

HSS, MORSE TAPER SHANK TWIST DRILLS

EXTRA LONG

🇩🇪 HSS, SPIRALBOHRER mit MORSEKEGELSCHAFT

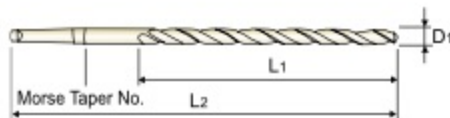
🇫🇷 Forets HSS, queue cône morse, série extra-longue

🇮🇹 PUNTE ELICOIDALI IN HSS, ATTACCO CM

ÜBERLANG
EXTRA-LONGUE
EXTRA LUNGA

- **Surface treatment** : Steam Tempered(Black Oxide Finish)
 ► **Application** : Designed for drilling deep holes or deeply located holes. Drilling into steels, cast steels alloyed and non-alloyed, grey cast iron, malleable cast iron, Spheroidal graphite cast iron, sintered iron, aluminum and aluminum alloys.

- **Oberflächenbehandlung** : Steam Homo(Schwarzoxidation)
 ► **Verwendung** : Standardbohrer zum Bohren extrem tiefer Löcher.
 Zum Bohren von Stahl und Stahlguß, Grauguß, Temperguß, Sphäroguß, Sinterisen und Graphit



DIN 1870/2 HSS N ≈ 30° 1~4 h8 118° Vap p.A277

PlainShank Page
 Recommended ToolHolder MORSE TAPER BOHRER D177-181

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	Morse Taper No.
	D1	L1	L2	
D1210130	13.0	260	395	1
D1210135	13.5	275	410	1
D1210140	14.0	275	410	1
D1210145	14.5	275	425	2
D1210150	15.0	275	425	2
D1210155	15.5	295	445	2
D1210160	16.0	295	445	2
D1210165	16.5	295	445	2
D1210170	17.0	295	445	2
D1210175	17.5	310	465	2
D1210180	18.0	310	465	2
D1210185	18.5	310	465	2
D1210190	19.0	310	465	2
D1210195	19.5	325	490	2
D1210200	20.0	325	490	2
D1210205	20.5	325	490	2
D1210210	21.0	325	490	2
D1210215	21.5	345	515	2
D1210220	22.0	345	515	2
D1210225	22.5	345	515	2
D1210230	23.0	345	515	2
D1210235	23.5	345	535	3
D1210240	24.0	365	555	3
D1210245	24.5	365	555	3
D1210250	25.0	365	555	3
D1210255	25.5	365	555	3
D1210260	26.0	365	555	3
D1210265	26.5	365	555	3

EDP No.	Drill Diameter	Flute Length	Overall Length	Morse Taper No.
	D1	L1	L2	
D1210270	27.0	385	580	3
D1210275	27.5	385	580	3
D1210280	28.0	385	580	3
D1210285	28.5	385	580	3
D1210290	29.0	385	580	3
D1210295	29.5	385	580	3
D1210300	30.0	385	580	3
D1210310	31.0	410	610	3
D1210320	32.0	410	635	4
D1210330	33.0	410	635	4
D1210340	34.0	430	665	4
D1210350	35.0	430	665	4
D1210360	36.0	430	665	4
D1210370	37.0	430	665	4
D1210380	38.0	460	695	4
D1210390	39.0	460	695	4
D1210400	40.0	460	695	4
D1210410	41.0	460	695	4
D1210420	42.0	460	695	4
D1210430	43.0	490	735	4
D1210440	44.0	490	735	4
D1210450	45.0	490	735	4
D1210460	46.0	490	735	4
D1210470	47.0	490	735	4
D1210480	48.0	510	765	4
D1210490	49.0	510	765	4
D1210500	50.0	510	765	4

⊙ : Excellent ○ : Good

ISO	P									M						K					
	Non-alloy steel				Low alloy steel					High alloyed steel, and tool steel		Stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	⊙	⊙	⊙	○	⊙	○	○	○	○	○	○	⊙	○	○	○	○	○	○	○	○	
ISO	N									S						H					
Material Description	Aluminum-wrought alloy			Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys				Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34	400Rm	1050Rm	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○						○							○					