




### HSS-E, DH100 STRAIGHT SHANK DRILLS for DEEP HOLES, GOLD-P COATED JOBBER

-  HSS-E DH100 SPIRALBOHRER, für TIEFLOCH mit ZYLINDERSCHAFT, GOLD-P BESCHICHTET KURZ
-  Forets GOLD-P HSS-E queue cylindrique revêtus, DH100 pour perçage profond, série courte COURTE
-  PUNTE GAMBO CILINDRICO DH100 IN HSS-E, PER FORI PROFONDI, GOLD-P CORTA

- ▶ **Flute Geometry** : Right hand, 38° helix, DH100 worm pattern type.
- ▶ **Point Angle** : 130°, Split point giving higher chip removal.
- ▶ **Surface treatment** : Bright body, TiN coating on working area.
- ▶ **Application** : Drilling deep holes in non alloy steels, alloy steels, grey cast iron, malleable cast iron, or magnesium alloys.

- ▶ **Nutenform** : 38° Rechtsspirale, DH 100 Flachnut
- ▶ **Spitzenwinkel** : Durch 130° Kreuzanschliff Gute Spanabfuhr
- ▶ **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich
- ▶ **Anwendung** : Tiefe Bohrungen in unlegierten und legierten Stählen, Grauguss, Temperguss, Aluminium- und Magnesiumlegierungen



DIN 338

HSS-E

38°

h8

130°

P.219

### ▶ DH100 worm pattern drills

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DLGP506020	2.0	24	49
DLGP506021	2.1	24	49
DLGP506022	2.2	27	53
DLGP506023	2.3	27	53
DLGP506024	2.4	30	57
DLGP506025	2.5	30	57
DLGP506026	2.6	30	57
DLGP506027	2.7	33	61
DLGP506028	2.8	33	61
DLGP506029	2.9	33	61
DLGP506030	3.0	33	61
DLGP506031	3.1	36	65
DLGP506032	3.2	36	65
DLGP506033	3.3	36	65
DLGP506034	3.4	39	70
DLGP506035	3.5	39	70
DLGP506036	3.6	39	70
DLGP506037	3.7	39	70
DLGP506038	3.8	43	75
DLGP506039	3.9	43	75
DLGP506040	4.0	43	75
DLGP506041	4.1	43	75
DLGP506042	4.2	43	75
DLGP506043	4.3	47	80
DLGP506044	4.4	47	80
DLGP506045	4.5	47	80

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DLGP506046	4.6	47	80
DLGP506047	4.7	47	80
DLGP506048	4.8	52	86
DLGP506049	4.9	52	86
DLGP506050	5.0	52	86
DLGP506051	5.1	52	86
DLGP506052	5.2	52	86
DLGP506053	5.3	52	86
DLGP506054	5.4	57	93
DLGP506055	5.5	57	93
DLGP506056	5.6	57	93
DLGP506057	5.7	57	93
DLGP506058	5.8	57	93
DLGP506059	5.9	57	93
DLGP506060	6.0	57	93
DLGP506061	6.1	63	101
DLGP506062	6.2	63	101
DLGP506063	6.3	63	101
DLGP506064	6.4	63	101
DLGP506065	6.5	63	101
DLGP506066	6.6	63	101
DLGP506067	6.7	63	101
DLGP506068	6.8	69	109
DLGP506069	6.9	69	109
DLGP506070	7.0	69	109
DLGP506071	7.1	69	109

Unit : mm

▶ NEXT PAGE

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	32	29	32	38	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																					

◎ : Excellent ○ : Good

**HSS-E, DH100 STRAIGHT SHANK DRILLS for DEEP HOLES, GOLD-P COATED**

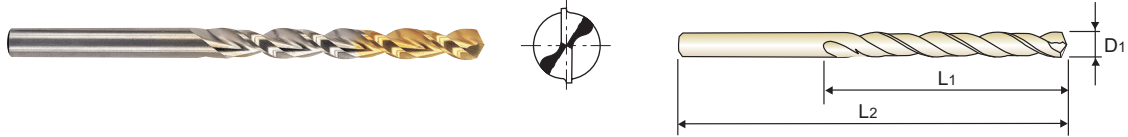
**JOBBER**

- 🇩🇪 HSS-E DH100 SPIRALBOHRER, für TIEFLOCH mit ZYLINDERSCHAFT, GOLD-P BESCHICHTET
- 🇫🇷 Forets GOLD-P HSS-E queue cylindrique revêtus, DH100 pour perçage profond, série courte
- 🇮🇹 PUNTE GAMBO CILINDRICO DH100 IN HSS-E, PER FORI PROFONDI, GOLD-P

**KURZ**  
**COURTE**  
**CORTA**

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- ▶ **Point Angle** : 130°, Split point giving higher chip removal.
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**DIN 338** **HSS-E** **38°** **h8** **130°** P.219

**▶ DH100 worm pattern drills**

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DLGP506072	7.2	69	109
DLGP506073	7.3	69	109
DLGP506074	7.4	69	109
DLGP506075	7.5	69	109
DLGP506076	7.6	75	117
DLGP506077	7.7	75	117
DLGP506078	7.8	75	117
DLGP506079	7.9	75	117
DLGP506080	8.0	75	117
DLGP506081	8.1	75	117
DLGP506082	8.2	75	117
DLGP506083	8.3	75	117
DLGP506084	8.4	75	117
DLGP506085	8.5	75	117
DLGP506086	8.6	81	125
DLGP506087	8.7	81	125
DLGP506088	8.8	81	125
DLGP506089	8.9	81	125
DLGP506090	9.0	81	125
DLGP506091	9.1	81	125
DLGP506092	9.2	81	125
DLGP506093	9.3	81	125
DLGP506094	9.4	81	125
DLGP506095	9.5	81	125
DLGP506096	9.6	87	133
DLGP506097	9.7	87	133

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DLGP506098	9.8	87	133
DLGP506099	9.9	87	133
DLGP506100	10.0	87	133
DLGP506101	10.1	87	133
DLGP506102	10.2	87	133
DLGP506103	10.3	87	133
DLGP506104	10.4	87	133
DLGP506105	10.5	87	133
DLGP506106	10.6	87	133
DLGP506107	10.7	94	142
DLGP506108	10.8	94	142
DLGP506109	10.9	94	142
DLGP506110	11.0	94	142
DLGP506111	11.1	94	142
DLGP506112	11.2	94	142
DLGP506113	11.3	94	142
DLGP506114	11.4	94	142
DLGP506115	11.5	94	142
DLGP506116	11.6	94	142
DLGP506117	11.7	94	142
DLGP506118	11.8	94	142
DLGP506119	11.9	101	151
DLGP506120	12.0	101	151
DLGP506121	12.1	101	151
DLGP506122	12.2	101	151
DLGP506123	12.3	101	151

▶ 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	10	29	32	38	15	35	15	23	10	10	26	3	25			
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																					

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DIN 338
HSS-E
38°
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**▶ DH100 worm pattern drills**

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DLGP506124	12.4	101	151
DLGP506125	12.5	101	151
DLGP506126	12.6	101	151
DLGP506127	12.7	101	151

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DLGP506128	12.8	101	151
DLGP506129	12.9	101	151
DLGP506130	13.0	101	151

◎ : Excellent ○ : Good

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		
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
VDI 3323																					
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
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323																					
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																					



**RECOMMENDED CUTTING CONDITIONS**  
**EMPHOHLENE SCHNEIDPARAMETER**

**D1GP125, D1GP165, DLGP195, DLGP506 SERIES**

**HSS & HSS-E GOLD-P 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	40	RPM	6370	4240	3180	2120	1590	1270	980
			FEED	0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24	
	2		RPM	5570	3710	2790	1860	1390	1110	860	
			FEED	0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24	
	3		RPM	4770	3180	2390	1590	1190	950	730	
		FEED	0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24		
	4	RPM	3180	2120	1590	1060	800	640	490		
		FEED	0.02-0.05	0.02-0.06	0.04-0.08	0.04-0.10	0.06-0.12	0.08-0.14	0.12-0.18		
	5										
	6	Low alloy steel	35	RPM	5570	3710	2790	1860	1390	1110	860
			FEED	0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24	
7	RPM		4770	3180	2390	1590	1190	950	730		
	FEED		0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24		
8	RPM	4770	3180	2390	1590	1190	950	730			
	FEED	0.02-0.05	0.02-0.06	0.04-0.08	0.04-0.10	0.06-0.12	0.08-0.14	0.12-0.18			
9											
10	High alloyed steel, and tool steel	20	RPM	3180	2120	1590	1060	800	640	490	
		FEED	0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24		
11											
M	12	Stainless steel	25	RPM	3980	2650	1990	1330	990	800	610
			FEED	0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24	
	13		RPM	3180	2120	1590	1060	800	640	490	
	FEED	0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24			
14	RPM	2390	1590	1190	800	600	480	370			
	FEED	0.02-0.05	0.02-0.06	0.04-0.08	0.04-0.10	0.06-0.12	0.08-0.14	0.12-0.18			
K	15	Grey cast iron	40	RPM	6370	4240	3180	2120	1590	1270	980
			FEED	0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24	
	16	RPM	5570	3710	2790	1860	1390	1110	860		
		FEED	0.02-0.05	0.02-0.06	0.04-0.08	0.04-0.10	0.06-0.12	0.08-0.14	0.12-0.18		
	17	Nodular cast iron	40	RPM	6370	4240	3180	2120	1590	1270	980
			FEED	0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24	
	18	RPM	4770	3180	2390	1590	1190	950	730		
		FEED	0.02-0.05	0.02-0.06	0.04-0.08	0.04-0.10	0.06-0.12	0.08-0.14	0.12-0.18		
19	Malleable cast iron	35	RPM	5570	3710	2790	1860	1390	1110	860	
		FEED	0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24		
20	RPM	4770	3180	2390	1590	1190	950	730			
	FEED	0.02-0.05	0.02-0.06	0.04-0.08	0.04-0.10	0.06-0.12	0.08-0.14	0.12-0.18			
N	21	Aluminum-wrought alloy	65	RPM	10350	6900	5170	3450	2590	2070	1590
			FEED	0.05-0.09	0.07-0.11	0.12-0.16	0.12-0.18	0.14-0.20	0.16-0.22	0.22-0.28	
	22	RPM	10350	6900	5170	3450	2590	2070	1590		
		FEED	0.05-0.09	0.07-0.11	0.12-0.16	0.12-0.18	0.14-0.20	0.16-0.22	0.22-0.28		
	23	Aluminum-cast, alloyed	50	RPM	7960	5310	3980	2650	1990	1590	1220
			FEED	0.05-0.09	0.07-0.11	0.12-0.16	0.12-0.18	0.14-0.20	0.16-0.22	0.22-0.28	
	24										
	25										
	26	Copper and Copper Alloys (Bronze / Brass)									
	27										
28											
29	Non Metallic Materials	30	RPM	4770	3180	2390	1590	1190	950	730	
		FEED	0.04-0.08	0.06-0.10	0.08-0.12	0.12-0.16	0.12-0.18	0.16-0.22	0.18-0.24		
30											
S	31	Heat Resistant Super Alloys									
	32										
	33										
	34										
	35										
	36	Titanium Alloys	20	RPM	3180	2120	1590	1060	800	640	490
			FEED	0.02-0.05	0.02-0.06	0.04-0.08	0.05-0.09	0.06-0.10	0.07-0.13	0.08-0.14	
37											
H	38	Hardened steel									
	39										
	40	Chilled Cast Iron									
	41	Hardened Cast Iron									

SELECTION GUIDE



SERIES

D1GP125

D1GP165

STANDARD

DIN338

DIN338

LENGTH

JOBBER

JOBBER

SIZE MIN

D1.0

D1.6

SIZE MAX

D13.0

D13.0

PAGE

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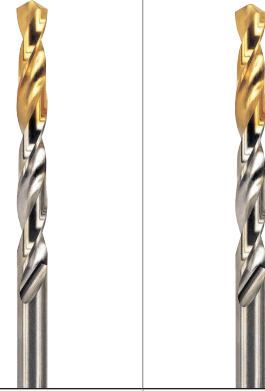
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SURFACE TREATMENT

TiN

# HSS & HSS-E GOLD-P DRILLS

Same Performance as Full TiN-coated Drills



Please visit [globalyg1.com/mat](http://globalyg1.com/mat) for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : P.219

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 (Bronze / Brass)	Cutting Alloys, PB>1%	110			
	27	Non Metallic Materials	CuZn, CuSnZn (Brass)	90				
	28		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		Annealed	250	25			
	34		Ni or Co Based Cured	350	38			
	35	Cast	320	34				
	36	Titanium Alloys	Pure Titanium	400 Rm		○	○	
	37		Alpha + Beta Alloys Hardened	1050 Rm				
H	38	Hardened steel	Hardened	550	55			
	39		Hardened	630	60			
	40	Chilled Cast Iron	Cast	400	42			
	41	Hardened Cast Iron	Hardened	550	55			

DLGP195	DLGP506
DIN338	DIN338
JOBBER	JOBBER
D1.0	D2.0
D13.0	D13.0
212	215
TiN	



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

GOLD-P DRILL SETS			
SET1	SET2	SET3	SET4
19pcs	25pcs	24pcs	91pcs
1.0mm ~ 10.0mm ×0.5mm step	1.0mm ~ 13.0mm ×0.5mm step	1.0mm ~ 10.5mm ×0.5mm step +3.3 +4.2 +6.8 +10.2	1.0mm ~ 10.0mm ×0.1mm step