



# MORSE TAPER SHANK DRILLS

## D1205 SERIES

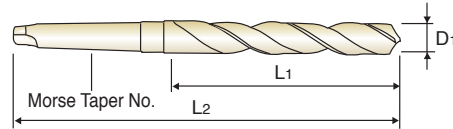
### HSS, MORSE TAPER SHANK TWIST DRILLS HSS, SPIRALBOHRER mit MORSEKEGELSCHAFT

**JOBBER**

**KURZ**

- ▶ **Surface treatment** : Steam Tempered(Black Oxide Finish)
- ▶ **Application** : Drilling steels, cast steels alloyed and non-alloyed, grey cast iron, malleable cast iron, graphite.

- ▶ **Oberflächenbehandlung** : Steam Homo(Schwarzoxidation)
- ▶ **Verwendung** : Zum Bohren von Stahl und Stahlguß, Grauguß, Temperguß, Sphärguß, Sintereisen, Graphit.



DIN 345
HSS
N 30°
1~5
h8
118°
P.229

Unit : mm

EDP No.	Drill Diameter	Flute Length L1	Overall Length L2	No. of Morse Taper	EDP No.	Drill Diameter	Flute Length L1	Overall Length L2	No. of Morse Taper
	D1					D1			
D1205050	5.0	52	133	1	D120515A	15.25	120	218	2
D1205055	5.5	57	138	1	D1205155	15.5	120	218	2
D1205060	6.0	57	138	1	D120515B	15.75	120	218	2
D1205065	6.5	63	144	1	D1205160	16.0	120	218	2
D1205070	7.0	69	150	1	D120516A	16.25	125	223	2
D1205075	7.5	69	150	1	D1205165	16.5	125	223	2
D1205080	8.0	75	156	1	D120516B	16.75	125	223	2
D1205085	8.5	75	156	1	D1205170	17.0	125	223	2
D1205090	9.0	81	162	1	D120517A	17.25	130	228	2
D1205095	9.5	81	162	1	D1205175	17.5	130	228	2
D1205100	10.0	87	168	1	D120517B	17.75	130	228	2
D1205105	10.5	87	168	1	D1205180	18.0	130	228	2
D1205110	11.0	94	175	1	D120518A	18.25	135	233	2
D1205115	11.5	94	175	1	D1205185	18.5	135	233	2
D1205120	12.0	101	182	1	D120518B	18.75	135	233	2
D1205125	12.5	101	182	1	D1205190	19.0	135	233	2
D1205130	13.0	101	182	1	D120519A	19.25	140	238	2
D1205132	13.2	101	182	1	D1205195	19.5	140	238	2
D120513A	13.25	108	189	1	D120519B	19.75	140	238	2
D1205135	13.5	108	189	1	D1205200	20.0	140	238	2
D120513B	13.75	108	189	1	D120520A	20.25	145	243	2
D1205138	13.8	108	189	1	D1205205	20.5	145	243	2
D1205140	14.0	108	189	1	D120520B	20.75	145	243	2
D120514A	14.25	114	212	2	D1205210	21.0	145	243	2
D1205145	14.5	114	212	2	D120521A	21.25	150	248	2
D120514B	14.75	114	212	2	D1205215	21.5	150	248	2
D1205150	15.0	114	212	2	D120521B	21.75	150	248	2

◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze	CFRP
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~								
◎	◎	○			○	○	○		○			

CARBIDE

HSS

I-DREAM DRILLS

DREAM DRILLS -GENERAL

DREAM DRILLS -INOX

DREAM DRILLS -ALU

DREAM DRILLS -CFRP

DREAM DRILLS -MQL TYPE

DREAM DRILLS for HARDENED STEELS

GENERAL CARBIDE DRILLS

NC-SPOTTING DRILLS

CENTER DRILLS

MULTI-1 DRILLS

HPD DRILLS

GOLD-P DRILLS

STRAIGHT SHANK DRILLS

TAPER SHANK DRILLS

NC-SPOTTING DRILLS

CENTER DRILLS

SPADE DRILLS

TECHNICAL DATA

# Y/G MORSE TAPER SHANK DRILLS

**D1205** SERIES

## HSS, MORSE TAPER SHANK TWIST DRILLS

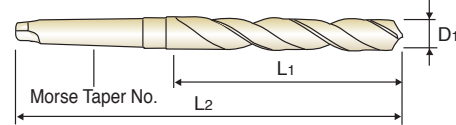
**JOBBER**

## HSS, SPIRALBOHRER mit MORSEKEGELSCHAFT

**KURZ**

▶ **Surface treatment** : Steam Tempered(Black Oxide Finish)  
 ▶ **Application** : Drilling steels, cast steels alloyed and non-alloyed, grey cast iron, malleable cast iron, graphite.

▶ **Oberflächenbehandlung** : Steam Homo(Schwarzoxidation)  
 ▶ **Verwendung** : Zum Bohren von Stahl und Stahlguß, Grauguß, Temperguß, Sphärguß, Sinterisen, Graphit.



DIN 345
HSS
N 30°
1~5
h8
118°
P.229

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	No. of Morse Taper	EDP No.	Drill Diameter	Flute Length	Overall Length	No. of Morse Taper
	D1	L1	L2			D1	L1	L2	
D1205220	22.0	150	248	2	D120528B	28.75	175	296	3
D120522A	22.25	150	248	2	D1205290	29.0	175	296	3
D1205225	22.5	155	253	2	D120529A	29.25	175	296	3
D120522B	22.75	155	253	2	D1205295	29.5	175	296	3
D1205230	23.0	155	253	2	D120529B	29.75	175	296	3
D120523A	23.25	155	276	3	D1205300	30.0	175	296	3
D1205235	23.5	155	276	3	D120530A	30.25	180	301	3
D120523B	23.75	160	281	3	D1205305	30.5	180	301	3
D1205240	24.0	160	281	3	D120530B	30.75	180	301	3
D120524A	24.25	160	281	3	D1205310	31.0	180	301	3
D1205245	24.5	160	281	3	D120531A	31.25	180	301	3
D120524B	24.75	160	281	3	D1205315	31.5	180	301	3
D1205250	25.0	160	281	3	D120531B	31.75	185	306	3
D120525A	25.25	165	286	3	D1205320	32.0	185	334	4
D1205255	25.5	165	286	3	D1205325	32.5	185	334	4
D120525B	25.75	165	286	3	D1205330	33.0	185	334	4
D1205260	26.0	165	286	3	D1205335	33.5	185	334	4
D120526A	26.25	165	286	3	D1205340	34.0	190	339	4
D1205265	26.5	165	286	3	D1205345	34.5	190	339	4
D120526B	26.75	170	291	3	D1205350	35.0	190	339	4
D1205270	27.0	170	291	3	D1205355	35.5	190	339	4
D120527A	27.25	170	291	3	D1205360	36.0	195	344	4
D1205275	27.5	170	291	3	D1205365	36.5	195	344	4
D120527B	27.75	170	291	3	D1205370	37.0	195	344	4
D1205280	28.0	170	291	3	D1205375	37.5	195	344	4
D120528A	28.25	175	296	3	D1205380	38.0	200	349	4
D1205285	28.5	175	296	3	D1205385	38.5	200	349	4

TECHNICAL DATA

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze	CFRP
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~								
◎	◎	○			○	○	○		○			

◎ : Excellent ○ : Good



# MORSE TAPER SHANK DRILLS

## D1205 SERIES

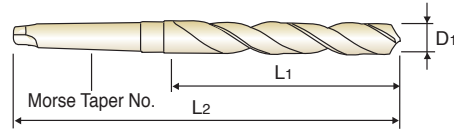
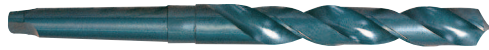
### HSS, MORSE TAPER SHANK TWIST DRILLS HSS, SPIRALBOHRER mit MORSEKEGELSCHAFT

**JOBBER**

**KURZ**

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DIN 345

HSS

N 30°

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P.229

Unit : mm

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

◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze	CFRP
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~								
◎	◎	○			○	○	○		○			

CARBIDE

HSS

I-DREAM DRILLS

DREAM DRILLS -GENERAL

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TECHNICAL DATA



# MORSE TAPER SHANK DRILLS

## RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN

### HSS-E, TWIST DRILLS for HEAVY DUTY, DIN345 HSS-E, SPIRALBOHRER für HOHELEISTUNGEN DIN 345

#### DL205 SERIES

WORK MATERIAL	CARBON STEELS		CARBON STEELS		CARBON STEELS		ALLOY STEELS		ALLOY STEELS		STAINLESS STEELS		CAST IRON	
	N	S	N	S	N	S	N	S	N	S	N	S	N	S
HARDNESS			~ HRC23		HRC23 ~ 28		HRC23 ~ 34		HRC34 ~ 38		HRC23		HRC21	
STRENGTH	~ 570 N/mm <sup>2</sup>		~ 830 N/mm <sup>2</sup>		830 ~ 950 N/mm <sup>2</sup>		830 ~ 1110 N/mm <sup>2</sup>		1110 ~ 1260 N/mm <sup>2</sup>		830 N/mm <sup>2</sup>		800 N/mm <sup>2</sup>	
DRILLING SPEED	27 ~ 32 m/min		20 ~ 25 m/min		13 ~ 18 m/min		17 ~ 22 m/min		8 ~ 13 m/min		27 ~ 32 m/min		27 ~ 32 m/min	
DIAMETER	N	S	N	S	N	S	N	S	N	S	N	S	N	S
13.0	785	0.17	575	0.17	445	0.09	540	0.20	325	0.05	785	0.17	785	0.17
14.0	720	0.18	530	0.18	410	0.10	500	0.20	300	0.05	720	0.18	720	0.18
16.0	635	0.20	475	0.20	365	0.11	445	0.22	265	0.05	635	0.20	635	0.20
18.0	550	0.22	420	0.22	320	0.12	390	0.23	230	0.05	550	0.22	550	0.22
20.0	500	0.23	380	0.23	290	0.13	355	0.23	210	0.06	500	0.23	500	0.23
22.0	450	0.24	340	0.24	260	0.14	320	0.23	190	0.06	450	0.24	450	0.24
24.0	420	0.25	320	0.25	240	0.15	295	0.23	175	0.07	420	0.25	420	0.25
26.0	390	0.26	300	0.26	220	0.16	270	0.23	160	0.07	390	0.26	390	0.26
28.0	360	0.27	275	0.27	205	0.17	250	0.23	150	0.07	360	0.27	360	0.27
30.0	330	0.28	250	0.28	190	0.18	230	0.23	140	0.08	330	0.28	330	0.28

N = R.P.M  
S = Feed per Revolution (mm/rev.)

### HSS DRILLS DIN345, DIN341, DIN1870 HSS SPIRALBOHRER DIN 345, DIN 341, DIN 1870

#### D1205, D1206, D1209, D1210 SERIES

WORK MATERIAL	CARBON STEELS		CARBON STEELS		CARBON STEELS		ALLOY STEELS		ALLOY STEELS		STAINLESS STEELS		TITANIUM ALLOYS	
	N	S	N	S	N	S	N	S	N	S	N	S	N	S
HARDNESS			~ HRC23		~ HRC23 ~ 28		HRC23 ~ 34		HRC34 ~ 38		HRC23			
STRENGTH	~ 570 N/mm <sup>2</sup>		~ 830 N/mm <sup>2</sup>		830 ~ 950 N/mm <sup>2</sup>		830 ~ 1110 N/mm <sup>2</sup>		1110 ~ 1260 N/mm <sup>2</sup>		830 N/mm <sup>2</sup>		410 N/mm <sup>2</sup>	
DRILLING SPEED	20 ~ 25 m/min		18 ~ 22 m/min		10 ~ 15 m/min		13 ~ 18 m/min		8 ~ 12 m/min		15 ~ 20 m/min		8 ~ 12 m/min	
DIAMETER	N	S	N	S	N	S	N	S	N	S	N	S	N	S
13.0	645	0.17	480	0.17	370	0.09	440	0.17	265	0.05	480	0.17	265	0.09
19.0	440	0.23	330	0.23	255	0.13	300	0.23	180	0.05	330	0.23	180	0.13
32.0	260	0.28	195	0.28	145	0.18	180	0.28	107	0.08	195	0.28	107	0.18
50.0	165	0.33	125	0.33	93	0.20	115	0.33	68	0.08	125	0.33	68	0.20
60.0	140	0.40	105	0.40	78	0.23	95	0.40	57	0.10	105	0.40	57	0.23

WORK MATERIAL	TOOL STEELS		CAST IRON		ALUMINUM ALLOYS		MAGNESIUM ALLOYS		ZINC ALLOYS		PLASTICS	
	N	S	N	S	N	S	N	S	N	S	N	S
HARDNESS			~ HRC21									
STRENGTH	~ 270 N/mm <sup>2</sup>		~ 800 N/mm <sup>2</sup>									
DRILLING SPEED	20 ~ 25 m/min		15 ~ 20 m/min		40 ~ 50 m/min		55 ~ 65 m/min		40 ~ 50 m/min		20 ~ 25 m/min	
DIAMETER	N	S	N	S	N	S	N	S	N	S	N	S
13.0	645	0.17	480	0.17	1200	0.26	1600	0.26	1200	0.26	645	0.17
19.0	440	0.23	330	0.23	820	0.30	1100	0.30	820	0.30	440	0.23
32.0	240	0.30	195	0.28	490	0.38	660	0.38	490	0.38	260	0.28
50.0	150	0.43	125	0.33	310	0.46	415	0.46	310	0.46	165	0.33
60.0	125	0.48	105	0.40	260	0.50	345	0.50	260	0.50	140	0.40

N = R.P.M  
S = Feed per Revolution (mm/rev.)