MICRO FX

3xd SOLID

3xd Without Internal Spiral Coolant Holes

3xD Mikrobohrer ohne Innenkühlung

- 100% Self Centered | Rigid Core | Free Flowing Chiproom | No peckings
  100% Selbstzentrierend | Stabiler Kern | Frei fließender Spanraum
- Working Material Group : Alloyed Steels Upto 38 HRC & Stainless Steels, Titanium
  Materialgruppe : Legierte Stähle bis 38 HRC & Rostfreie Stähle, Titan

d_1	d_2	l_2	l_1	z	Catalogue Code / *Bestellnummer* HA Pertura	d_1	d_2	l_2	l_1	z	Catalogue Code / *Bestellnummer* HA Pertura
1.00	3	7.00	35.00	2	DFMP 0310 0100	2.00	3	13.00	45.00	2	DFMP 0310 0200
1.10	3	7.00	35.00	2	DFMP 0310 0110	2.10	3	13.00	45.00	2	DFMP 0310 0210
1.20	3	8.00	35.00	2	DFMP 0310 0120	2.20	3	13.00	45.00	2	DFMP 0310 0220
1.30	3	8.00	35.00	2	DFMP 0310 0130	2.30	3	13.00	45.00	2	DFMP 0310 0230
1.40	3	9.00	35.00	2	DFMP 0310 0140	2.40	3	15.00	45.00	2	DFMP 0310 0240
1.50	3	9.00	40.00	2	DFMP 0310 0150	2.50	3	15.00	50.00	2	DFMP 0310 0250
1.60	3	10.00	40.00	2	DFMP 0310 0160	2.60	3	15.00	50.00	2	DFMP 0310 0260
1.70	3	10.00	40.00	2	DFMP 0310 0170	2.70	3	17.00	50.00	2	DFMP 0310 0270
1.80	3	11.00	40.00	2	DFMP 0310 0180	2.80	3	17.00	50.00	2	DFMP 0310 0280
1.90	3	11.00	40.00	2	DFMP 0310 0190	2.90	3	17.00	50.00	2	DFMP 0310 0290

MICRO FX

3xd IK

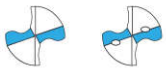
3xd With Internal Spiral Coolant Holes

3xD Mikrobohrer mit innenkühlung

d_1	d_2	l_2	l_1	z	Catalogue Code / *Bestellnummer* HA Pertura	d_1	d_2	l_2	l_1	z	Catalogue Code / *Bestellnummer* HA Pertura
2.20	3	8.60	55.00	2	DFMH 0320 0220	2.60	3	10.20	55.00	2	DFMH 0320 0260
2.25	3	8.80	55.00	2	DFMH 0320 0225	2.65	3	10.40	55.00	2	DFMH 0320 0265
2.30	3	9.00	55.00	2	DFMH 0320 0230	2.70	3	10.50	55.00	2	DFMH 0320 0270
2.35	3	9.20	55.00	2	DFMH 0320 0235	2.75	3	10.80	55.00	2	DFMH 0320 0275
2.24	3	9.40	55.00	2	DFMH 0320 0224	2.80	3	11.00	55.00	2	DFMH 0320 0280
2.45	3	9.60	55.00	2	DFMH 0320 0245	2.85	3	11.20	55.00	2	DFMH 0320 0285
2.50	3	9.80	55.00	2	DFMH 0320 0250	2.90	3	11.40	55.00	2	DFMH 0320 0290
2.55	3	10.00	55.00	2	DFMH 0320 0255						

MICRO FX DRILLS

Application Parameters / *Anwendungsparameter*



	Materials / Materialgruppen	Diameter / *Durchmesser* (d_1) (mm) Ø	3xd-5xd Without Internal Spiral Coolant Holes *3xD-5xD Mikrobohrer ohne Innenkühlung* (mm/min) RPM	f	Peck	3xd-12xd With Internal Spiral Coolant Holes *3xD-12xD Mikrobohrer mit innenküh!ung* VC (m/min) Min	Ideal	Max	(mm/min) f	15xd-30xd With Internal Spiral Coolant Holes *15xD-30xD Mikrobohrer mit innenkühlung* VC (m/min) Min	Ideal	Max	(mm/min) f
P	MILD STEELS / *Weichstahl*	0.40-0.49	20000	0.004	0.05	-	-	-	-	-	-	-	-
	HRC ≤ 20	0.50- 0.79	20000	0.010	0.10	-	-	-	-	-	-	-	-
	N/mm2 ≤ 750	0.80- 0.99	20000	0.041	0.30	-	-	-	-	-	-	-	-
		100-2.95	20000	0.089	-	165	200	230	0.079	165	200	230	0.079
P	ALLOY STEELS / *Legierte Stähle*	0.40-0.49	20000	0.004	0.05	-	-	-	-	-	-	-	-
	4140, 4150, 4320, 5120, 5150, 8630, 86L20, 50100	0.50- 0.79	20000	0.010	0.10	-	-	-	-	-	-	-	-
	HRC ≤ 40	0.80- 0.99	20000	0.041	0.30	-	-	-	-	-	-	-	-
	N/mm2 ≤ 1260	100-2.95	17500	0.064	-	130	165	200	0.079	65	100	130	0.041
K	CAST IRONS / *Gusseisen*	0.40-0.49	20000	0.004	0.05	-	-	-	-	-	-	-	-
	(Low & Medium Alloy) Gray, Malleable, Ductile	0.50- 0.79	20000	0.010	0.10	-	-	-	-	-	-	-	-
		0.80- 0.99	20000	0.041	0.30	-	-	-	-	-	-	-	-
		100-2.95	25000	0.076	-	130	165	200	0.081	100	130	165	0.071
M	STAINLESS STEELS / *Rostfreie Stähle*	0.40-0.49	15000	0.004	0.05	-	-	-	-	-	-	-	-
	(Free Machinlng)	0.50- 0.79	10000	0.010	0.10	-	-	-	-	-	-	-	-
	303, 416, 420F, 430F 440F	0.80- 0.99	6000	0.020	0.20	-	-	-	-	-	-	-	-
		100-2.95	16000	0.038	-	65	100	130	0.051	65	100	130	0.030
S	Titanium Alloys / *Titanlegierungen*	0.40-0.49	4000	0.003	0.05	-	-	-	-	-	-	-	-
	Pure Ttanium, Ti6Al4V,	0.50- 0.79	3000	0.005	0.10	-	-	-	-	-	-	-	-
	Ti6Al2Sn4Zr2Mo, Ti4Al4Mo2Sn0.5Si	0.80- 0.99	1800	0.010	0.20	-	-	-	-	-	-	-	-
		100-2.95	4000	0.051	-	15	35	50	0.030	15	30	50	0.020