ILIX PRECISION

2024

Tieflochbohrer aus

HSS

HSS-CO

VHM

- HSS: DIN 1869 und DIN 1870
- HSS: überlange Ausführung
- HSS-Co: DIN 1869 und DIN 1870
- VHM: 8 x D bis 50 x D

ILIX PRECISION

DIN 1869-1

Spiralbohrer mit Zylinderschaft, extra lange Länge | Twist drills with straight shank, extra long length

1869 1

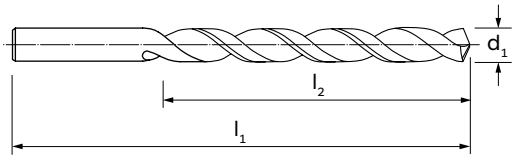
DIN

≤16xd

P.331→

NEW

6216TN/1



MATERIAL | MATERIAL	HSS	HSS	HSS	HSS-Co
TYP | TYPE	N	STL	STL	STL
SPITZENWINKEL | POINT ANGLE	118°	130°	130°	130°
BESCHICHTUNG | COATING	–	–	TiN	–
OBERFLÄCHENBEHANDLUNG | SURFACE TREATMENT	VAP	F.NIT	–	F.NIT
SCHNITTRICHTUNG | CUTTING DIRECTION	↻	↻	↻	↻

MATERIALGRUPPEN MATERIAL GROUPS				
P | **Stähle** | Steels	P	P	P	P
M | **Rostfreier Stahl** | Stainless Steels	M	–	–	–
K | **Gusseisen** | Cast Irons	K	K	K	K
N | **Nichteisenmetalle** | Non-ferrous metals	N	N	N	N
S | **HRSA und Titan** | HRSA and Titanium	–	–	–	–
H | **Gehärtete Stähle** | Hardened Steels	–	–	–	–

d_1 (h8)	d_1 (")	d_1 (No.)	l_1	l_2	6217/1	6216/1	6216 TN/1	6218/1
2,000			125	85	●	●	●	●
2,100			125	85	●	●	–	●
2,200			135	90	●	●	–	●
2,300			135	90	●	●	–	●
2,383	3/32		140	95	–	●	–	–
2,400			140	95	●	●	–	●
2,489		40	140	95	–	●	–	–
2,500			140	95	●	●	●	●
2,527		39	140	95	–	●	–	–
2,578		38	140	95	–	●	–	–
2,600			140	95	●	●	–	●
2,642		37	140	95	–	●	–	–
2,700			150	100	●	●	–	●
2,705		36	150	100	–	●	–	–
2,779	7/64		150	100	–	●	–	–
2,794		35	150	100	–	●	–	–
2,800			150	100	●	●	–	●
2,819		34	150	100	–	●	–	–
2,870		33	150	100	–	●	–	–
2,900			150	100	●	●	–	●
2,946		32	150	100	–	●	–	–
3,000			150	100	●	●	●	●
3,048		31	155	105	–	●	–	–

01/04 →

DIN 1869-1

Spiralbohrer mit Zylinderschaft, extra lange Länge | Twist drills with straight shank, extra long length

d_1 (h8)	d_1 (")	d_1 (No.)	l_1	l_2	6217/1	6216/1	6216 TN/1	6218/1
3,100			155	105	●	●	–	●
3,175	1/8		155	105	–	●	–	–
3,200			155	105	●	●	–	●
3,264		30	155	105	–	●	–	–
3,300			155	105	●	●	–	●
3,400			165	115	●	●	–	●
3,454		29	165	115	–	●	–	–
3,500			165	115	●	●	●	●
3,569		28	165	115	–	●	–	–
3,571	9/64		165	115	–	●	–	–
3,600			165	115	●	●	–	●
3,658		27	165	115	–	●	–	–
3,700			165	115	●	●	–	●
3,734		26	165	115	–	●	–	–
3,797		25	175	120	–	●	–	–
3,800			175	120	●	●	–	●
3,861		24	175	120	–	●	–	–
3,900			175	120	●	●	–	●
3,912		23	175	120	–	●	–	–
3,970	5/32		175	120	–	●	–	–
3,988		22	175	120	–	●	–	–
4,000			175	120	●	●	●	●
4,039		21	175	120	–	●	–	–
4,089		20	175	120	–	●	–	–
4,100			175	120	●	●	–	●
4,200			175	120	●	●	–	●
4,216		19	175	120	–	●	–	–
4,300			185	125	●	●	–	●
4,305		18	185	125	–	●	–	–
4,366	11/64		185	125	–	●	–	–
4,394		17	185	125	–	●	–	–
4,400			185	125	●	●	–	●
4,496		16	185	125	–	●	–	–
4,500			185	125	●	●	●	●
4,572		15	185	125	–	●	–	–
4,600			185	125	●	●	–	●
4,623		14	185	125	–	●	–	–
4,699		13	185	125	–	●	–	–
4,700			185	125	●	●	–	●
4,763	3/16		195	135	–	●	–	–
4,800			195	135	●	●	–	●
4,801		12	195	135	–	●	–	–
4,851		11	195	135	–	●	–	–
4,900			195	135	●	●	–	●
4,915		10	195	135	–	●	–	–
4,978		9	195	135	–	●	–	–
5,000			195	135	●	●	●	●
5,055		8	195	135	–	●	–	–
5,100			195	135	●	●	–	●
5,105		7	195	135	–	●	–	–
5,159	13/64		195	135	–	●	–	–
5,182		6	195	135	–	●	–	–
5,200			195	135	●	●	–	●
5,220		5	195	135	–	●	–	–
5,300			195	135	●	●	–	●
5,309		4	205	140	–	●	–	–

02/04 →

A 03

d_1 (h8)	d_1 (")	d_1 (No.)	l_1	l_2	6217/1	6216/1	6216 TN/1	6218/1
5,400			205	140	●	●	–	●
5,410		3	205	140	–	●	–	–
5,500			205	140	●	●	●	●
5,558	7/32		205	140	–	●	–	–
5,600			205	140	●	●	–	●
5,613		2	205	140	–	●	–	–
5,700			205	140	●	●	–	●
5,791		1	205	140	–	●	–	–
5,800			205	140	●	●	–	●
5,900			205	140	●	●	–	●
5,954	15/64		205	140	–	●	–	–
6,000			205	140	●	●	●	●
6,100			215	150	●	●	–	●
6,200			215	150	●	●	–	●
6,300			215	150	●	●	–	●
6,350	1/4		215	150	–	●	–	–
6,400			215	150	●	●	–	●
6,500			215	150	●	●	●	●
6,600			215	150	●	●	–	●
6,700			215	150	●	●	–	●
6,746	17/64		225	155	–	●	–	–
6,800			225	155	●	●	–	●
6,900			225	155	●	●	–	●
7,000			225	155	●	●	●	●
7,100			225	155	●	●	–	●
7,145	9/32		225	155	–	●	–	–
7,200			225	155	●	●	–	●
7,300			225	155	●	●	–	●
7,400			225	155	●	●	–	●
7,500			225	155	●	●	●	●
7,541	19/64		240	165	–	●	–	–
7,600			240	165	●	●	–	●
7,700			240	165	●	●	–	●
7,800			240	165	●	●	–	●
7,900			240	165	●	●	–	●
7,938	5/16		240	165	–	●	–	–
8,000			240	165	●	●	●	●
8,100			240	165	●	●	–	●
8,200			240	165	●	●	–	●
8,300			240	165	●	●	–	●
8,334	21/64		240	165	–	●	–	–
8,400			240	165	●	●	–	●
8,500			240	165	●	●	●	●
8,600			250	175	●	●	–	●
8,700			250	175	●	●	–	●
8,733	11/32		250	175	–	●	–	–
8,800			250	175	●	●	–	●
8,900			250	175	●	●	–	●
9,000			250	175	●	●	●	●
9,100			250	175	●	●	–	●
9,129	23/64		250	175	–	●	–	–
9,200			250	175	●	●	–	●
9,300			250	175	●	●	–	●
9,400			250	175	●	●	–	●
9,500			250	175	●	●	●	●
9,525	3/8		265	185	–	●	–	–

03/04 →

d_1 (h8)	d_1 (")	d_1 (No.)	l_1	l_2	6217/1	6216/1	6216 TN/1	6218/1
9,600			265	185	●	●	–	●
9,700			265	185	●	●	–	●
9,800			265	185	●	●	–	●
9,900			265	185	●	●	–	●
9,921	25/64		265	185	–	●	–	–
10,000			265	185	●	●	●	●
10,320	13/32		265	185	–	●	–	–
10,500			265	185	–	●	●	●
10,716	27/64		280	195	–	●	–	–
11,000			280	195	–	●	●	●
11,113	7/16		280	195	–	●	–	–
11,500			280	195	–	●	●	●
11,509	29/64		280	195	–	●	–	–
11,908	15/32		295	205	–	●	–	–
12,000			295	205	–	●	●	●
12,304	31/64		295	205	–	●	–	–
12,700	1/2		295	205	–	●	–	–

DIN 1869-2

Spiralbohrer mit Zylinderschaft, extra lange Länge | Twist drills with straight shank, extra long length

1869 2

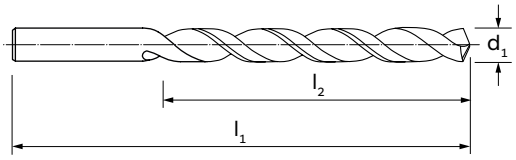
DIN

≤22xd

P.331→

NEW

6216TN/2



	6217/2	6216/2	6216 TN/2	6218/2
MATERIAL | MATERIAL	HSS	HSS	HSS	HSS-Co
TYP | TYPE	N	STL	STL	STL
SPITZENWINKEL | POINT ANGLE	118°	130°	130°	130°
BESCHICHTUNG | COATING	–	–	TiN	–
OBERFLÄCHENBEHANDLUNG | SURFACE TREATMENT	VAP	F.NIT	–	F.NIT
SCHNITTRICHTUNG | CUTTING DIRECTION	↻	↻	↻	↻

MATERIALGRUPPEN
MATERIAL GROUPS

	6217/2	6216/2	6216 TN/2	6218/2
P | **Stähle** | Steels	P	P	P	P
M | **Rostfreier Stahl** | Stainless Steels	M	–	–	–
K | **Gusseisen** | Cast Irons	K	K	K	K
N | **Nichteisenmetalle** | Non-ferrous metals	N	N	N	N
S | **HRSA und Titan** | HRSA and Titanium	–	–	–	–
H | **Gehärtete Stähle** | Hardened Steels	–	–	–	–

d_1 (h8)	l_1	l_2	6217/2	6216/2	6216 TN/2	6218/2
3,0	190	130	●	●	●	●
3,5	210	145	●	●	●	●
4,0	220	150	●	●	●	●
4,5	235	160	●	●	●	●
5,0	245	170	●	●	●	●
5,5	260	180	●	●	●	●
6,0	260	180	●	●	●	●
6,5	275	190	●	●	●	●
7,0	290	200	●	●	●	●
7,5	290	200	●	●	●	●
8,0	305	210	●	●	●	●
8,5	305	210	●	●	●	●
9,0	320	220	●	●	●	●
9,5	320	220	●	●	●	●
10,0	340	235	●	●	●	●
10,5	340	235	–	●	●	●
11,0	360	250	–	●	●	●
11,5	360	250	–	●	●	●
12,0	380	260	–	●	●	●

DIN 1869-3

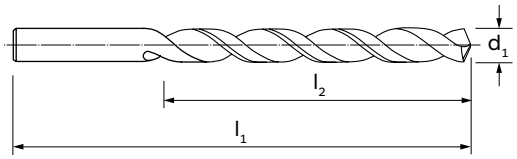
Spiralbohrer mit Zylinderschaft, extra lange Länge | Twist drills with straight shank, extra long length

1869 3

DIN

≤30xd

P.331➔



MATERIAL | MATERIAL	HSS	HSS
TYP | TYPE	N	STL
SPITZENWINKEL | POINT ANGLE	118°	130°
BESCHICHTUNG | COATING	–	–
OBERFLÄCHENBEHANDLUNG | SURFACE TREATMENT	VAP	F.NIT
SCHNITTRICHTUNG | CUTTING DIRECTION	↻	↻

MATERIALGRUPPEN MATERIAL GROUPS		
P | **Stähle** | Steels	P	P
M | **Rostfreier Stahl** | Stainless Steels	M	–
K | **Gusseisen** | Cast Irons	K	K
N | **Nichteisenmetalle** | Non-ferrous metals	N	N
S | **HRSA und Titan** | HRSA and Titanium	–	–
H | **Gehärtete Stähle** | Hardened Steels	–	–

d_1 (h8)	l_1	l_2	6217/3	6216/3
3,5	265	180	●	●
4,0	280	190	●	●
4,5	295	200	●	●
5,0	315	210	●	●
5,5	330	225	●	●
6,0	330	225	●	●
6,5	350	235	●	●
7,0	370	250	●	●
7,5	370	250	●	●
8,0	390	265	●	●
8,5	390	265	●	●
9,0	410	280	●	●
9,5	410	280	●	●
10,0	430	295	●	●
10,5	430	295	–	●
11,0	450	305	–	●
11,5	450	305	–	●
12,0	480	305	–	●

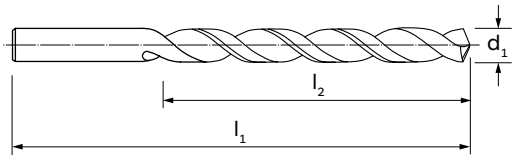
ILIX NORM

DIN

≤60/70 ×d

P.331→

A 03



MATERIAL | MATERIAL	HSS
TYP | TYPE	STL
SPITZENWINKEL | POINT ANGLE	130°
BESCHICHTUNG | COATING	–
OBERFLÄCHENBEHANDLUNG | SURFACE TREATMENT	F.NIT
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN
MATERIAL GROUPS

P | **Stähle** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	M
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	N
S | **HRSA und Titan** | HRSA and Titanium	–
H | **Gehärtete Stähle** | Hardened Steels	–

d_1 (h8)	l_1	l_2		6130
6,0	500	400		●
6,5	500	400		●
7,0	500	400		●
8,0	650	550		●
8,0	800	700		●
9,0	650	550		●
10,0	800	700		●
10,0	1000	800		●
11,0	800	700		●
12,0	800	700		●
12,0	1000	800		●
13,0	800	700		●
13,5	800	700		■
13,5	1000	800		■
14,0	800	700		●

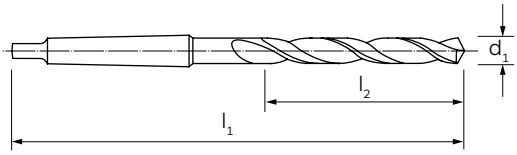
d_1 (h8)	l_1	l_2		6130

Bei Bestellung bitte Ø und Gesamtlänge (l1) angeben | When ordering, please state Ø and total length (l1).
Abweichende Ø und Längen entnehmen Sie bitte unserer Kat.-Nr. 6150 mit Morsekegelschaft | For different Ø and lengths please refer to our Cat. 6150 with Morse taper shank.
■ **Solange der Vorrat reicht** | Till stocks last

1870 1
DIN

≤16xd

P.331→



MATERIAL | MATERIAL	HSS	HSS	HSS-Co
TYP | TYPE	N	STL	STL
SPITZENWINKEL | POINT ANGLE	118°	130°	130°
BESCHICHTUNG | COATING	–	–	–
OBERFLÄCHENBEHANDLUNG | SURFACE TREATMENT	VAP	F.NIT	F.NIT
SCHNITTRICHTUNG | CUTTING DIRECTION	↻	↻	↻

MATERIALGRUPPEN / MATERIAL GROUPS			
P | **Stähle** | Steels	P	P	P
M | **Rostfreier Stahl** | Stainless Steels	M	–	–
K | **Gusseisen** | Cast Irons	K	K	K
N | **Nichteisenmetalle** | Non-ferrous metals	N	N	N
S | **HRSA und Titan** | HRSA and Titanium	–	–	–
H | **Gehärtete Stähle** | Hardened Steels	–	–	–

d_1 (h8)	l_1	l_2		6220/1	6221/1	6219/1
8,00	265	165	1	●	–	–
8,50	265	165	1	●	–	–
9,00	275	175	1	●	–	–
9,50	275	175	1	●	–	–
10,00	285	185	1	●	–	–
10,50	285	185	1	●	–	–
11,00	300	195	1	●	–	–
11,50	300	195	1	●	–	–
12,00	310	205	1	●	●	●
12,50	310	205	1	●	●	●
13,00	310	205	1	●	●	●
13,50	325	220	1	●	●	●
14,00	325	220	1	●	●	●
14,50	340	220	2	●	●	●
15,00	340	220	2	●	●	●
15,50	355	230	2	●	●	●
16,00	355	230	2	●	●	●
16,50	355	230	2	●	●	●
17,00	355	230	2	●	●	●
17,50	370	245	2	●	●	●
18,00	370	245	2	●	●	●
18,50	370	245	2	●	●	●
19,00	370	245	2	●	●	●

01/02 →

■ **Solange der Vorrat reicht** | Till stocks last

DIN 1870/1

Spiralbohrer mit Morsekegel | Twist drills with taper shank

d_1 (h8)	l_1	l_2		6220/1	6221/1	6219/1
19,50	385	260	2	●	●	●
20,00	385	260	2	●	●	●
20,50	385	260	2	●	–	–
21,00	385	260	2	●	●	●
21,50	405	270	2	●	–	–
22,00	405	270	2	●	●	●
22,50	405	270	2	●	–	–
23,00	405	270	2	●	●	●
23,50	425	270	3	●	–	–
24,00	440	290	3	●	●	●
24,50	440	290	3	●	–	–
25,00	440	290	3	●	●	●
25,50	440	290	3	●	–	–
26,00	440	290	3	●	●	●
26,50	440	290	3	●	–	–
27,00	460	305	3	●	●	●
28,00	460	305	3	●	●	●
29,00	460	305	3	●	●	●
29,50	460	305	3	●	–	–
30,00	460	305	3	●	●	●
31,00	480	320	3	●	–	–
32,00	505	320	4	●	–	–
33,00	505	320	4	●	–	–
34,00	530	340	4	●	–	–
35,00	530	340	4	●	–	–
36,00	530	340	4	●	–	–
37,00	530	340	4	●	–	–
38,00	555	360	4	●	–	–
39,00	555	360	4	●	–	–
40,00	555	360	4	●	–	–
41,00	555	360	4	●	–	–
42,00	555	360	4	●	–	–
45,00	585	385	4	●	–	–
48,00	605	405	4	●	–	–
50,00	605	405	4	●	–	–

02/02

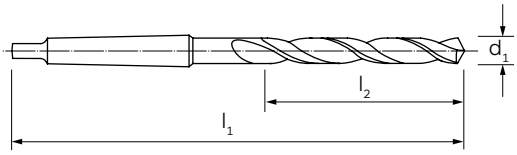
DIN 1870/2

Spiralbohrer mit Morsekegel | Twist drills with taper shank

1870 2
DIN

≤22xd

P.331→



MATERIAL | MATERIAL	HSS	HSS	HSS-Co
TYP | TYPE	N	STL	STL
SPITZENWINKEL | POINT ANGLE	118°	130°	130°
BESCHICHTUNG | COATING	–	–	–
OBERFLÄCHENBEHANDLUNG | SURFACE TREATMENT	VAP	F.NIT	F.NIT
SCHNITTRICHTUNG | CUTTING DIRECTION	↻	↻	↻

MATERIALGRUPPEN / MATERIAL GROUPS			
P | **Stähle** | Steels	P	P	P
M | **Rostfreier Stahl** | Stainless Steels	M	–	–
K | **Gusseisen** | Cast Irons	K	K	K
N | **Nichteisenmetalle** | Non-ferrous metals	N	N	N
S | **HRSA und Titan** | HRSA and Titanium	–	–	–
H | **Gehärtete Stähle** | Hardened Steels	–	–	–

d_1 (h8)	l_1	l_2		6220/2	6221/2	6219/2
8,00	330	210	1	●	●	–
8,50	330	210	1	●	●	–
9,00	345	220	1	●	●	–
9,50	345	220	1	●	–	–
10,00	360	235	1	●	●	●
10,50	360	235	1	●	●	●
11,00	375	250	1	●	●	●
11,50	375	250	1	●	●	●
12,00	395	260	1	●	●	●
12,50	395	260	1	●	●	●
13,00	395	260	1	●	●	●
13,50	410	275	1	●	●	●
14,00	410	275	1	●	●	●
14,50	425	275	2	●	●	●
15,00	425	275	2	●	●	●
15,50	445	295	2	●	●	●
16,00	445	295	2	●	●	●
16,50	445	295	2	●	●	●
17,00	445	295	2	●	●	●
17,50	465	310	2	●	●	●
18,00	465	310	2	●	●	●
18,50	465	310	2	●	●	●
19,00	465	310	2	●	●	●

01/02 →

DIN 1870/2

Spiralbohrer mit Morsekegel | Twist drills with taper shank

d_1 (h8)	l_1	l_2		6220/2	6221/2	6219/2
19,50	490	325	2	●	●	●
20,00	490	325	2	●	●	●
20,50	490	325	2	●	–	■
21,00	490	325	2	●	●	●
21,50	515	345	2	●	–	–
22,00	515	345	2	●	●	●
22,50	515	345	2	●	–	–
23,00	515	345	2	●	●	●
23,50	535	345	3	●	–	–
24,00	555	365	3	●	●	●
24,50	555	365	3	●	–	–
25,00	555	365	3	●	●	●
25,50	555	365	3	●	–	–
26,00	555	365	3	●	●	●
26,50	555	365	3	●	–	–
27,00	580	385	3	●	●	●
27,50	580	385	3	■	–	–
28,00	580	385	3	●	●	●
28,50	580	385	3	■	–	–
29,00	580	385	3	●	●	●
29,50	580	385	3	●	–	–
30,00	580	385	3	●	●	●
31,00	610	410	3	●	●	–
32,00	635	410	4	●	●	–
33,00	635	410	4	●	●	–
34,00	665	430	4	●	●	–
35,00	665	430	4	●	●	–
36,00	665	430	4	●	–	–
37,00	665	430	4	●	–	–
38,00	695	460	4	●	●	–
39,00	695	460	4	●	–	–
40,00	695	460	4	●	●	–
41,00	695	460	4	●	–	–
42,00	695	460	4	●	–	–
45,00	735	490	4	●	–	–
48,00	765	510	4	●	–	–
50,00	765	510	4	●	–	–

02/02

■ **Solange der Vorrat reicht** | Till stocks last

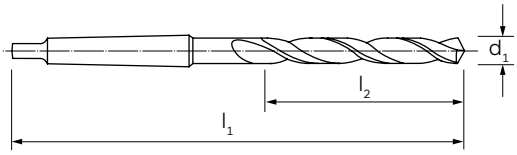
ILIX NORM

DIN

≤40xd

P.331→

A 03



MATERIAL | MATERIAL	HSS
TYP | TYPE	STL
SPITZENWINKEL | POINT ANGLE	130°
BESCHICHTUNG | COATING	-
OBERFLÄCHENBEHANDLUNG | SURFACE TREATMENT	F.NIT
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN
MATERIAL GROUPS

P | **Stähle** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	-
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	N
S | **HRSA und Titan** | HRSA and Titanium	-
H | **Gehärtete Stähle** | Hardened Steels	-

d_1 (h8)	l_1	l_2			6150
10	**500**	410	1		●
11	**500**	410	1		●
12	**500**	410	1		●
13	**500**	410	1		●
14	**500**	410	1		●
14	**600**	490	1		●
14	**750**	640	1		●
14	**1000**	840	2		●
15	**600**	490	2		●
15	**750**	640	2		●
15	**1000**	840	2		●
16	**600**	490	2		●
16	**750**	640	2		●
16	**1000**	840	2		●
18	**600**	490	2		●
18	**750**	640	2		●
18	**1000**	840	2		●
20	**600**	490	2		●
21	**600**	490	2		●
22	**600**	490	2		●

d_1 (h8)	l_1	l_2			6150

Bei Bestellung bitte Ø und Gesamtlänge l_1 angeben | When ordering, please state Ø and total length l_1

Die VHM-Bohrer der RECORD DH i-Serie sind für das Bohren tiefer Löcher in Stählen, rostfreien Stählen, Gusseisen und hitzebeständigen Legierungen konzipiert.

The solid carbide drills of the RECORD DH i series have been designed for drilling deep holes on steels, stainless steels, cast irons and heat-resistant alloys.

Record DH i

DH-GEOMETRIE.
DH geometry.

INNENKÜHLUNG.
Internal coolant.

TT (TiAlN Futura Plus)-BESCHICHTUNG MIT PVD-TECHNIK SORGT FÜR HOHE VERSCHLEISSFESTIGKEIT, NIEDRIGEN REIBWERT AUCH BEI ANWENDUNGEN MIT MINIMALMENGENSCHMIERUNG (MMS).
TT (TiAlN Futura Plus) coating, with PVD technique, ensures high wear resistance, low coefficient of friction even on applications with minimum quantity lubrication (MQL).

DIN 6535HA UND DIN 6535HE SCHÄFTE IN TOLERANZ H6 ZUM SCHRUMPFEN GEEIGNET.
DIN 6535HA and DIN 6535HE shanks in tolerance h6 suitable for shrink fit.

SPEZIELLE SCHNEIDENFORM UND POLIERTE OBERFLÄCHENBEARBEITUNG SORGEN FÜR EINE BESSERE SPANABFUHR.
Specific flute shape and polished surface process ensure better chip evacuation.

DIE VIER FASEN ERMÖGLICHEN DEM BOHRER EINE BESSERE LEISTUNG BEI DER BEARBEITUNG VON QUERBOHRUNGEN.
The four margin lands allow the drill to better perform during cross-holes machining.

ILIX® PRECISION

RECORD 2S i - PILOTBOHRER

VHM-Hochleistungs-Spiralbohrer | Solid Carbide high performance twist drills

6537 K

DIN

≤3xd

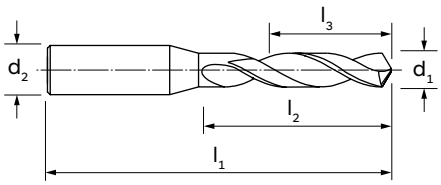
6535 HA

140°

A

SHRINK FIT

P. 124



MATERIAL | MATERIAL	M.D.I.-HM
BESCHICHTUNG | COATING	TiAlN Futura Plus
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN
MATERIAL GROUPS

P | **Stahl** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	M
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	–
S | **HRSA und Titan** | HRSA and Titanium	S
H | **Gehärtete Stähle** | Hardened Steels	H

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6011TF
3,0	62	20	16	6		●
3,1	62	20	15	6		●
3,2	62	20	15	6		●
3,3	62	20	15	6		●
3,4	62	20	15	6		●
3,5	62	20	15	6		●
3,6	62	20	15	6		●
3,7	62	20	15	6		●
3,8	66	24	18	6		●
3,9	66	24	18	6		●
4,0	66	24	18	6		●
4,1	66	24	18	6		●
4,2	66	24	18	6		●
4,3	66	24	18	6		●
4,4	66	24	17	6		●
4,5	66	24	17	6		●
4,6	66	24	17	6		●
4,7	66	24	17	6		●
4,8	66	28	21	6		●
4,9	66	28	21	6		●
5,0	66	28	21	6		●
5,1	66	28	20	6		●
5,2	66	28	20	6		●
5,3	66	28	20	6		●
5,4	66	28	20	6		●
5,5	66	28	20	6		●
5,6	66	28	20	6		●

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6011TF
5,7	66	28	20	6		●
5,8	66	28	19	6		●
5,9	66	28	19	6		●
6,0	66	28	19	6		●
6,1	79	34	25	8		●
6,2	79	34	25	8		●
6,3	79	34	25	8		●
6,4	79	34	24	8		●
6,5	79	34	24	8		●
6,6	79	34	24	8		●
6,7	79	34	24	8		●
6,8	79	34	24	8		●
6,9	79	34	24	8		●
7,0	79	41	31	8		●
7,1	79	41	30	8		●
7,2	79	41	30	8		●
7,3	79	41	30	8		●
7,4	79	41	30	8		●
7,5	79	41	30	8		●
7,6	79	41	30	8		●
7,7	79	41	30	8		●
7,8	79	41	29	8		●
7,9	79	41	29	8		●
8,0	79	41	29	8		●
8,1	89	47	35	10		●
8,2	89	47	35	10		●
8,3	89	47	35	10		●

01/02 →

RECORD 2S i

VHM-Hochleistungs-Spiralbohrer | Solid Carbide high performance twist drills

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6011TF
8,4	89	47	34	10		●
8,5	89	47	34	10		●
8,6	89	47	34	10		●
8,7	89	47	34	10		●
8,8	89	47	34	10		●
8,9	89	47	34	10		●
9,0	89	47	34	10		●
9,1	89	47	33	10		●
9,2	89	47	33	10		●
9,3	89	47	33	10		●
9,4	89	47	33	10		●
9,5	89	47	33	10		●
9,6	89	47	33	10		●
9,7	89	47	33	10		●
9,8	89	47	32	10		●
9,9	89	47	32	10		●
10,0	89	47	32	10		●
10,1	102	55	40	12		●
10,2	102	55	40	12		●
10,3	102	55	40	12		●
10,4	102	55	39	12		●
10,5	102	55	39	12		●
10,6	102	55	39	12		●
10,7	102	55	39	12		●
10,8	102	55	39	12		●
10,9	102	55	39	12		●
11,0	102	55	39	12		●
11,1	102	55	38	12		●
11,2	102	55	38	12		●
11,3	102	55	38	12		●
11,4	102	55	38	12		●
11,5	102	55	38	12		●
11,6	102	55	38	12		●
11,7	102	55	38	12		●
11,8	102	55	37	12		●
11,9	102	55	37	12		●
12,0	102	55	37	12		●
12,1	107	60	42	14		●
12,2	107	60	42	14		●
12,3	107	60	42	14		●
12,4	107	60	41	14		●
12,5	107	60	41	14		●
12,6	107	60	41	14		●

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6011TF
12,7	107	60	41	14		●
12,8	107	60	41	14		●
12,9	107	60	41	14		●
13,0	107	60	41	14		●
13,1	107	60	40	14		●
13,2	107	60	40	14		●
13,3	107	60	40	14		●
13,4	107	60	40	14		●
13,5	107	60	40	14		●
13,6	107	60	40	14		●
13,7	107	60	40	14		●
13,8	107	60	39	14		●
13,9	107	60	39	14		●
14,0	107	60	39	14		●
14,1	115	65	44	16		●
14,2	115	65	44	16		●
14,3	115	65	44	16		●
14,4	115	65	43	16		●
14,5	115	65	43	16		●
14,6	115	65	43	16		●
14,7	115	65	43	16		●
14,8	115	65	43	16		●
14,9	115	65	43	16		●
15,0	115	65	43	16		●
15,1	115	65	42	16		●
15,2	115	65	42	16		●
15,3	115	65	42	16		●
15,4	115	65	42	16		●
15,5	115	65	42	16		●
15,6	115	65	42	16		●
15,7	115	65	42	16		●
15,8	115	65	41	16		●
15,9	115	65	41	16		●
16,0	115	65	41	16		●
16,5	123	73	48	18		●
17,0	123	73	48	18		●
17,5	123	73	47	18		●
18,0	123	73	46	18		●
18,5	131	79	51	20		●
19,0	131	79	51	20		●
19,5	131	79	50	20		●
20,0	131	79	49	20		●

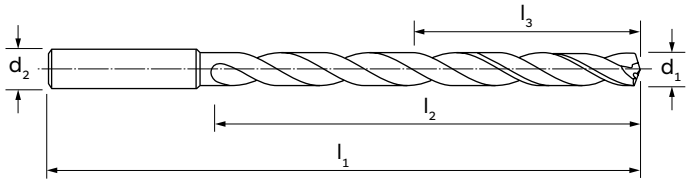
02/02

ILIX PRECISION

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

NEW TECH | ILIX NORM DIN | ≤8xd | 6535 HA | 140° | A | SHRINK FIT | P. 128



MATERIAL | MATERIAL	M.D.I.-HM
BESCHICHTUNG | COATING	TiAlN Futura Plus
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN MATERIAL GROUPS

P | **Stahl** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	M
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	–
S | **HRSA und Titan** | HRSA and Titanium	S
H | **Gehärtete Stähle** | Hardened Steels	H

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6025TT
3,0	70	32	28	6		●
3,1	70	32	27	6		●
3,2	70	32	27	6		●
3,3	70	32	27	6		●
3,4	70	32	27	6		●
3,5	70	32	27	6		●
3,6	70	32	27	6		●
3,7	70	32	27	6		●
3,8	80	42	36	6		●
3,9	80	42	36	6		●
4,0	80	42	36	6		●
4,1	80	42	36	6		●
4,2	80	42	36	6		●
4,3	80	42	36	6		●
4,4	80	42	35	6		●
4,5	80	42	35	6		●
4,6	80	42	35	6		●
4,7	80	42	35	6		●
4,8	92	54	47	6		●
4,9	92	54	47	6		●
5,0	92	54	47	6		●
5,1	92	54	46	6		●
5,2	92	54	46	6		●
5,3	92	54	46	6		●
5,4	92	54	46	6		●
5,5	92	54	46	6		●
5,6	92	54	46	6		●

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6025TT
5,7	92	54	46	6		●
5,8	92	54	45	6		●
5,9	92	54	45	6		●
6,0	92	54	45	6		●
6,1	100	62	53	8		●
6,2	100	62	53	8		●
6,3	100	62	53	8		●
6,4	100	62	52	8		●
6,5	100	62	52	8		●
6,6	100	62	52	8		●
6,7	100	62	52	8		●
6,8	100	62	52	8		●
6,9	100	62	52	8		●
7,0	108	70	60	8		●
7,1	108	70	59	8		●
7,2	108	70	59	8		●
7,3	108	70	59	8		●
7,4	108	70	59	8		●
7,5	108	70	59	8		●
7,6	108	70	59	8		●
7,7	108	70	59	8		●
7,8	108	70	58	8		●
7,9	108	70	58	8		●
8,0	108	70	58	8		●
8,1	122	80	68	10		●
8,2	122	80	68	10		●
8,3	122	80	68	10		●

01/02 →

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6025TT
8,4	122	80	67	10		●
8,5	122	80	67	10		●
8,6	122	80	67	10		●
8,7	122	80	67	10		●
8,8	122	80	67	10		●
8,9	122	80	67	10		●
9,0	122	80	67	10		●
9,1	130	88	74	10		●
9,2	130	88	74	10		●
9,3	130	88	74	10		●
9,4	130	88	74	10		●
9,5	130	88	74	10		●
9,6	130	88	74	10		●
9,7	130	88	74	10		●
9,8	130	88	73	10		●
9,9	130	88	73	10		●
10,0	130	88	73	10		●
10,1	152	105	90	12		●
10,2	152	105	90	12		●
10,3	152	105	90	12		●
10,4	152	105	89	12		●
10,5	152	105	89	12		●
10,6	152	105	89	12		●
10,7	152	105	89	12		●
10,8	152	105	89	12		●
10,9	152	105	89	12		●
11,0	152	105	89	12		●

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6025TT
11,1	152	105	88	12		●
11,2	152	105	88	12		●
11,3	152	105	88	12		●
11,4	152	105	88	12		●
11,5	152	105	88	12		●
11,6	152	105	88	12		●
11,7	152	105	88	12		●
11,8	152	105	87	12		●
11,9	152	105	87	12		●
12,0	152	105	87	12		●
12,5	170	123	104	14		●
13,0	170	123	104	14		●
13,5	170	123	103	14		●
14,0	170	123	102	14		●
14,5	192	142	120	16		●
15,0	192	142	120	16		●
15,5	192	142	119	16		●
16,0	192	142	118	16		●
16,5	223	171	146	18		●
17,0	223	171	146	18		●
17,5	223	171	145	18		●
18,0	223	171	144	18		●
18,5	244	190	162	20		●
19,0	244	190	162	20		●
19,5	244	190	161	20		●
20,0	244	190	160	20		●

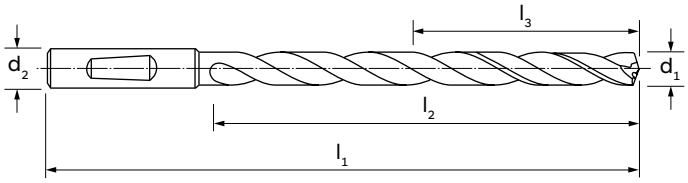
02/02

ILIX PRECISION

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

NEW TECH | ILIX NORM DIN | ≤8xd | 6535 HE | 140° | A | P. 128



MATERIAL | MATERIAL	M.D.I.-HM
BESCHICHTUNG | COATING	TiAlN Futura Plus
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN / MATERIAL GROUPS	
P | **Stahl** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	–
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	–
S | **HRSA und Titan** | HRSA and Titanium	–
H | **Gehärtete Stähle** | Hardened Steels	–

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6026TT
3,0	70	32	28	6		●
3,1	70	32	27	6		●
3,2	70	32	27	6		●
3,3	70	32	27	6		●
3,4	70	32	27	6		●
3,5	70	32	27	6		●
3,6	70	32	27	6		●
3,7	70	32	27	6		●
3,8	80	42	36	6		●
3,9	80	42	36	6		●
4,0	80	42	36	6		●
4,1	80	42	36	6		●
4,2	80	42	36	6		●
4,3	80	42	36	6		●
4,4	80	42	35	6		●
4,5	80	42	35	6		●
4,6	80	42	35	6		●
4,7	80	42	35	6		●
4,8	92	54	47	6		●
4,9	92	54	47	6		●
5,0	92	54	47	6		●
5,1	92	54	46	6		●
5,2	92	54	46	6		●
5,3	92	54	46	6		●
5,4	92	54	46	6		●
5,5	92	54	46	6		●
5,6	92	54	46	6		●

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6026TT
5,7	92	54	46	6		●
5,8	92	54	45	6		●
5,9	92	54	45	6		●
6,0	92	54	45	6		●
6,1	100	62	53	8		●
6,2	100	62	53	8		●
6,3	100	62	53	8		●
6,4	100	62	52	8		●
6,5	100	62	52	8		●
6,6	100	62	52	8		●
6,7	100	62	52	8		●
6,8	100	62	52	8		●
6,9	100	62	52	8		●
7,0	108	70	60	8		●
7,1	108	70	59	8		●
7,2	108	70	59	8		●
7,3	108	70	59	8		●
7,4	108	70	59	8		●
7,5	108	70	59	8		●
7,6	108	70	59	8		●
7,7	108	70	59	8		●
7,8	108	70	58	8		●
7,9	108	70	58	8		●
8,0	108	70	58	8		●
8,1	122	80	68	10		●
8,2	122	80	68	10		●
8,3	122	80	68	10		●

01/02 →

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6026TT
8,4	122	80	67	10		●
8,5	122	80	67	10		●
8,6	122	80	67	10		●
8,7	122	80	67	10		●
8,8	122	80	67	10		●
8,9	122	80	67	10		●
9,0	122	80	67	10		●
9,1	130	88	74	10		●
9,2	130	88	74	10		●
9,3	130	88	74	10		●
9,4	130	88	74	10		●
9,5	130	88	74	10		●
9,6	130	88	74	10		●
9,7	130	88	74	10		●
9,8	130	88	73	10		●
9,9	130	88	73	10		●
10,0	130	88	73	10		●
10,1	152	105	90	12		●
10,2	152	105	90	12		●
10,3	152	105	90	12		●
10,4	152	105	89	12		●
10,5	152	105	89	12		●
10,6	152	105	89	12		●
10,7	152	105	89	12		●
10,8	152	105	89	12		●
10,9	152	105	89	12		●
11,0	152	105	89	12		●

d_1 (m7)	l_1	l_2	l_3	d_2 (h6)		6026TT
11,1	152	105	88	12		●
11,2	152	105	88	12		●
11,3	152	105	88	12		●
11,4	152	105	88	12		●
11,5	152	105	88	12		●
11,6	152	105	88	12		●
11,7	152	105	88	12		●
11,8	152	105	87	12		●
11,9	152	105	87	12		●
12,0	152	105	87	12		●
12,5	170	123	104	14		●
13,0	170	123	104	14		●
13,5	170	123	103	14		●
14,0	170	123	102	14		●
14,5	192	142	120	16		●
15,0	192	142	120	16		●
15,5	192	142	119	16		●
16,0	192	142	118	16		●
16,5	223	171	146	18		●
17,0	223	171	146	18		●
17,5	223	171	145	18		●
18,0	223	171	144	18		●
18,5	244	190	162	20		●
19,0	244	190	162	20		●
19,5	244	190	161	20		●
20,0	244	190	160	20		●

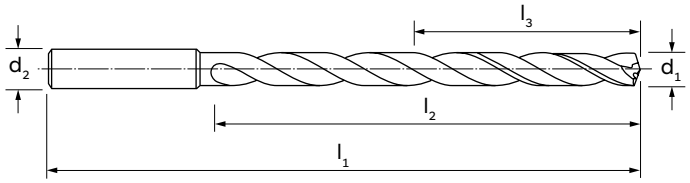
02/02

ILIX PRECISION

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

NEW TECH | ILIX NORM DIN | ≤12xd | 6535 HA | 140° | A | SHRINK FIT | P. 128



MATERIAL | MATERIAL	M.D.I.-HM
BESCHICHTUNG | COATING	TiAlN Futura Plus
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN MATERIAL GROUPS	
P | **Stahl** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	M
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	–
S | **HRSA und Titan** | HRSA and Titanium	S
H | **Gehärtete Stähle** | Hardened Steels	H

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6027TT
3,0	92	54	50	6		●
3,3	92	54	49	6		●
3,4	92	54	49	6		●
3,5	92	54	49	6		●
3,8	102	64	58	6		●
4,0	102	64	58	6		●
4,2	102	64	58	6		●
4,3	102	64	58	6		●
4,5	102	64	57	6		●
4,8	121	83	76	6		●
5,0	121	83	76	6		●
5,1	121	83	75	6		●
5,2	121	83	75	6		●
5,5	121	83	75	6		●
5,6	121	83	75	6		●
5,8	121	83	74	6		●
6,0	121	83	74	6		●
6,1	148	110	101	8		●
6,5	148	110	100	8		●
6,6	148	110	100	8		●
6,8	148	110	100	8		●
6,9	148	110	100	8		●
7,0	148	110	100	8		●
7,4	148	110	99	8		●
7,5	148	110	99	8		●
7,8	148	110	98	8		●
8,0	148	110	98	8		●

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6027TT
8,1	180	138	126	10		●
8,3	180	138	126	10		●
8,4	180	138	125	10		●
8,5	180	138	125	10		●
8,6	180	138	125	10		●
8,7	180	138	125	10		●
8,8	180	138	125	10		●
9,0	180	138	125	10		●
9,3	180	138	124	10		●
9,5	180	138	124	10		●
9,8	180	138	123	10		●
10,0	180	138	123	10		●
10,2	206	158	143	12		●
10,3	206	158	143	12		●
10,4	206	158	142	12		●
10,5	206	158	142	12		●
10,8	206	158	142	12		●
11,0	206	158	142	12		●
11,2	206	158	141	12		●
11,5	206	158	141	12		●
11,8	206	158	140	12		●
12,0	206	158	140	12		●
12,5	230	182	163	14		●
13,0	230	182	163	14		●
13,5	230	182	162	14		●
14,0	230	182	161	14		●
14,5	260	208	186	16		●

01/02 →

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6027TT
15,0	260	208	186	16		●
15,5	260	208	185	16		●
16,0	260	208	184	16		●
16,5	285	234	209	18		●
17,0	285	234	209	18		●
17,5	285	234	208	18		●

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6027TT
18,0	285	234	207	18		●
18,5	310	258	230	20		●
19,0	310	258	230	20		●
19,5	310	258	229	20		●
20,0	310	258	228	20		●

02/02

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

NEW TECH

ILIX NORM
DIN

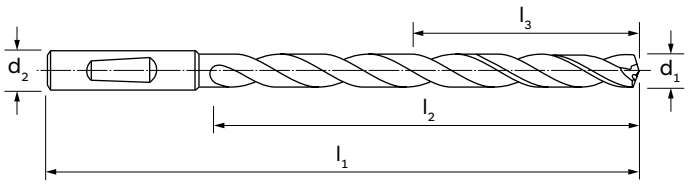
≤12xd

6535 HE

140°

A

P. 128



MATERIAL | MATERIAL	M.D.I.-HM
BESCHICHTUNG | COATING	TiAlN Futura Plus
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN
MATERIAL GROUPS

P | **Stahl** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	M
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	–
S | **HRSA und Titan** | HRSA and Titanium	S
H | **Gehärtete Stähle** | Hardened Steels	H

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6028TT
3,0	92	54	50	6		●
3,3	92	54	49	6		●
3,4	92	54	49	6		●
3,5	92	54	49	6		●
3,8	102	64	58	6		●
4,0	102	64	58	6		●
4,2	102	64	58	6		●
4,3	102	64	58	6		●
4,5	102	64	57	6		●
4,8	121	83	76	6		●
5,0	121	83	76	6		●
5,1	121	83	75	6		●
5,2	121	83	75	6		●
5,5	121	83	75	6		●
5,6	121	83	75	6		●
5,8	121	83	74	6		●
6,0	121	83	74	6		●
6,1	148	110	101	8		●
6,5	148	110	100	8		●
6,6	148	110	100	8		●
6,8	148	110	100	8		●
6,9	148	110	100	8		●
7,0	148	110	100	8		●
7,4	148	110	99	8		●
7,5	148	110	99	8		●
7,8	148	110	98	8		●
8,0	148	110	98	8		●

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6028TT
8,1	180	138	126	10		●
8,3	180	138	126	10		●
8,4	180	138	125	10		●
8,5	180	138	125	10		●
8,6	180	138	125	10		●
8,7	180	138	125	10		●
8,8	180	138	125	10		●
9,0	180	138	125	10		●
9,3	180	138	124	10		●
9,5	180	138	124	10		●
9,8	180	138	123	10		●
10,0	180	138	123	10		●
10,2	206	158	143	12		●
10,3	206	158	143	12		●
10,4	206	158	142	12		●
10,5	206	158	142	12		●
10,8	206	158	142	12		●
11,0	206	158	142	12		●
11,2	206	158	141	12		●
11,5	206	158	141	12		●
11,8	206	158	140	12		●
12,0	206	158	140	12		●
12,5	230	182	163	14		●
13,0	230	182	163	14		●
13,5	230	182	162	14		●
14,0	230	182	161	14		●
14,5	260	208	186	16		●

01/02 →

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6028TT
15,0	260	208	186	16		●
15,5	260	208	185	16		●
16,0	260	208	184	16		●
16,5	285	234	209	18		●
17,0	285	234	209	18		●
17,5	285	234	208	18		●

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6028TT
18,0	285	234	207	18		●
18,5	310	258	230	20		●
19,0	310	258	230	20		●
19,5	310	258	229	20		●
20,0	310	258	228	20		●

02/02

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

ILIX NORM

DIN

≤15xd

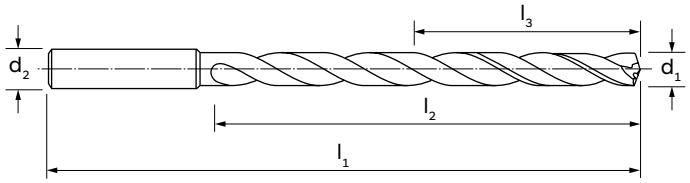
6535 HA

135°

A

SHRINK FIT

P. 128



MATERIAL | MATERIAL	M.D.I.-HM
BESCHICHTUNG | COATING	TiAlN Futura Plus
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN
MATERIAL GROUPS

P | **Stahl** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	M
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	–
S | **HRSA und Titan** | HRSA and Titanium	S
H | **Gehärtete Stähle** | Hardened Steels	–

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6032TT
3,0	100	60	55	6		●
3,2	100	60	55	6		●
3,5	100	60	55	6		●
3,8	115	75	69	6		●
4,0	115	75	69	6		●
4,2	115	75	69	6		●
4,5	130	90	83	6		●
4,8	130	90	83	6		●
5,0	130	90	83	6		●
5,5	150	108	99	6		●
5,8	150	108	99	6		●
6,0	150	108	99	6		●
6,5	165	125	115	8		●
6,8	165	125	115	8		●
7,0	165	125	115	8		●
7,5	180	140	128	8		●
8,0	180	140	128	8		●
8,5	205	160	147	10		●
8,8	205	160	147	10		●
9,0	205	160	147	10		●
10,0	225	180	165	10		●
10,2	240	190	174	12		●
12,0	265	215	197	12		●

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6032TT

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

ILIX NORM
DIN

≤20xd

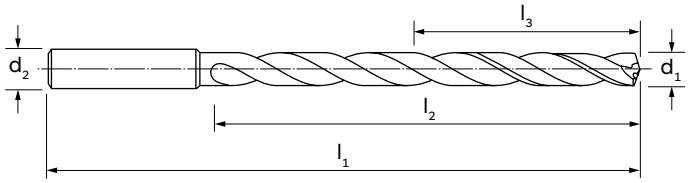
6535 HA

135°

A

SHRINK FIT

P. 128



MATERIAL | MATERIAL	M.D.I.-HM
BESCHICHTUNG | COATING	TiAlN Futura Plus
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN
MATERIAL GROUPS

P | **Stahl** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	M
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	–
S | **HRSA und Titan** | HRSA and Titanium	S
H | **Gehärtete Stähle** | Hardened Steels	–

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6034TT
2,0	92	50	47	4		●
2,5	112	70	66	4		●
3,0	120	80	75	6		●
3,1	120	80	75	6		●
3,2	120	80	75	6		●
3,3	120	80	75	6		●
3,4	120	80	75	6		●
3,5	120	80	75	6		●
3,7	130	90	84	6		●
3,8	130	90	84	6		●
3,9	130	90	84	6		●
4,0	130	90	84	6		●
4,2	160	110	103	6		●
4,5	160	110	103	6		●
4,7	160	110	103	6		●
4,8	160	120	113	6		●
4,9	160	120	113	6		●
5,0	160	120	113	6		●
5,1	160	120	113	6		●
5,2	160	120	113	6		●
5,4	160	120	113	6		●
5,5	185	140	131	6		●
5,9	185	140	131	6		●
6,0	185	140	131	6		●
6,2	210	160	150	8		●
6,4	210	160	150	8		■
6,5	210	160	150	8		●

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6034TT
6,8	210	160	150	8		●
7,0	210	160	150	8		●
7,1	230	180	168	8		●
7,4	230	180	168	8		●
7,5	230	180	168	8		●
7,8	230	180	168	8		●
8,0	230	180	168	8		●
8,5	260	195	182	10		●
9,0	290	230	216	10		●
9,5	290	230	216	10		●
10,0	290	230	216	10		●
10,2	315	268	251	12		●
10,5	315	268	251	12		●
10,9	315	268	251	12		●
11,0	315	268	251	12		●
12,0	315	268	251	12		●

■ **So lange der Vorrat reicht** | Till stocks last

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

NEW

ILIX NORM
DIN

≤25xd

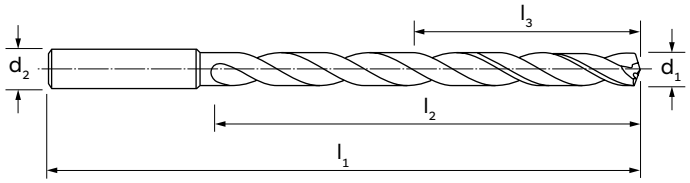
6535 HA

135°

A

SHRINK FIT

P. 128



MATERIAL | MATERIAL	M.D.I.-HM
BESCHICHTUNG | COATING	TiAlN Futura Plus
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN / MATERIAL GROUPS	
P | **Stahl** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	M
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	–
S | **HRSA und Titan** | HRSA and Titanium	S
H | **Gehärtete Stähle** | Hardened Steels	–

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6035TT
3,0	135	98	93	6		●
3,2	135	98	93	6		●
3,3	150	110	105	6		●
3,5	150	110	105	6		●
3,8	160	120	114	6		●
4,0	160	120	114	6		●
4,2	160	120	114	6		●
4,5	180	135	128	6		●
4,8	180	135	128	6		●
5,0	180	135	128	6		●
5,5	205	168	159	6		●
5,8	205	168	159	6		●
6,0	205	168	159	6		●
6,5	240	200	190	8		●
6,8	240	200	190	8		●
7,0	240	200	190	8		●
7,5	260	220	208	8		●
7,8	260	220	208	8		●
8,0	260	220	208	8		●
8,5	285	240	227	10		●
8,8	310	268	254	10		●
9,0	310	268	254	10		●
9,8	310	268	254	10		●
10,0	310	268	254	10		●
10,2	375	325	308	12		●
10,8	375	325	308	12		●
11,8	375	325	308	12		●

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6035TT
12,0	375	325	308	12		●

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

ILIX NORM
DIN

≤30xd

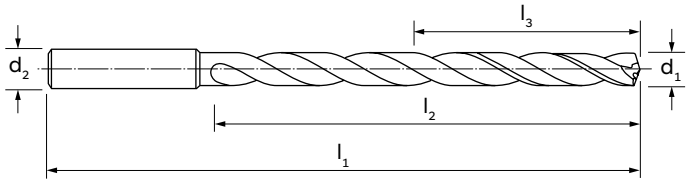
6535 HA

135°

A

SHRINK FIT

P. 128



MATERIAL | MATERIAL	M.D.I.-HM
BESCHICHTUNG | COATING	TiAlN Futura Plus
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN
MATERIAL GROUPS

P | **Stahl** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	M
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	–
S | **HRSA und Titan** | HRSA and Titanium	S
H | **Gehärtete Stähle** | Hardened Steels	–

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6036TT
2,0	115	70	67	4		●
2,5	138	90	86	4		●
3,0	150	105	100	6		●
3,2	150	105	100	6		●
3,3	185	135	130	6		●
3,5	185	135	130	6		●
3,6	185	135	130	6		●
3,7	185	135	130	6		●
3,8	185	135	130	6		●
4,0	185	135	130	6		●
4,2	185	135	130	6		●
4,5	215	165	158	6		●
4,8	215	165	158	6		●
5,0	215	165	158	6		●
5,1	230	180	171	6		●
5,2	230	180	171	6		●
5,5	230	180	171	6		●
5,8	230	180	171	6		●
6,0	230	180	171	6		●
6,5	280	215	205	8		●
6,8	280	230	220	8		●
7,0	280	230	220	8		●
7,5	280	230	220	8		●
8,0	315	265	253	8		●
8,5	350	295	282	10		●
9,0	380	330	316	10		●
10,0	380	330	316	10		●

d_1 (h7)	l_1	l_2	l_3	d_2 (h6)		6036TT
10,2	430	380	365	12		●
12,0	430	380	365	12		●

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

ILIX NORM
DIN

≤40xd

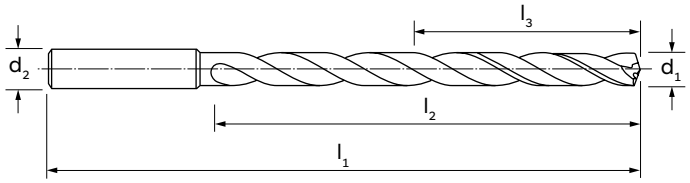
6535 HA

135°

A

SHRINK FIT

P. 128



MATERIAL | MATERIAL	M.D.I.-HM
BESCHICHTUNG | COATING	TiAlN Futura Plus
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN / MATERIAL GROUPS	
P | **Stahl** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	M
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	–
S | **HRSA und Titan** | HRSA and Titanium	S
H | **Gehärtete Stähle** | Hardened Steels	–

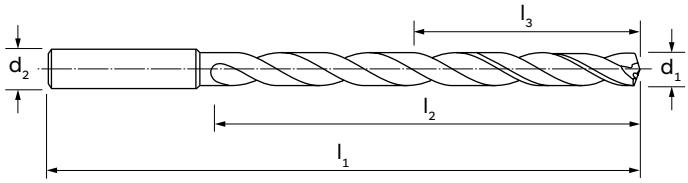
d_1 (fg6)	l_1	l_2	l_3	d_2 (h6)		6038TT
3,0	195	150	146	6		●
4,0	220	175	169	6		●
4,2	245	200	194	6		●
4,5	245	200	194	6		●
4,8	275	230	223	6		●
5,0	275	230	223	6		●
5,5	305	260	251	6		●
5,8	305	260	251	6		●
6,0	305	260	251	6		●
6,5	345	300	290	8		●
6,8	345	300	290	8		●
7,0	345	300	290	8		●
7,5	385	340	328	8		●
8,0	385	340	328	8		●
9,0	430	380	367	10		●

d_1 (fg6)	l_1	l_2	l_3	d_2 (h6)		6038TT

RECORD DH i

Vollhartmetall Mikrokorn Hochleistungs-Spiralbohrer
Solid Carbide Micro Grain high performance twist drills

NEW | ILIX NORM DIN | ≤50xd | 6535 HA | 135° | A | SHRINK FIT | P. 128



MATERIAL | MATERIAL	M.D.I.-HM
BESCHICHTUNG | COATING	TiAlN Futura Plus
SCHNITTRICHTUNG | CUTTING DIRECTION	↻

MATERIALGRUPPEN
MATERIAL GROUPS

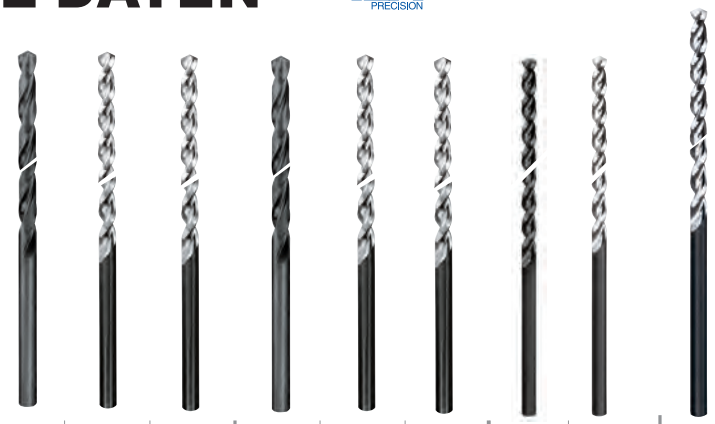
P | **Stahl** | Steels	P
M | **Rostfreier Stahl** | Stainless Steels	M
K | **Gusseisen** | Cast Irons	K
N | **Nichteisenmetalle** | Non-ferrous metals	–
S | **HRSA und Titan** | HRSA and Titanium	S
H | **Gehärtete Stähle** | Hardened Steels	–

d_1 (fg6)	l_1	l_2	l_3	d_2 (h6)		6039TT
3	220	175	170	6		●
4	265	220	214	6		●
5	320	275	268	6		●
6	355	315	306	6		●

d_1 (fg6)	l_1	l_2	l_3	d_2 (h6)		6039TT

TECHNISCHE DATEN

TECHNICAL DATA



Typ Type	N		STL		STL		N		STL		STL		N		STL		STL
ILIX Typ-siehe Seite Ilix Type -See page	158		162		166		158		162		166		158		158		162
DIN	1869-1						1869-2						1869-3				Ilix Norm.
Bohrtiefe Drilling depth	16xd						22xd						30xd				60/70 xd
Schneidrichtung Cutting direction																	
Schneidstoff Material	HSS		HSS		HSS-CO		HSS		HSS		HSS-CO		HSS		HSS		HSS
Spitzenwinkel Point angle	120°		130°		130°		120°		130°		130°		120°		130°		130°
Beschichtung Coating	VAP		FASE NIT.		FASE NIT.		VP		FASE NIT.		FASE NIT.		VP		FASE NIT.		FASE NIT.
Innenliegende Kühlkanäle Internal coolant	-		-		-		-		-		-		-		-		-
Verstärkter Schaft Reinforced shank	-		-		-		-		-		-		-		-		-
	6217/1		**6216/1**		**6218/1**		**6217/2**		**6216/2**		**6218/2**		**6217/3**		**6216/3**		**6130**
	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*
P	< 800 N/mm²	20	7	22	7	23	8	19	7	21	7	21	8	18	7	20	8	14	6
P	700-1000 N/mm²	13	6	16	6	18	7	12	6	16	6	21	7	11	6	16	7	9	5
P	1000-1300 N/mm²	6	5	10	5	14	6	5	5	12	9	12	6	4	5	9	6	4	4
M	Austenitisch	4	4	-	-	-	-	3	4	-	-	-	-	3	3	-	-	5	3
M	Austenitisch / ferritisch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
K	GG	13	6	20	7	25	7	12	6	20	6	23	6	11	7	20	5	18	5
K	GGG	7	5	10	5	15	6	6	5	10	4	20	6	5	5	10	3	9	3
N	Aluminium	28	6	30	6	30	10	27	6	30	6	35	10	26	9	30	10	20	6
N	NE-Metalle	21	5	25	5	25	7	20	5	22	5	30	7	19	5	25	7	20	5
S	Titan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	Sonderlegierungen basiert auf Ni	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 38 / 48 HRC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN

TECHNICAL DATA

Typ Type		N		STL		STL		N		STL		STL		STL
ILIX Typ-siehe Seite Ilix Type -See page		160		164		166		160		164		166		164
DIN		1870-1						1870-2						Ilix Norm.
Bohrtiefe Drilling depth		16xd						22xd						40xd
Schneidrichtung Cutting direction														
Schneidstoff Material		HSS		HSS		HSS-CO		HSS		HSS		HSS-CO		HSS
Spitzenwinkel Point angle		120°		130°		130°		120°		130°		130°		130°
Beschichtung Coating		VAP		FASE NIT.		FASE NIT.		VP		FASE NIT.		FASE NIT.		FASE NIT.
Innenliegende Kühlkanäle Internal coolant		-		-		-		-		-		-		-
Verstärkter Schaft Reinforced shank		-		-		-		-		-		-		-
		6220/ 1		6221/ 1		6219/ 1		6220/ 2		6221/ 2		6219/ 2		6150
		VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*
P	< 800 N/mm²	18	7	20	7	22	8	15	6	17	6	20	7	20	7
P	700-1000 N/mm²	10	6	12	6	15	7	8	5	9	5	13	6	15	6
P	1000-1300 N/mm²	6	5	8	5	10	6	5	4	6	4	8	4	11	5
M	Austenitisch	4	3	-	-	-	-	3	2	-	-	-	-	-	-
M	Austenitisch / ferritisch	-	-	-	-	-	-	-	-	-	-	-	-	-	-
K	GG	15	7	20	7	25	7	13	6	13	7	15	7	13	7
K	GGG	7	5	12	6	15	6	6	4	8	6	10	6	8	6
N	Aluminium	35	8	37	8	40	9	30	7	33	7	37	8	28	6
N	NE-Metalle	17	6	20	6	22	7	14	5	16	5	20	6	21	5
S	Titan	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	Sonderlegierungen basiert auf Ni	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 38 / 48 HRC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA

Pilotbohrer

Typ Type	RECORD DHi	RECORD DHi	RECORD DHi	RECORD DHi	RECORD DHi	RECORD DHi	RECORD 2Si
DIN	ILIX Norm			ILIX Norm			6537K
Bohrtiefe Drilling depth	12xD	15xD	20xD	25xD	30xD	40xD	3xD
Schneidrichtung Cutting direction							
Schneidstoff Material	K20F	K30F	K30F	K30F	K30F	K30F	K30F
Spitzenwinkel Point angle	140°	135°	135°	135°	135°	135°	140°
Beschichtung Coating	TT	TT	TT	TT	TT	TT	TF
Innenliegende Kühlkanäle Internal coolant							IK
Verstärkter Schaft Reinforced shank	6535 HA / 6535 HE	6535 HA	6535 HA	6535 HA	6535 HA	6535 HA	6535 HA
	6027-6028 TT	6032 TT	6034 TT	6035 TT	6036 TT	6038 TT	6011 TF

		vc	f*	vc	f*	vc	f*	vc	f*	vc	f*	vc	f*	vc	f*
P	< 800 N/mm²	75	10	80	12	75	9	70	9	70	9	60	8	110	12
P	700-1000 N/mm²	65	9	70	9	65	8	60	8	60	8	50	7	90	10
P	1000-1300 N/mm²	60	8	65	8	60	7	55	7	55	7	40	6	70	10
M	Austenitisch	35	4	45	5	40	5	35	4	35	4	25	4	40	6
M	Austenitisch / ferritisch	-	-	35	4	30	4	27	3	27	3	20	3	-	-
K	GG	75	12	70	12	65	13	60	12	60	12	50	12	100	12
K	GGG	55	9	60	8	55	10	50	9	50	9	40	9	80	10
N	Aluminium	80	16	100	12	100	12	90	10	90	10	80	9	150	12
N	NE-Metalle	70	10	70	10	65	10	60	8	60	8	50	7	120	10
S	Titan	-	-	25	5	22	5	20	4	20	4	15	4	-	-
S	Sonderlegierungen basiert auf Ni	-	-	20	4	18	4	16	3	16	3	11	3	-	-
H	Gehärteter Stahl 38 / 48 HRC	-	-	15	3	13	3	10	2	10	2	8	2	18	4
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-			-	-	-	-		
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-			-	-	-	-		

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

VORSCHUBTABELLE / FEED TABLE

Bohrer-Kegelsenker-Aufbohrer / Drills-Countersinking-Core Drilling

Vorschub F (mm/U x Bohrerdurchmesser (mm) in HSS - VHM - HM bestückt
feed f (mm/rev) for HSS - solid carbide drills - solid carbide inserts

Vorschub-Kennzahl Nr. Feed	Ø 1	Ø 1,5	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 15	Ø 20	Ø 25	Ø 30	Ø 40	Ø 50
1	0,005	0,006	0,006	0,007	0,008	0,009	0,010	0,012	0,013	0,015	0,017	0,019	0,022	0,024	0,028	0,031
2	0,008	0,009	0,011	0,013	0,015	0,018	0,021	0,024	0,028	0,033	0,038	0,045	0,053	0,062	0,072	0,084
3	0,010	0,012	0,014	0,016	0,019	0,023	0,027	0,032	0,038	0,044	0,052	0,062	0,073	0,086	0,101	0,120
4	0,013	0,015	0,018	0,022	0,026	0,031	0,037	0,044	0,052	0,062	0,074	0,088	0,105	0,125	0,148	0,177
5	0,017	0,020	0,024	0,029	0,035	0,042	0,051	0,061	0,073	0,088	0,105	0,126	0,152	0,182	0,218	0,262
6	0,020	0,024	0,029	0,035	0,043	0,052	0,063	0,076	0,092	0,111	0,135	0,163	0,197	0,238	0,288	0,349
7	0,023	0,028	0,034	0,042	0,051	0,062	0,076	0,093	0,113	0,138	0,168	0,205	0,250	0,305	0,372	0,454
8	0,027	0,033	0,041	0,050	0,062	0,076	0,093	0,115	0,141	0,174	0,214	0,263	0,324	0,398	0,490	0,602
9	0,030	0,037	0,046	0,057	0,070	0,086	0,106	0,131	0,162	0,201	0,248	0,306	0,378	0,466	0,576	0,711
10	0,033	0,041	0,050	0,061	0,076	0,093	0,114	0,141	0,173	0,213	0,262	0,322	0,396	0,487	0,599	0,736
12	0,037	0,045	0,055	0,067	0,082	0,100	0,122	0,149	0,182	0,222	0,270	0,330	0,402	0,491	0,599	0,730
16	0,043	0,052	0,063	0,076	0,092	0,112	0,135	0,163	0,198	0,239	0,289	0,350	0,424	0,512	0,620	0,750
20	0,050	0,061	0,073	0,089	0,107	0,130	0,157	0,190	0,230	0,278	0,336	0,407	0,492	0,596	0,721	0,872

ILIX PRECISION

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