



Leading Through Innovation



HSS & HSS-E

MORSE TAPER SHANK DRILLS

BOHRER MIT MK

- Morse Taper Shank Drills for Wide Applications
- Bohrer mit Morsekegel für breite Anwendungen

SELECTION GUIDE



SERIES	DL205	D1205	D1206
STANDARD	DIN345	DIN345	DIN341
LENGTH	JOBBER	JOBBER	LONG
SIZE MIN	D13.0	D5.0	D13.0
SIZE MAX	D30.0	D60.0	D30.0
PAGE	A270	A271	A274
SURFACE TREATMENT	Bright	Steam Tempered	

HSS & HSS-E
MORSE TAPER
SHANK DRILLS

Morse Taper Shank Drills for Wide Applications



Please visit
globalyg1.com/mat
for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.A277

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc			
P	1	Non-alloy steel	About 0.15% C	Annealed	125		◎	◎	◎
	2		About 0.45% C	Annealed	190	13	◎	◎	◎
	3		About 0.45% C	Quenched & Tempered	250	25	◎	◎	◎
	4		About 0.75% C	Annealed	270	28	○	○	○
	5		About 0.75% C	Quenched & Tempered	300	32			
	6	Low alloy steel		Annealed	180	10	◎	◎	◎
	7			Quenched & Tempered	275	29	○	○	○
	8			Quenched & Tempered	300	32	○	○	○
	9			Quenched & Tempered	350	38			
	10	High alloyed steel, and tool steel		Annealed	200	15	○	○	○
	11			Quenched & Tempered	325	35			
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15	◎	◎	◎
	13		Martensitic	Quenched & Tempered	240	23	○	○	○
	14		Austenitic		180	10			
K	15	Grey cast iron	Pearlitic / ferritic		180	10	○	○	○
	16		Pearlitic (Martensitic)		260	26	○	○	○
	17	Nodular cast iron	Ferritic		160	3	○	○	○
	18		Pearlitic		250	25	○	○	○
	19	Malleable cast iron	Ferritic		130		○	○	○
	20		Pearlitic		230	21	○	○	○
N	21	Aluminum-wrought alloy	Not Curable		60		○	○	○
	22		Curable Hardened		100		○	○	○
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		○	○	○
	24		≤ 12% Si, Curable Hardened		90				
	25		> 12% Si, Not Curable		130				
	26	Copper and Copper Alloys	Cutting Alloys, PB>1%		110				
	27		CuZn, CuSnZn (Brass)		90				
	28	Non Metallic Materials	CuSn, lead-free copper and electrolytic copper		100				
	29		Duroplastic, Fiber Reinforced Plastic				○	○	○
	30		Rubber, Wood, etc.						
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15			
	32			Cured	280	30			
	33		Ni or Co Based	Annealed	250	25			
	34			Cured	350	38			
	35			Cast	320	34			
	36	Titanium Alloys	Pure Titanium		400 Rm		○	○	○
	37		Alpha + Beta Alloys		1050 Rm				
H	38	Hardened steel			550	55			
	39				630	60			
	40	Chilled Cast Iron			400	42			
	41	Hardened Cast Iron			550	55			

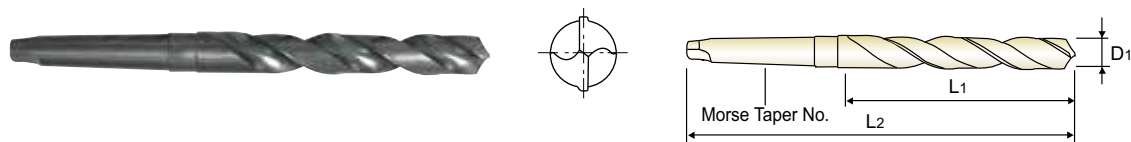
D1209	D1210
DIN1870/1	DIN1870/2
EXTRA LONG	EXTRA LONG
D13.0	D13.0
D50.0	D50.0
A275	A276
Steam Tempered	

◎	◎	1	P
◎	◎	2	
◎	◎	3	
○	○	4	
		5	
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○	○	7	
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		9	
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◎	◎	12	M
○	○	13	
		14	
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		41	

**JOBBER**

**KURZ
COURTE
CORTA**

- **Oberflächenbehandlung** : Steam Homo (Schwarzoxidation)
- **Verwendung** : Zum Bohren von Stahl und Stahlguss, Grauguss, Temperguss, Sphäroguss, Sintereisen, Graphit.



					Unit : mm				
EDP No.	Drill Diameter	Flute Length	Overall Length	Morse Taper No.	EDP No.	Drill Diameter	Flute Length	Overall Length	Morse Taper No.
	D1	L1	L2			D1	L1	L2	
D1205370	37.0	195	344	4	D1205500	50.0	220	369	4
D1205375	37.5	195	344	4	D1205505	50.5	225	374	4
D1205380	38.0	200	349	4	D1205510	51.0	225	412	5
D1205385	38.5	200	349	4	D1205520	52.0	225	412	5
D1205390	39.0	200	349	4	D1205530	53.0	225	412	5
D1205395	39.5	200	349	4	D1205540	54.0	230	417	5
D1205400	40.0	200	349	4	D1205550	55.0	230	417	5
D1205405	40.5	205	354	4	D1205560	56.0	230	417	5
D1205410	41.0	205	354	4	D1205570	57.0	235	422	5
D1205415	41.5	205	354	4	D1205580	58.0	235	422	5
D1205420	42.0	205	354	4	D1205590	59.0	235	422	5
D1205425	42.5	205	354	4	D1205600	60.0	235	422	5
D1205430	43.0	210	359	4					
D1205435	43.5	210	359	4					
D1205440	44.0	210	359	4					
D1205445	44.5	210	359	4					
D1205450	45.0	210	359	4					
D1205455	45.5	215	364	4					
D1205460	46.0	215	364	4					
D1205465	46.5	215	364	4					
D1205470	47.0	215	364	4					
D1205475	47.5	215	364	4					
D1205480	48.0	220	369	4					
D1205485	48.5	220	369	4					
D1205490	49.0	220	369	4					
D1205495	49.5	220	369	4					

◎ : Excellent ○ : Good

ISO

Material Description

VDI 3323

HRC

HB

Recommended

1

2

3

4

5

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7

8

9

10

11

12

13

14

15

16

17

18

19

20

Non-alloy steel

Low alloy steel

High alloyed steel, and tool steel

Stainless steel

Grey cast iron

Nodular cast iron

Malleable cast iron

125

190

250

270

300

180

275

300

350

200

325

200

240

180

180

260

160

250

130

230

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ISO

Material Description

VDI 3323

HRC

HB

Recommended

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

15

30

25

38

34

200

280

250

350

320

400 Rm

1050 Rm

550

630

400

550

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

60

100

75

90

130

110

90

100

○

○

○

○

○

○

○

○

◎ : Excellent ○ : Good

A273

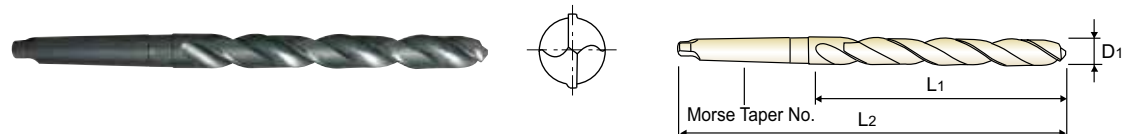


D1209 SERIES

EXTRA LONG

**ÜBERLANG
EXTRA-LONGUE
EXTRA LUNGA**

- **Oberflächenbehandlung** : Steam Homo (Schwarzoxidation)
- **Verwendung** : Für Bohrungen mit Bohrbuchsen oder an tief liegenden Stellen.
Zum Bohren von Stahl und Stahlguß, Grauß, Temperguß, Sphäroguß, Sinterisen, Neusilber und Graphit



Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	Morse Taper No.
	D1	L1	L2	
D1209270	27.0	305	460	3
D1209275	27.5	305	460	3
D1209280	28.0	305	460	3
D1209285	28.5	305	460	3
D1209290	29.0	305	460	3
D1209295	29.5	305	460	3
D1209300	30.0	305	460	3
D1209305	30.5	320	480	3
D1209310	31.0	320	480	3
D1209320	32.0	320	505	4
D1209330	33.0	320	505	4
D1209340	34.0	340	530	4
D1209350	35.0	340	530	4
D1209360	36.0	340	530	4
D1209370	37.0	340	530	4
D1209380	38.0	360	555	4
D1209390	39.0	360	555	4
D1209400	40.0	360	555	4
D1209410	41.0	360	555	4
D1209420	42.0	360	555	4
D1209430	43.0	385	585	4
D1209440	44.0	385	585	4
D1209450	45.0	385	585	4
D1209460	46.0	385	585	4
D1209470	47.0	385	585	4
D1209480	48.0	405	605	4
D1209490	49.0	405	605	4
D1209500	50.0	405	605	4

◎ : Excellent ○ : Good

ISO	P										M			K							
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron		
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	
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											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	○	○	○						○							○					

A275

