



Leading Through Innovation



**HSS & HSS-E**

# **GOLD-P DRILLS**

**GOLD-P BOHRER**

- Same Performance as Full TiN-coated Drills
- Gleiche Leistung, wie bei voll TiN-beschichteten Bohrern

SELECTION GUIDE



SERIES	D1GP125	D1GP165
STANDARD	DIN338	DIN338
LENGTH	JOBBER	JOBBER
SIZE MIN	D1.0	D1.6
SIZE MAX	D13.0	D13.0
PAGE	A194	A197

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.A207

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)	CuZn, CuSnZn (Brass)	90	○
	27	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic	○	○	
	28		Rubber, Wood, etc.	○	○	
	29		○	○	○	
	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		Cast	400	42	○
41	Hardened Cast Iron	Hardened	550	55	○	

SERIES	DLGP195	DLGP506
STANDARD	DIN338	DIN338
LENGTH	JOBBER	JOBBER
SIZE MIN	D1.0	D2.0
SIZE MAX	D13.0	D13.0
PAGE	A200	A203

TiN



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)	CuZn, CuSnZn (Brass)	90	○
	27	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic	○	○	
	28		Rubber, Wood, etc.	○	○	
	29		○	○	○	
	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		Cast	400	42	○
41	Hardened Cast Iron	Hardened	550	55	○	

### GOLD-P DRILL SETS

SET1	SET2	SET3	SET4
<b>19pcs</b>	<b>25pcs</b>	<b>24pcs</b>	<b>91pcs</b>
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
<b>p. A206</b>			

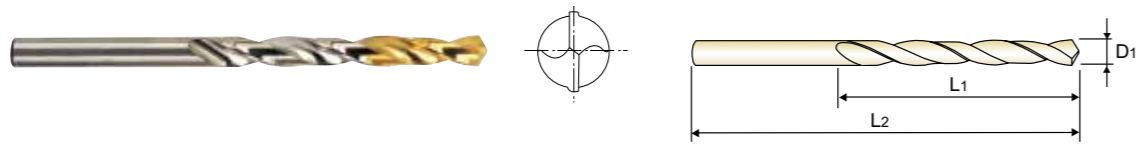
## HSS, STRAIGHT SHANK DRILLS, GOLD-P COATED

- HSS SPIRALBOHRER, GOLD-P BESCHICHTET
- Forets GOLD-P HSS queue cylindrique revêtus, série courte
- PUNTE IN HSS, GAMBO CILINDRICO, GOLD-P

► **Flute Geometry** : Right hand helix  
 ► **Point Angle** : 118°, Normal point  
 ► **Surface treatment** : Bright body, TiN coating on working area  
 ► **Application** : Drilling steels, Cast steels alloyed and Non-alloyed, Grey cast iron, Graphite, Malleable cast iron

► **Nutenform** : Rechtsspirale  
 ► **Spitzenwinkel** : 118° Normalanschliff  
 ► **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich  
 ► **Anwendung** : Stahl, legierter und unlegierter Stahlguss, Grauguss, Graphit, Temperguss

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



Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2		D1	L1	L2
D1GP125010	1.0	12	34	D1GP125036	3.6	39	70
D1GP125011	1.1	14	36	D1GP125037	3.7	39	70
D1GP125012	1.2	16	38	D1GP125038	3.8	43	75
D1GP125013	1.3	16	38	D1GP125039	3.9	43	75
D1GP125014	1.4	18	40	D1GP125040	4.0	43	75
D1GP125015	1.5	18	40	D1GP125041	4.1	43	75
D1GP125016	1.6	20	43	D1GP125042	4.2	43	75
D1GP125017	1.7	20	43	D1GP125043	4.3	47	80
D1GP125018	1.8	22	46	D1GP125044	4.4	47	80
D1GP125019	1.9	22	46	D1GP125045	4.5	47	80
D1GP125020	2.0	24	49	D1GP125046	4.6	47	80
D1GP125021	2.1	24	49	D1GP125047	4.7	47	80
D1GP125022	2.2	27	53	D1GP125048	4.8	52	86
D1GP125023	2.3	27	53	D1GP125049	4.9	52	86
D1GP125024	2.4	30	57	D1GP125050	5.0	52	86
D1GP125025	2.5	30	57	D1GP125051	5.1	52	86
D1GP125026	2.6	30	57	D1GP125052	5.2	52	86
D1GP125027	2.7	33	61	D1GP125053	5.3	52	86
D1GP125028	2.8	33	61	D1GP125054	5.4	57	93
D1GP125029	2.9	33	61	D1GP125055	5.5	57	93
D1GP125030	3.0	33	61	D1GP125056	5.6	57	93
D1GP125031	3.1	36	65	D1GP125057	5.7	57	93
D1GP125032	3.2	36	65	D1GP125058	5.8	57	93
D1GP125033	3.3	36	65	D1GP125059	5.9	57	93
D1GP125034	3.4	39	70	D1GP125060	6.0	57	93
D1GP125035	3.5	39	70	D1GP125061	6.1	63	101

► NEXT PAGE

◎ : 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	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 Material Description	N							S						H							
	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)			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			15	30	25	38	34	40	41	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

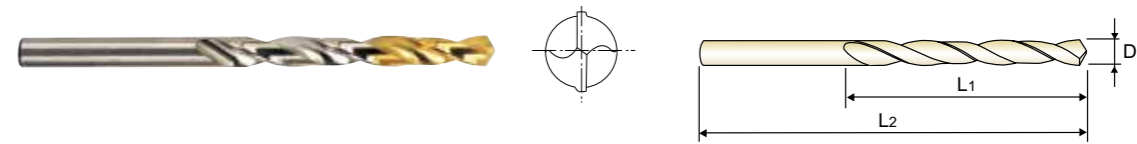
## HSS, STRAIGHT SHANK DRILLS, GOLD-P COATED

- HSS SPIRALBOHRER, GOLD-P BESCHICHTET
- Forets GOLD-P HSS queue cylindrique revêtus, série courte
- PUNTE IN HSS, GAMBO CILINDRICO, GOLD-P

► **Flute Geometry** : Right hand helix  
 ► **Point Angle** : 118°, Normal point  
 ► **Surface treatment** : Bright body, TiN coating on working area  
 ► **Application** : Drilling steels, Cast steels alloyed and Non-alloyed, Grey cast iron, Graphite, Malleable cast iron

► **Nutenform** : Rechtsspirale  
 ► **Spitzenwinkel** : 118° Normalanschliff  
 ► **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich  
 ► **Anwendung** : Stahl, legierter und unlegierter Stahlguss, Grauguss, Graphit, Temperguss

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



Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2		D1	L1	L2
D1GP125062	6.2	63	101	D1GP125088	8.8	81	125
D1GP125063	6.3	63	101	D1GP125089	8.9	81	125
D1GP125064	6.4	63	101	D1GP125090	9.0	81	125
D1GP125065	6.5	63	101	D1GP125091	9.1	81	125
D1GP125066	6.6	63	101	D1GP125092	9.2	81	125
D1GP125067	6.7	63	101	D1GP125093	9.3	81	125
D1GP125068	6.8	69	109	D1GP125094	9.4	81	125
D1GP125069	6.9	69	109	D1GP125095	9.5	81	125
D1GP125070	7.0	69	109	D1GP125096	9.6	87	133
D1GP125071	7.1	69	109	D1GP125097	9.7	87	133
D1GP125072	7.2	69	109	D1GP125098	9.8	87	133
D1GP125073	7.3	69	109	D1GP125099	9.9	87	133
D1GP125074	7.4	69	109	D1GP125100	10.0	87	133
D1GP125075	7.5	69	109	D1GP125101	10.1	87	133
D1GP125076	7.6	75	117	D1GP125102	10.2	87	133
D1GP125077	7.7	75	117	D1GP125103	10.3	87	133
D1GP125078	7.8	75	117	D1GP125104	10.4	87	133
D1GP125079	7.9	75	117	D1GP125105	10.5	87	133
D1GP125080	8.0	75	117	D1GP125106	10.6	87	133
D1GP125081	8.1	75	117	D1GP125107	10.7	94	142
D1GP125082	8.2	75	117	D1GP125108	10.8	94	142
D1GP125083	8.3	75	117	D1GP125109	10.9	94	142
D1GP125084	8.4	75	117	D1GP125110	11.0	94	142
D1GP125085	8.5	75	117	D1GP125111	11.1	94	142
D1GP125086	8.6	81	125	D1GP125112	11.2	94	142
D1GP125087	8.7	81	125	D1GP125113	11.3	94	142

► NEXT PAGE

◎ : 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	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 Material Description	N							S						H							
	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)			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			15	30	25	38	34	40	41	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

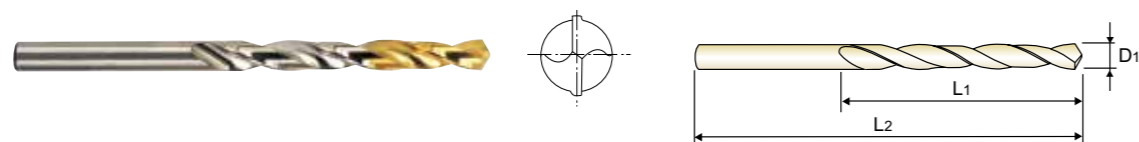
**HSS, STRAIGHT SHANK DRILLS, GOLD-P COATED**

**JOBBER**

- HSS SPIRALBOHRER, GOLD-P BESCHICHTET
- Forets GOLD-P HSS queue cylindrique revêtus, série courte
- PUNTE IN HSS, GAMBO CILINDRICO, GOLD-P

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

- **Flute Geometry** : Right hand helix
- **Point Angle** : 118°, Normal point
- **Surface treatment** : Bright body, TiN coating on working area
- **Application** : Drilling steels, Cast steels alloyed and Non-alloyed, Grey cast iron, Graphite, Malleable cast iron
- **Nutenform** : Rechtsspirale
- **Spitzenwinkel** : 118° Normalanschiff
- **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich
- **Anwendung** : Stahl, legierter und unlegierter Stahlguss, Grauguss, Graphit, Temperguss



Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D1GP125114	11.4	94	142
D1GP125115	11.5	94	142
D1GP125116	11.6	94	142
D1GP125117	11.7	94	142
D1GP125118	11.8	94	142
D1GP125119	11.9	101	151
D1GP125120	12.0	101	151
D1GP125121	12.1	101	151
D1GP125122	12.2	101	151
D1GP125123	12.3	101	151

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D1GP125124	12.4	101	151
D1GP125125	12.5	101	151
D1GP125126	12.6	101	151
D1GP125127	12.7	101	151
D1GP125128	12.8	101	151
D1GP125129	12.9	101	151
D1GP125130	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	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	35	15	35	23	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	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	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			15	30	25	38	34	55	60	42	55	55	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○			○					○					○					

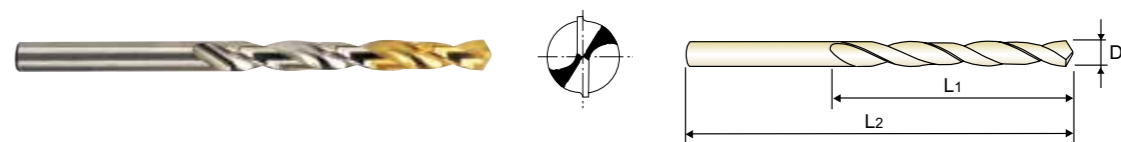
**HSS, STRAIGHT SHANK DRILLS, GOLD-P COATED**

**JOBBER**

- HSS SPIRALBOHRER, GOLD-P BESCHICHTET
- Forets GOLD-P HSS queue cylindrique revêtus, série courte
- PUNTE IN HSS, GAMBO CILINDRICO, GOLD-P

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

- **Flute Geometry** : Right hand helix
- **Point Angle** : 118°, Split point
- **Surface treatment** : Bright body, TiN coating on working area
- **Application** : Drilling steels, Cast steels alloyed and Non-alloyed, Grey cast iron, Graphite, Malleable cast iron
- **Nutenform** : Rechtsspirale
- **Spitzenwinkel** : 118° Kreuzanschiff
- **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich
- **Anwendung** : Stahl, legierter und unlegierter Stahlguss, Grauguss, Graphit, Temperguss



Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D1GP165016	1.6	20	43
D1GP165017	1.7	20	43
D1GP165018	1.8	22	46
D1GP165019	1.9	22	46
D1GP165020	2.0	24	49
D1GP165021	2.1	24	49
D1GP165022	2.2	27	53
D1GP165023	2.3	27	53
D1GP165024	2.4	30	57
D1GP165025	2.5	30	57
D1GP165026	2.6	30	57
D1GP165027	2.7	33	61
D1GP165028	2.8	33	61
D1GP165029	2.9	33	61
D1GP165030	3.0	33	61
D1GP165031	3.1	36	65
D1GP165032	3.2	36	65
D1GP165033	3.3	36	65
D1GP165034	3.4	39	70
D1GP165035	3.5	39	70
D1GP165036	3.6	39	70
D1GP165037	3.7	39	70
D1GP165038	3.8	43	75
D1GP165039	3.9	43	75
D1GP165040	4.0	43	75
D1GP165041	4.1	43	75

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D1GP165042	4.2	43	75
D1GP165043	4.3	47	80
D1GP165044	4.4	47	80
D1GP165045	4.5	47	80
D1GP165046	4.6	47	80
D1GP165047	4.7	47	80
D1GP165048	4.8	52	86
D1GP165049	4.9	52	86
D1GP165050	5.0	52	86
D1GP165051	5.1	52	86
D1GP165052	5.2	52	86
D1GP165053	5.3	52	86
D1GP165054	5.4	57	93
D1GP165055	5.5	57	93
D1GP165056	5.6	57	93
D1GP165057	5.7	57	93
D1GP165058	5.8	57	93
D1GP165059	5.9	57	93
D1GP165060	6.0	57	93
D1GP165061	6.1	63	101
D1GP165062	6.2	63	101
D1GP165063	6.3	63	101
D1GP165064	6.4	63	101
D1GP165065	6.5	63	101
D1GP165066	6.6	63	101
D1GP165067	6.7	63	101

► NEXT PAGE

◎ : 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	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	35	15	35	23	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	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	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			15	30	25	38	34	55	60	42	55	55	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○			○					○					○					

**GOLD-P COATED DRILL SETS**

- GOLD-P BESCHICHTET BOHRER SATS
- Coffrets de Forets GOLD-P revêtus
- SET DI PUNTE GOLD-P



**DIN338 DRILL SETS JOBBER LENGTH Gold-P coated Drills**

EDP No.	DESCRIPTON	SIZE	Q'TY
<b>D1GP165SET1</b>	HSS Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-10.0x0.5mm step	19 pcs
<b>D1GP165SET2</b>	HSS Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-13.0x0.5mm step	25 pcs
<b>D1GP165SET3</b>	HSS Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-10.5x0.5mm step +3.3 +4.2 +6.8 +10.2	24 pcs
<b>DLGP195SET1</b>	HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-10.0x0.5mm step	19 pcs
<b>DLGP195SET2</b>	HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-13.0x0.5mm step	25 pcs
<b>DLGP195SET3</b>	HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-10.5x0.5mm step +3.3 +4.2 +6.8 +10.2	24 pcs
<b>DLGPSET982</b>	HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)	1.0-10.0x0.1mm step	91 pcs

**D1GP125, D1GP165, DLGP195, DLGP506 SERIES HSS & HSS-E GOLD-P DRILLS**

VC = M/MIN  
RPM = rev./min.  
FEED = mm/rev.

ISO	VDI 3323	Material Description	Vc	Parameter	Drill Diameter (mm)	Vc	Parameter	Drill Diameter (mm)							
								1.0	2.0	3.0	4.0	6.0	8.0	10.0	13.0
<b>P</b>	1	Non-alloy steel	28	RPM	8910	40	RPM	6370	4240	3180	2120	1590	1270	980	
				FEED	0.01-0.03		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	25	RPM	7960	35	RPM	5570	3710	2790	1860	1390	1110	860
					FEED	0.01-0.03		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	20	RPM	6370	30	RPM	4770	3180	2390	1590	1190	950	730		
			FEED	0.01-0.03		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	15	RPM	4770	20	RPM	3180	2120	1590	1060	800	640	490		
			FEED	0.01-0.02		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		
	6	25	Low alloy steel	RPM	7960	35	RPM	5570	3710	2790	1860	1390	1110	860	
				FEED	0.01-0.03		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	
RPM				6370	30		RPM	4770	3180	2390	1590	1190	950	730	
FEED				0.01-0.03			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	20	RPM	6370	30	RPM	4770	3180	2390	1590	1190	950	730			
		FEED	0.01-0.03		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	20	RPM	6370	30	RPM	4770	3180	2390	1590	1190	950	730			
		FEED	0.01-0.02		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			
10	15	High alloyed steel, and tool steel	RPM	4770	20	RPM	3180	2120	1590	1060	800	640	490		
			FEED	0.01-0.03		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		
			RPM	5730		25	RPM	3980	2650	1990	1330	990	800	610	
			FEED	0.01-0.03			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	
12	18	Stainless steel	RPM	4770	20	RPM	3180	2120	1590	1060	800	640	490		
			FEED	0.01-0.03		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	15	RPM	3180	15	RPM	2390	1590	1190	800	600	480	370			
		FEED	0.01-0.02		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			
<b>M</b>	15	Grey cast iron	28	RPM	8910	40	RPM	6370	4240	3180	2120	1590	1270	980	
				FEED	0.01-0.03		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	25	RPM	7960	35	RPM	5570	3710	2790	1860	1390	1110	860
					FEED	0.01-0.02		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	28	Nodular cast iron	RPM	8910	40	RPM	6370	4240	3180	2120	1590	1270	980	
				FEED	0.01-0.03		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	20	RPM	6370	30	RPM	4770	3180	2390	1590	1190	950	730		
			FEED	0.01-0.02		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	25	Malleable cast iron	RPM	7960	35	RPM	5570	3710	2790	1860	1390	1110	860	
				FEED	0.01-0.03		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	
RPM				6370	30		RPM	4770	3180	2390	1590	1190	950	730	
FEED				0.01-0.02			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	
<b>N</b>	21	Aluminum-wrought alloy	RPM	14320	65	RPM	10350	6900	5170	3450	2590	2070	1590		
			FEED	0.02-0.05		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	45	RPM	14320	65	RPM	10350	6900	5170	3450	2590	2070	1590		
			FEED	0.02-0.05		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	35	Aluminum-cast, alloyed	RPM	11140	50	RPM	7960	5310	3980	2650	1990	1590	1220	
				FEED	0.02-0.05		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	
29	20	Non Metallic Materials	RPM	6370	30	RPM	4770	3180	2390	1590	1190	950	730		
			FEED	0.01-0.03		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		
36	15	Titanium Alloys	RPM	4770	20	RPM	3180	2120	1590	1060	800	640	490		
			FEED	0.01-0.02		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		