



# STRAIGHT SHANK DRILLS

**DL507** SERIES

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

**EXTRA LONG**

- HSS-E, SPIRALBOHRER für ALUMINIUM TIEFLOCH mit ZYLINDERSCHAFT
- Forets HSS-E, queue cylindrique pour ALU, perçage profond, série extra-longue
- PUNTE HSS-E, GAMBO CILINDRICO PER FORATURE NON - STOP SU ALLUMINIO

**ÜBERLANG**

**EXTRA-LONGUE**

**EXTRA LUNGA**

► **Application** : Drilling deep holes in aluminum and its alloys, silumin, zinc, refined copper, wood and other soft synthetic materials.

► **Verwendung** : Zum Bohren von weichen und langspanenden Werkstoffen wie Alu-Legierungen, Zink, Kupfer, Kunststoffe und Holz.



P.283

► **DH50**  
worm pattern drills

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DL507120	2.0	40	75
DL507121	2.1	40	75
DL507220	2.0	50	100
DL507221	2.1	50	100
DL507225	2.5	50	100
DL507227	2.7	50	100
DL507230	3.0	50	100
DL507233	3.3	50	100
DL507235	3.5	50	100
DL507320	2.0	75	150
DL507321	2.1	75	150
DL507325	2.5	75	150
DL507327	2.7	75	150
DL507330	3.0	75	150
DL507333	3.3	75	150
DL507335	3.5	75	150
DL507340	4.0	75	150
DL507342	4.2	75	150
DL507345	4.5	75	150
DL507350	5.0	75	150
DL507353	5.3	75	150
DL507355	5.5	75	150
DL507360	6.0	75	150

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DL507430	3.0	100	200
DL507433	3.3	100	200
DL507435	3.5	100	200
DL507440	4.0	100	200
DL507442	4.2	100	200
DL507445	4.5	100	200
DL507450	5.0	100	200
DL507453	5.3	100	200
DL507455	5.5	100	200
DL507460	6.0	100	200
DL507465	6.5	100	200
DL507468	6.8	100	200
DL507470	7.0	100	200
DL507475	7.5	100	200
DL507480	8.0	100	200
DL507485	8.5	100	200
DL507488	8.8	100	200
DL507490	9.0	100	200
DL507495	9.5	100	200
DL507700	10.0	100	200
DL507540	4.0	150	250
DL507542	4.2	150	250
DL507545	4.5	150	250
DL507550	5.0	150	250
DL507553	5.3	150	250

► NEXT PAGE

◎ : 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	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	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
HB											15	30	25	38	34			55	60	42	55
Recommended	◎	◎	○																		

# Y/G STRAIGHT SHANK DRILLS

## DL507 SERIES

**HSS-E, STRAIGHT SHANK TWIST DRILLS for ALUMINUM DEEP HOLES** *EXTRA LONG*  
**HSS-E, SPIRALBOHRER für ALUMINIUM TIEFLOCH mit ZYLINDERSCHAFT** *ÜBERLANG*  
**Forets HSS-E, queue cylindrique pour ALU, perçage profond, série extra-longue** *EXTRA-LONGUE*  
**PUNTE HSS-E, GAMBO CILINDRICO PER FORATURA NON - STOP SU ALLUMINIO** *EXTRA LUNGA*

► **Application** : Drilling deep holes in aluminum and its alloys, silumin, zinc, refined copper, wood and other soft synthetic materials.    ► **Verwendung** : Zum Bohren von weichen und langspanenden Werkstoffen wie Alu-Legierungen, Zink, Kupfer, Kunststoffe und Holz.



**HSS-E**

### ► DH50 worm pattern drills

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DL507555	5.5	150	250
DL507560	6.0	150	250
DL507565	6.5	150	250
DL507568	6.8	150	250
DL507570	7.0	150	250
DL507575	7.5	150	250
DL507580	8.0	150	250
DL507585	8.5	150	250
DL507588	8.8	150	250
DL507590	9.0	150	250
DL507595	9.5	150	250
DL507800	10.0	150	250
DL507803	10.3	150	250
DL507805	10.5	150	250
DL507810	11.0	150	250
DL507815	11.5	150	250
DL507820	12.0	150	250
DL507825	12.5	150	250
DL507830	13.0	150	250

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DL507650	5.0	180	300
DL507653	5.3	180	300
DL507655	5.5	180	300
DL507660	6.0	180	300
DL507665	6.5	180	300
DL507668	6.8	180	300
DL507670	7.0	180	300
DL507675	7.5	180	300
DL507680	8.0	180	300
DL507685	8.5	180	300
DL507688	8.8	180	300
DL507690	9.0	180	300
DL507695	9.5	180	300
DL507900	10.0	180	300
DL507903	10.3	180	300
DL507905	10.5	180	300
DL507910	11.0	180	300
DL507915	11.5	180	300
DL507920	12.0	180	300
DL507925	12.5	180	300
DL507930	13.0	180	300

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	
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	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				
	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			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
HB											15	30	25	38	34			55	60	42	55
Recommended	◎	◎	○																		



# STRAIGHT SHANK DRILLS

## RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDPARAMETER

### DL507 SERIES

### HSS-E, DH50 WORM PATTERN DRILLS

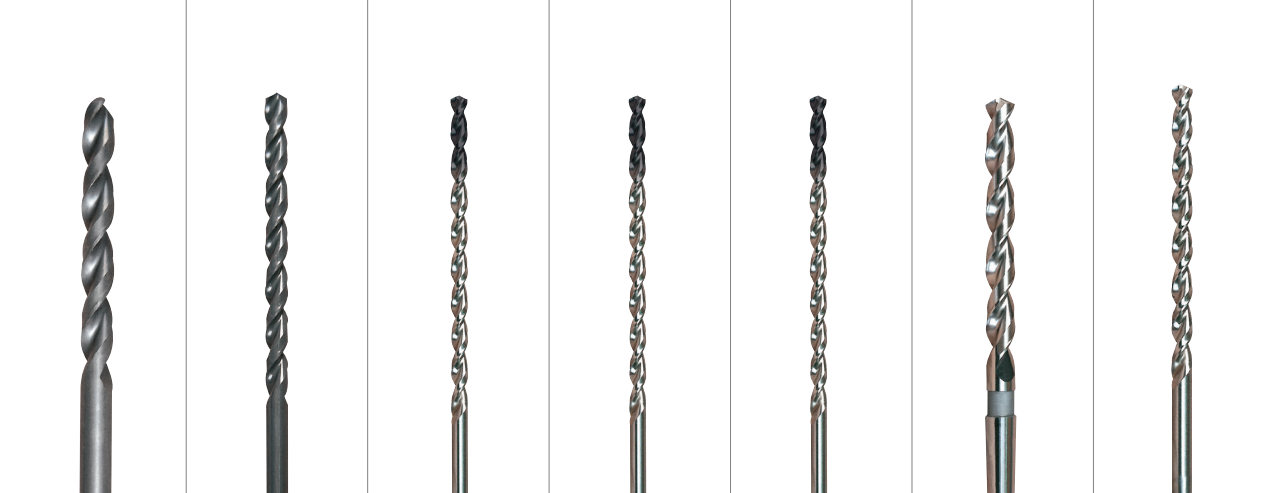
RPM = rev./min.  
FEED = mm/rev.

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	15	RPM FEED	2390 0.01~0.03	1590 0.02~0.04	1190 0.03~0.06	800 0.04~0.08	600 0.04~0.10	480 0.07~0.13	370 0.09~0.15			
	2													
	3													
	4													
	5	Low alloy steel												
	6													
	7													
	8													
	9													
	10				High alloyed steel, and tool steel									
	11													
M	12	Stainless steel												
	13													
	14													
K	15	Grey cast iron												
	16													
	17	Nodular cast iron												
	18													
	19		Malleable cast iron											
	20													
N	21	Aluminum-wrought alloy	55	RPM FEED	8750 0.02~0.04	5840 0.03~0.06	4380 0.04~0.08	2920 0.08~0.12	2190 0.10~0.16	1750 0.14~0.20	1350 0.16~0.26			
	22				7160 0.02~0.04	4770 0.03~0.06	3580 0.04~0.08	2390 0.08~0.12	1790 0.10~0.16	1430 0.14~0.20	1100 0.16~0.26			
	23	Aluminum-cast, alloyed			40	RPM FEED	6370 0.02~0.04	4240 0.03~0.06	3180 0.04~0.08	2120 0.08~0.12	1590 0.10~0.16	1270 0.14~0.20	980 0.16~0.26	
	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													
	36		Titanium Alloys											
	37													
H	38	Hardened steel												
	39													
	40	Chilled Cast Iron												
	41	Hardened Cast Iron												



DH100 DL505	DH100 DL504	DH100 DT600	DH100 DT692	DH100 DT693	DH100 DL608	DH50 DL507
DIN338	DIN340	DIN1869/1	DIN1869/2	DIN1869/3	DIN341	-
JOBBER	LONG	EXTRA LONG			LONG	EXTRA LONG
D2.0	D2.0	D2.0	D3.0	D4.0	D13.0	D2.0
D13.0	D13.0	D10.5	D10.2	D10.0	D30.0	D13.0
269	271	272			273	274

Steam Tempered		TiAlN			Bright	
----------------	--	-------	--	--	--------	--



⊙	⊙	⊙	⊙	⊙	⊙	○	1
⊙	⊙	⊙	⊙	⊙	⊙	○	2
⊙	⊙	⊙	⊙	⊙	⊙	○	3
○	○	○	○	○	○	○	4
⊙	⊙	⊙	⊙	⊙	⊙	○	5
○	○	○	○	○	○	○	6 P
○	○	○	○	○	○	○	7
○	○	○	○	○	○	○	8
○	○	○	○	○	○	○	9
○	○	○	○	○	○	○	10
○	○	○	○	○	○	○	11
○	○	○	○	○	○	○	12
○	○	○	○	○	○	○	13 M
○	○	○	○	○	○	○	14
○	○	○	○	○	○	○	15
○	○	○	○	○	○	○	16
○	○	○	○	○	○	○	17 K
○	○	○	○	○	○	○	18
○	○	○	○	○	○	○	19
○	○	○	○	○	○	○	20
○	○	○	○	○	○	⊙	21
○	○	○	○	○	○	⊙	22
○	○	○	○	○	○	○	23
○	○	○	○	○	○	○	24
○	○	○	○	○	○	○	25 N
○	○	○	○	○	○	○	26
○	○	○	○	○	○	○	27
○	○	○	○	○	○	○	28
○	○	○	○	○	○	○	29
○	○	○	○	○	○	○	30
○	○	○	○	○	○	○	31
○	○	○	○	○	○	○	32
○	○	○	○	○	○	○	33
○	○	○	○	○	○	○	34 S
○	○	○	○	○	○	○	35
○	○	○	○	○	○	○	36
○	○	○	○	○	○	○	37
○	○	○	○	○	○	○	38
○	○	○	○	○	○	○	39 H
○	○	○	○	○	○	○	40
○	○	○	○	○	○	○	41