50	23.75	60.00
TD.IP.330.660.90	Ø 3.300	-	Ø 4.80	Ø 6.00	6.60	24.10	60.00
TD.IP.335.670.90	Ø 3.350	-	Ø 4.80	Ø 6.00	6.70	24.50	60.00
TD.IP.340.680.90	Ø 3.400	-	Ø 4.80	Ø 6.00	6.80	24.85	60.00
TD.IP.345.690.90	Ø 3.450	-	Ø 4.80	Ø 6.00	6.90	25.20	60.00
TD.IP.350.700.90	Ø 3.500	-	Ø 5.50	Ø 6.00	7.00	25.55	65.00
TD.IP.355.710.90	Ø 3.550	-	Ø 5.50	Ø 6.00	7.10	25.95	65.00
TD.IP.360.720.90	Ø 3.600	-	Ø 5.50	Ø 6.00	7.20	26.30	65.00
TD.IP.365.730.90	Ø 3.650	-	Ø 5.50	Ø 6.00	7.30	26.65	65.00
TD.IP.370.740.90	Ø 3.700	-	Ø 5.50	Ø 6.00	7.40	27.05	65.00
TD.IP.375.750.90	Ø 3.750	-	Ø 5.50	Ø 6.00	7.50	27.40	70.00
TD.IP.380.760.90	Ø 3.800	-	Ø 5.50	Ø 6.00	7.60	27.75	70.00
TD.IP.385.770.90	Ø 3.850	-	Ø 5.50	Ø 6.00	7.70	28.15	70.00
TD.IP.390.780.90	Ø 3.900	-	Ø 5.50	Ø 6.00	7.80	28.50	70.00
TD.IP.395.790.90	Ø 3.950	-	Ø 5.50	Ø 6.00	7.90	28.85	70.00
TD.IP.3969.7937.90	Ø 3.969	5/32"	Ø 5.50	Ø 6.00	7.937	29.20	70.00
TD.IP.400.800.90	Ø 4.000	-	Ø 5.50	Ø 6.00	8.00	29.20	70.00
TD.IP.410.820.90	Ø 4.100	-	Ø 6.00	Ø 6.00	8.20	-	75.00
TD.IP.420.840.90	Ø 4.200	-	Ø 6.00	Ø 6.00	8.40	-	75.00
TD.IP.430.860.90	Ø 4.300	-	Ø 6.00	Ø 6.00	8.60	-	75.00
TD.IP.440.880.90	Ø 4.400	-	Ø 6.00	Ø 6.00	8.80	-	75.00
TD.IP.450.900.90	Ø 4.500	-	Ø 6.00	Ø 6.00	9.00	-	75.00
TD.IP.460.920.90	Ø 4.600	-	Ø 6.00	Ø 6.00	9.20	-	75.00
TD.IP.465.930.90	Ø 4.650	-	Ø 6.00	Ø 6.00	9.30	-	75.00
TD.IP.470.940.90	Ø 4.700	-	Ø 6.00	Ø 6.00	9.40	-	75.00
TD.IP.4763.9525.90	Ø 4.763	3/16"	Ø 6.00	Ø 6.00	9.525	-	75.00
TD.IP.480.960.90	Ø 4.800	-	Ø 6.00	Ø 6.00	9.60	-	75.00
TD.IP.490.980.90	Ø 4.900	-	Ø 6.00	Ø 6.00	9.80	-	75.00
TD.IP.500.1000.90	Ø 5.000	-	Ø 8.00	Ø 8.00	10.00	-	80.00
TD.IP.510.1020.90	Ø 5.100	-	Ø 8.00	Ø 8.00	10.20	-	80.00
TD.IP.520.1040.90	Ø 5.200	-	Ø 8.00	Ø 8.00	10.40	-	80.00
TD.IP.530.1060.90	Ø 5.300	-	Ø 8.00	Ø 8.00	10.60	-	80.00
TD.IP.540.1080.90	Ø 5.400	-	Ø 8.00	Ø 8.00	10.80	-	80.00
TD.IP.550.1100.90	Ø 5.500	-	Ø 8.00	Ø 8.00	11.00	-	80.00
TD.IP.5556.1111.90	Ø 5.556	7/32"	Ø 8.00	Ø 8.00	11.112	-	80.00
TD.IP.560.1120.90	Ø 5.600	-	Ø 8.00	Ø 8.00	11.20	-	80.00
TD.IP.570.1140.90	Ø 5.700	-	Ø 8.00	Ø 8.00	11.40	-	80.00
TD.IP.580.1160.90	Ø 5.800	-	Ø 8.00	Ø 8.00	11.60	-	80.00
TD.IP.590.1180.90	Ø 5.900	-	Ø 8.00	Ø 8.00	11.80	-	80.00
TD.IP.600.1200.90	Ø 6.000	-	Ø 8.00	Ø 8.00	12.00	-	80.00
TD.IP.620.12400.90	Ø 6.200	-	Ø 8.00	Ø 8.00	12.40	-	80.00
TD.IP.6350.1270.90	Ø 6.350	1/4"	Ø 8.00	Ø 8.00	12.70	-	80.00
TD.IP.660.1320.90	Ø 6.600	-	Ø 8.00	Ø 8.00	13.20	-	80.00
TD.IP.670.1320.90	Ø 6.700	-	Ø 8.00	Ø 8.00	13.40	-	80.00
TD.IP.680.1360.90	Ø 6.800	-	Ø 8.00	Ø 8.00	13.60	-	80.00
TD.IP.690.1360.90	Ø 6.900	-	Ø 8.00	Ø 8.00	13.80	-	80.00
TD.IP.700.1400.90	Ø 7.000	-	Ø 8.00	Ø 8.00	14.00	-	80.00
TD.IP.720.1400.90	Ø 7.200	-	Ø 8.00	Ø 8.00	14.40	-	80.00

Available from stock





Material group	Material group	Mat. no.	DIN	AISI/ASTM/UNS
P	Steels up to RM < 1200N/mm ²	1.0044	S275JR	AISI 1020
		1.0715	11SMn30	AISI 1215
		1.7131	16MnCr5	AISI 5115
		1.3505	100Cr6	AISI 52100
		1.7225	42CrMo4	AISI 4140
M	Stainless steels: ferritic, martensitic, austenitic	1.4034	X46Cr13	AISI 420C
		1.4542	X5CrNiCuNb 16-4	AISI 630 / ASTM 17-4 PH
		1.4545	X5CrNiCuNb 15-5	ASTM 15-5 PH
		1.4301	X5CrNi 18-10	AISI 304
		1.4435	X2CrNiMo 18-14-3	AISI 316L
K	Cast iron	0.6020	GG20	ASTM 30
		0.6030	GG30	ASTM 40B
		0.7040	GGG40	ASTM 60-40-18
		0.7060	GGG60	ASTM 80-60-03
N	Non-ferrous metals	3.2315	AlMgSi1	ASTM 6351
		2.0065	Cu-ETP / CW004A	UNS C11000
		2.0321	CuZn37 CW508L	UNS C27400
		2.0401	CuZn39Pb3 / CW614N	UNS C38500
		2.0966	CuAl10Ni5Fe4	UNS C63000
S (S1, S2, S3)	Heat-resistant steels, titanium, CrCo	2.4617	NiMo28	Hastelloy B-2
		2.4665	NiCr22Fe18Mo	Hastelloy X
		3.7165	TiAl6V4	ASTM B348 / F136
		9.9367	TiAl6Nb7	ASTM F1295
		2.4964	CoCr20W15Ni	Haynes 25
H	Hardened steels ≥ 60 HRC		CrCoMo28	ASTM F1537
		1.2510	100MnCrMoW4	AISI O1
		1.2379	X153CrMoV12	AISI D2

Recommended use Highly suitable Partially suitable Not recommended

Ø 0.75 - 1.2 mm		Ø 1.5 - 1.8 mm		Ø 2.0 - 2.5 mm		Ø 3.0 - 4.0 mm		Ø 5.0 - 7.2 mm	
vc [m/min]	f [mm/U]	vc [m/min]	f [mm/U]	vc [m/min]	f [mm/U]	vc [m/min]	f [mm/U]	vc [m/min]	f [mm/U]
40-85	0.042 - 0.066	60-130	0.122 - 0.128	60-130	0.130 - 0.182	60-140	0.128 - 0.232	60-160	0.220 - 0.280
40-90	0.042 - 0.056	60-120	0.120 - 0.122	60-130	0.130 - 0.182	60-120	0.128 - 0.202	60-150	0.200 - 0.260
50-120	0.025 - 0.04	50-120	0.043 - 0.055	50-120	0.060 - 0.080	50-100	0.074 - 0.098	50-120	0.115 - 0.185
50-80	0.02 - 0.038	50-80	0.040 - 0.068	50-90	0.050 - 0.070	50-90	0.072 - 0.084	50-100	0.115 - 0.175
80-140	0.030 - 0.042	80-140	0.06 - 0.115	80-160	0.126 - 0.135	80-160	0.100 - 0.145	80-180	0.145 - 0.210
80-160	0.042 - 0.066	80-160	0.096 - 0.122	80-160	0.132 - 0.18	80-160	0.136 - 0.172	80-180	0.200 - 0.250
80-140	0.046 - 0.088	80-140	0.098 - 0.122	80-160	0.132 - 0.210	80-160	0.134 - 0.164	80-180	0.200 - 0.252
80-120	0.032 - 0.088	80-120	0.066 - 0.122	80-140	0.085 - 0.120	80-120	0.132 - 0.162	80-160	0.195 - 0.242
15 - 50	0.025 - 0.045	15 - 50	0.049 - 0.060	15 - 60	0.060 - 0.07	15 - 70	0.062 - 0.08	15 - 80	0.080 - 0.10
15 - 50	0.025 - 0.045	15 - 50	0.048 - 0.060	15 - 60	0.060 - 0.07	15 - 70	0.062 - 0.08	15 - 80	0.080 - 0.10
15 - 50	0.020 - 0.024	15 - 50	0.05 - 0.060	15 - 50	0.055 - 0.07	15 - 60	0.052 - 0.08	15 - 75	0.076 - 0.10
15-32	0.005 - 0.009	15-32	0.006 - 0.010	15-32	0.006 - 0.012	15-35	0.009 - 0.014	15-40	0.009 - 0.018
15-32	0.004 - 0.009	15-32	0.006 - 0.010	15-32	0.006 - 0.012	15-35	0.009 - 0.014	15-40	0.009 - 0.018

TARGETDRILL®
by HB microtec *INOX-Pilot 130°*



HB microtec®
ACTIONTOOLS & ENGINEERING

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