



# STRAIGHT SHANK DRILLS

**DT692** SERIES

**DT600** SERIES

**DT693** SERIES

## HSS-E, STRAIGHT SHANK TWIST DRILLS for DEEP HOLES

**EXTRA LONG**

● HSS-E, SPIRALBOHRER für TIEFLOCH mit ZYLINDERSCHAFT

**ÜBERLANG**

● Forets HSS-E, queue cylindrique pour perçage profond, Forme C, série extra-longue

**EXTRA-LONGUE**

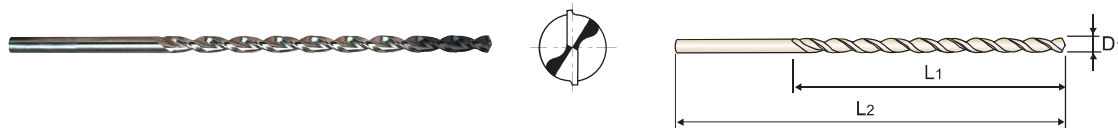
● PUNTA IN HSS-E, GAMBO CILINDRICO PER FORI NON - STOP

**EXTRA LUNGA**

► **Surface treatment** : TiAIN coating on working area.

► **Verwendung** : Zum Bohren von legiertem und unlegiertem stahl, Grauguß, Temperguß, Sphärguß, Druckguß, Alu-Legierungen kurzspanend, Bronze, Messing zäh, Neusilber.

► **Application** : Drilling deep holes in non alloy steels, alloy steels, grey cast iron, malleable cast iron, special aluminum or magnesium alloys.



P.282

## ► DH100 worm pattern drills

### DT600 SERIES (DIN1869/1)

EDP No.	Drill Diameter D1	Flute Length L1	Overall Length L2
DT600020	2.0	85	125
DT600025	2.5	95	140
DT600030	3.0	100	150
DT600035	3.5	115	165
DT600040	4.0	120	175
DT600045	4.5	125	185
DT600050	5.0	135	195
DT600055	5.5	140	205
DT600060	6.0	140	205
DT600065	6.5	150	215
DT600070	7.0	155	225
DT600075	7.5	155	225
DT600080	8.0	165	240
DT600085	8.5	165	240
DT600090	9.0	175	250
DT600095	9.5	175	250
DT600100	10.0	185	265
DT600105	10.5	185	265

### DT692 SERIES (DIN1869/2)

Unit : mm

EDP No.	Drill Diameter D1	Flute Length L1	Overall Length L2
DT692030	3.0	130	190
DT692035	3.5	145	210
DT692040	4.0	150	220
DT692045	4.5	160	235
DT692050	5.0	170	245
DT692055	5.5	180	260
DT692060	6.0	180	260
DT692065	6.5	190	275
DT692070	7.0	200	290
DT692075	7.5	200	290
DT692080	8.0	210	305
DT692085	8.5	210	305
DT692090	9.0	220	320
DT692095	9.5	220	320
DT692100	10.0	235	340
DT692102	10.2	235	340

► TiN(DN600) and TiCN(DX600) are available on your request.

### DT693 SERIES (DIN1869/3)

EDP No.	Drill Diameter D1	Flute Length L1	Overall Length L2
DT693040	4.0	190	280
DT693050	5.0	210	315
DT693060	6.0	225	330
DT693080	8.0	265	390
DT693100	10.0	295	430

◎ : Excellent ○ : Good

ISO Material Description	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
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	30	10	29	32	38	15	15	35	10	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 Material Description	N										S							H			
	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
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	200	280	250	350	320	400Rm	1050Rm	550	630	400	550	550	630	400	550	550
HB	60	100	75	90	130	110	90	100													
Recommended																					



# STRAIGHT SHANK DRILLS

## RECOMMENDED CUTTING CONDITIONS EMPFOLHENE SCHNEIDPARAMETER

### DT600, DT692, DT693 SERIES HSS-E, DH100 WORM PATTERN DRILLS (EXTRA LONG)

RPM = rev./min.  
FEED = mm/rev.

i-ONE DRILLS  
i-DREAM DRILLS  
DREAM DRILLS -GENERAL  
DREAM DRILLS -HIGH FEED  
DREAM DRILLS -FLAT BOTTOM  
DREAM DRILLS -INOX  
DREAM DRILLS -ALU  
DREAM DRILLS -CFRP  
DREAM DRILLS -MQL  
DREAM DRILLS for HIGH HARDENED STEELS  
GENERAL CARBIDE DRILLS  
MULTI-1 DRILLS  
HPD DRILLS  
GOLD-P DRILLS  
SUPER-GP DRILLS  
STRAIGHT SHANK DRILLS  
TAPER SHANK DRILLS  
NC-SPOTTING DRILLS  
CENTER DRILLS  
SPADE DRILLS  
REAMERS  
COUNTER SINKS  
COUNTER BORES  
TECHNICAL DATA

ISO	VDI 3323	Material Description	Vc (m/min)	Parameter	Drill Diameter (mm)						
					2.0	3.0	4.0	6.0	8.0	10.0	13.0
P	1	Non-alloy steel	20	RPM	3180	2120	1590	1060	800	640	490
	FEED			0.01~0.03	0.03~0.05	0.04~0.06	0.05~0.08	0.08~0.11	0.09~0.13	0.10~0.16	
	2		RPM	2390	1590	1190	800	600	480	370	
	FEED		0.01~0.03	0.03~0.05	0.04~0.06	0.05~0.08	0.08~0.11	0.09~0.13	0.10~0.16		
	3		RPM	1590	1060	800	530	400	320	240	
	4	FEED	0.01~0.03	0.03~0.05	0.04~0.06	0.05~0.08	0.08~0.11	0.09~0.13	0.10~0.16		
	5	RPM	1590	1060	800	530	400	320	240		
	FEED	0.01~0.02	0.01~0.03	0.02~0.04	0.02~0.05	0.03~0.06	0.03~0.06	0.04~0.10			
	6	Low alloy steel	15	RPM	2390	1590	1190	800	600	480	370
	FEED			0.01~0.03	0.03~0.05	0.04~0.06	0.05~0.08	0.08~0.11	0.09~0.13	0.10~0.16	
	7		RPM	1590	1060	800	530	400	320	240	
FEED	0.01~0.03		0.03~0.05	0.04~0.06	0.05~0.08	0.08~0.11	0.09~0.13	0.10~0.16			
8	RPM		1590	1060	800	530	400	320	240		
9	FEED	0.01~0.02	0.01~0.03	0.02~0.04	0.02~0.05	0.03~0.06	0.03~0.06	0.04~0.10			
10	High alloyed steel, and tool steel	5	RPM	800	530	400	270	200	160	120	
FEED			0.01~0.03	0.03~0.05	0.04~0.06	0.05~0.08	0.08~0.11	0.09~0.13	0.10~0.16		
M	12	Stainless steel									
	13										
	14										
K	15	Grey cast iron	20	RPM	3180	2120	1590	1060	800	640	490
	FEED			0.01~0.03	0.03~0.05	0.04~0.06	0.05~0.08	0.08~0.11	0.09~0.13	0.10~0.16	
	16	RPM	2390	1590	1190	800	600	480	370		
	FEED	0.01~0.02	0.01~0.03	0.02~0.04	0.02~0.05	0.03~0.06	0.03~0.06	0.04~0.10			
	17	Nodular cast iron	20	RPM	3180	2120	1590	1060	800	640	490
	FEED			0.01~0.03	0.03~0.05	0.04~0.06	0.05~0.08	0.08~0.11	0.09~0.13	0.10~0.16	
18	RPM	1590	1060	800	530	400	320	240			
FEED	0.01~0.02	0.01~0.03	0.02~0.04	0.02~0.05	0.03~0.06	0.03~0.06	0.04~0.10				
19	Malleable cast iron	15	RPM	2390	1590	1190	800	600	480	370	
FEED			0.01~0.03	0.03~0.05	0.04~0.06	0.05~0.08	0.08~0.11	0.09~0.13	0.10~0.16		
20	RPM	1590	1060	800	530	400	320	240			
FEED	0.01~0.02	0.01~0.03	0.02~0.04	0.02~0.05	0.03~0.06	0.03~0.06	0.04~0.10				
N	21	Aluminum-wrought alloy									
	22										
	23	Aluminum-cast, alloyed									
	24										
	25										
	26	Copper and Copper Alloys (Bronze / Brass)									
	27										
	28										
	29	Non Metallic Materials									
	30										
S	31	Heat Resistant Super Alloys									
	32										
	33										
	34										
	35	Titanium Alloys									
	36										
	37										
H	38	Hardened steel									
	39										
	40	Hardened Cast Iron									
	41										