



Leading Through Innovation



**HSSCo8 & HSS-E**

# HPD STRAIGHT SHANK DRILLS

**HPD BOHRER**

- High Precision Drilling for General Steels & Stainless Steels
- Hochpräzises Bohren für allgemeine Stähle und rostfreie Stähle

SELECTION GUIDE



SERIES

D4541

D4542

TOOL MATERIAL

HSSCo8

LENGTH

STUB

JOBBER

SIZE MIN

D2.0

D2.0

SIZE MAX

D13.0

D32.0

PAGE

182

186

SURFACE TREATMENT

TiN

# HSSCo8 & HSS-E HPD STRAIGHT SHANK DRILLS

High Precision Drilling for General Steels & Stainless Steels



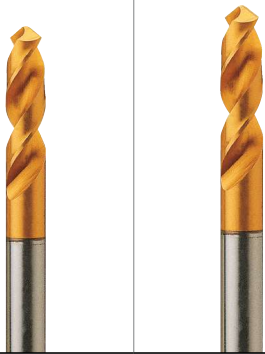
Please visit  
[globalyg1.com/mat](http://globalyg1.com/mat)  
for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : P.198

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		Ferritic		130			
20	Malleable cast iron	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		CuZn, CuSnZn (Brass)		90			
	28		CuSn, lead-free copper and electrolytic copper		100			
	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic					
	30		Rubber, Wood, etc.					
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15		
	32			Cured	280	30		
	33		Ni or Co Based	Annealed	250	25		
	34			Cured	350	38		
	35			Cast	320	34		
	36	Titanium Alloys	Pure Titanium		400 Rm			
	37		Alpha + Beta Alloys		1050 Rm			
H	38	Hardened steel	Hardened		550	55		
	39		Hardened		630	60		
	40		Cast		400	42		
	41	Hardened Cast Iron	Hardened		550	55		

DJ543	DJ544
HSS-E	
STUB	JOBBER
D2.0	D2.0
D13.0	D20.0
<b>192</b>	<b>195</b>
TiN	



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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

### HSSCo8, HPD TWIST DRILLS for STEELS

STUB

- PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE
- Forets HPD HSSCo Premium pour Aciers, série extra-courte
- PUNTE ELICOIDALI HPD IN PREMIUM HSS Co, PER ACCIAI

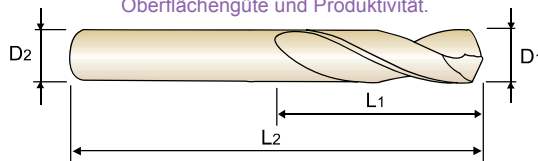
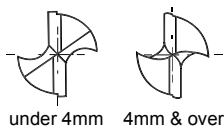
- EXTRA KURZ
- EXTRA-COURTE
- EXTRA CORTA

► **Application** : Designed for accurate drilling on NC/CNC machines. Drilling hard and tough materials, alloyed tool steels, inconel, nimonic, cast iron, aluminum die casting, etc.

► **Advantage** : Helical thinning - good chip removal, self-centering, reducing thrust and improving accuracy. Reinforced web and stub length - increasing rigidity, reducing vibration and deflection. Premium Cobalt HSS with superior TiN coating - higher speed and feed, longer tool life. High quality & good surface finish, high productivity

► **Anwendung** : Für präzises Bohren mit NC/CNC Maschinen, geeignet zum Bearbeiten von harten und zähen Werkstücken, Legierungen, Werkzeugstahl, Inconel, Inconel, Gusseisen, Aluminium-Guss usw.

► **Vorteile** : Durch Kreuzanschliff gute Spanentfernung, reduzierter Druck, verbesserte Genauigkeit, selbstzentriert, extra kurze Ausführung, verbesserte Stabilität, weniger Vibrationen und Abdrängung, Premium Kobalt HSS mit hochwertiger TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.



D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length
	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>
TiN			
D4541020	2.00	12	44
D4541920	2.05	12	44
D4541021	2.10	12	44
D4541921	2.15	13	45
D4541022	2.20	13	45
D4541922	2.25	13	45
D4541023	2.30	13	45
D4541923	2.35	13	45
D4541024	2.40	14	46
D4541924	2.45	14	46
D4541025	2.50	14	46
D4541925	2.55	14	46
D4541026	2.60	14	46
D4541926	2.65	14	46
D4541027	2.70	16	48
D4541927	2.75	16	48
D4541028	2.80	16	48
D4541928	2.85	16	48
D4541029	2.90	16	48
D4541929	2.95	16	48
D4541030	3.00	16	48
D4541930	3.05	18	50

EDP No.	Drill Diameter	Flute Length	Overall Length
	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>
TiN			
D4541031	3.10	18	50
D4541931	3.15	18	50
D4541032	3.20	18	50
D4541932	3.25	18	50
D4541033	3.30	18	50
D4541933	3.35	18	50
D4541034	3.40	20	52
D4541934	3.45	20	52
D4541035	3.50	20	52
D4541935	3.55	20	52
D4541036	3.60	20	52
D4541936	3.65	20	52
D4541037	3.70	20	52
D4541937	3.75	20	52
D4541038	3.80	22	54
D4541938	3.85	22	54
D4541039	3.90	22	54
D4541939	3.95	22	54
D4541040	4.00	22	54
D4541940	4.05	22	66
D4541041	4.10	22	66
D4541941	4.15	22	66

► TiCN(D7541), TiAlN(DQ541) are available on your request.

► 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
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
VDI 3323	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	19	21		
HRc	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
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	400Rm	1050Rm	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																					



### HSSCo8, HPD TWIST DRILLS for STEELS

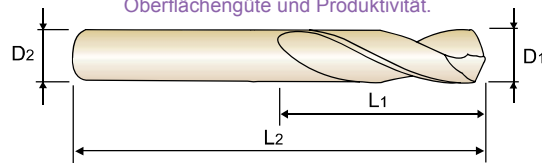
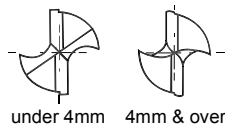
STUB

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- Forets HPD HSSCo Premium pour Aciers, série extra-courte
- PUNTE ELICOIDALI HPD IN PREMIUM HSS Co, PER ACCIAI

EXTRA KURZ  
EXTRA-COURTE  
EXTRA CORTA

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HSS Co8
25°
h7
h8
130°
P.198-199

D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
TiN			
D4541042	4.20	22	66
D4541942	4.25	22	66
D4541043	4.30	24	68
D4541943	4.35	24	68
D4541044	4.40	24	68
D4541944	4.45	24	68
D4541045	4.50	24	68
D4541945	4.55	24	68
D4541046	4.60	24	68
D4541946	4.65	24	68
D4541047	4.70	24	68
D4541947	4.75	24	68
D4541048	4.80	26	70
D4541948	4.85	26	70
D4541049	4.90	26	70
D4541949	4.95	26	70
D4541050	5.00	26	70
D4541950	5.05	26	70
D4541051	5.10	26	70
D4541951	5.15	26	70
D4541052	5.20	26	70
D4541952	5.25	26	70

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
TiN			
D4541053	5.30	26	70
D4541953	5.35	28	72
D4541054	5.40	28	72
D4541954	5.45	28	72
D4541055	5.50	28	72
D4541955	5.55	28	72
D4541056	5.60	28	72
D4541956	5.65	28	72
D4541057	5.70	28	72
D4541957	5.75	28	72
D4541058	5.80	28	72
D4541958	5.85	28	72
D4541059	5.90	28	72
D4541959	5.95	28	72
D4541060	6.00	28	72
D4541061	6.10	31	75
D4541062	6.20	31	75
D4541063	6.30	31	75
D4541064	6.40	31	75
D4541065	6.50	31	75
D4541965	6.55	31	75
D4541066	6.60	31	75

TiCN(D7541), TiAlN(DQ541) are available on your request.

▶ 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	10	11	12	13	14	15	16	17	18	19	20
HRc	13	23	25	28	32	10	29	32	38	45	15	35	15	23	10	10	26	3	25		21
HB	125	190	250	270	300	180	275	300	350	200	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	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											15	30	25	38	34			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																					



**HSSCo8, HPD TWIST DRILLS for STEELS**

**STUB**

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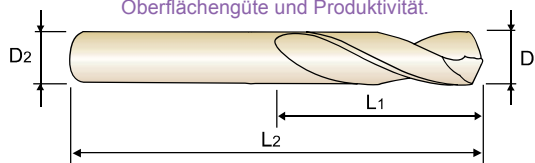
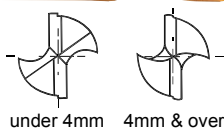
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HSS Co8
25°
h7
h8
130°
P.198-199

D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length
	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>
D4541966	6.65	31	75
D4541067	6.70	31	75
D4541068	6.80	34	78
D4541069	6.90	34	78
D4541070	7.00	34	78
D4541071	7.10	34	78
D4541072	7.20	34	78
D4541073	7.30	34	78
D4541973	7.35	34	78
D4541074	7.40	34	78
D4541075	7.50	34	78
D4541975	7.55	37	81
D4541076	7.60	37	81
D4541976	7.65	37	81
D4541077	7.70	37	81
D4541078	7.80	37	81
D4541079	7.90	37	81
D4541080	8.00	37	81
D4541081	8.10	37	87
D4541082	8.20	37	87
D4541083	8.30	37	87
D4541983	8.35	37	87

EDP No.	Drill Diameter	Flute Length	Overall Length
	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>
D4541084	8.40	37	87
D4541085	8.50	37	87
D4541985	8.55	40	90
D4541086	8.60	40	90
D4541986	8.65	40	90
D4541087	8.70	40	90
D4541088	8.80	40	90
D4541089	8.90	40	90
D4541090	9.00	40	90
D4541091	9.10	40	90
D4541092	9.20	40	90
D4541992	9.25	40	90
D4541093	9.30	40	90
D4541993	9.35	40	90
D4541094	9.40	40	90
D4541994	9.45	40	90
D4541095	9.50	40	90
D4541995	9.55	43	93
D4541096	9.60	43	93
D4541996	9.65	43	93
D4541097	9.70	43	93
D4541098	9.80	43	93

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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				
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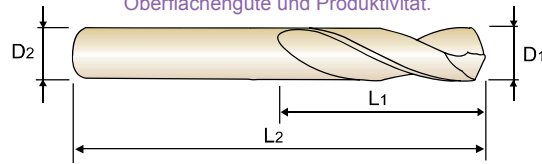
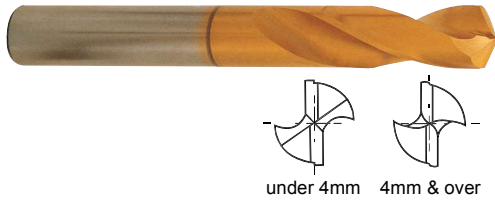
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D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
TiN			
D4541099	9.90	43	93
D4541999	9.95	43	93
D4541100	10.00	43	93
D4541101	10.10	43	100
D4541102	10.20	43	100
D4541802	10.25	43	100
D4541103	10.30	43	100
D4541803	10.35	43	100
D4541104	10.40	43	100
D4541105	10.50	43	100
D4541805	10.55	43	100
D4541106	10.60	43	100
D4541806	10.65	47	104
D4541107	10.70	47	104
D4541108	10.80	47	104
D4541109	10.90	47	104
D4541809	10.95	47	104
D4541110	11.00	47	104
D4541111	11.10	47	104
D4541112	11.20	47	104
D4541812	11.25	47	104

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
TiN			
D4541113	11.30	47	104
D4541813	11.35	47	104
D4541114	11.40	47	104
D4541115	11.50	47	104
D4541815	11.55	47	104
D4541116	11.60	47	104
D4541117	11.70	47	104
D4541118	11.80	47	104
D4541119	11.90	51	108
D4541120	12.00	51	108
D4541121	12.10	51	108
D4541122	12.20	51	108
D4541123	12.30	51	108
D4541124	12.40	51	108
D4541125	12.50	51	108
D4541126	12.60	51	108
D4541127	12.70	51	108
D4541128	12.80	51	108
D4541129	12.90	51	108
D4541130	13.00	51	108

► TiCN(D7541), TiAlN(DQ541) are available on your request.

◎ : 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	23	25	28	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 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	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											15	30	25	38	34			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																					

- 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



### HSSCo8, HPD TWIST DRILLS for STEELS

JOBBER

- PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE
- Forets HPD HSSCo Premium pour Aciers, série courte
- PUNTE ELICOIDALI HPD IN PREMIUM HSS Co, PER ACCIAI

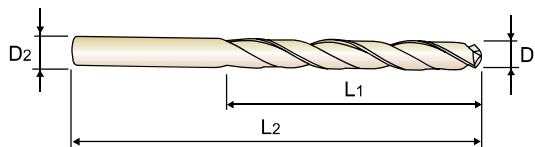
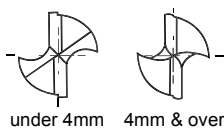
KURZ  
COURTE  
CORTA

► **Application** : Designed for high speed non-step 4D~5D drilling. Drilling mild steels, cast iron, aluminum, alloyed tool steels, etc.

► **Advantage** : Helical thinning - good chip removal, self-centering, reducing thrust and improving accuracy. Reinforced web and jobbers length - increasing rigidity and suitable for 4D~5D drilling. Premium Cobalt HSS with superior TiN coating - higher speed and feed, longer tool life. High quality & good surface finish, high productivity.

► **Anwendung** : Zum Hochgeschwindigkeitsbohren 4D~5D Bohrtiefe geeignet zum Bearbeiten von Stahl, Gusseisen, Aluminium, Legierungen, Werkzeugstahl, usw.

► **Vorteile** : Gute Spanabfuhr, selbstzentriert, geringere Abdrängung und verbesserte Genauigkeit, kurze Ausführung, verbesserte Stabilität, zum Bearbeiten von Premium kobalt HSS mit hochwertiger TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.



HSS Co8
30°
h7
h6
h8
130°
P.198-199

up to 13mm over 13mm

D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length
	TiN D1	L1	L2
D4542020	2.00	24	56
D4542920	2.05	24	56
D4542021	2.10	24	56
D4542921	2.15	27	59
D4542022	2.20	27	59
D4542922	2.25	27	59
D4542023	2.30	27	59
D4542923	2.35	27	59
D4542024	2.40	30	62
D4542924	2.45	30	62
D4542025	2.50	30	62
D4542925	2.55	30	62
D4542026	2.60	30	62
D4542926	2.65	30	62
D4542027	2.70	33	65
D4542927	2.75	33	65
D4542028	2.80	33	65
D4542928	2.85	33	65
D4542029	2.90	33	65
D4542929	2.95	33	65
D4542030	3.00	33	65
D4542930	3.05	36	68

EDP No.	Drill Diameter	Flute Length	Overall Length
	TiN D1	L1	L2
D4542031	3.10	36	68
D4542931	3.15	36	68
D4542032	3.20	36	68
D4542932	3.25	36	68
D4542033	3.30	36	68
D4542933	3.35	36	68
D4542034	3.40	39	71
D4542934	3.45	39	71
D4542035	3.50	39	71
D4542935	3.55	39	71
D4542036	3.60	39	71
D4542936	3.65	39	71
D4542037	3.70	39	71
D4542937	3.75	39	71
D4542038	3.80	43	75
D4542938	3.85	43	75
D4542039	3.90	43	75
D4542939	3.95	43	75
D4542040	4.00	43	75
D4542940	4.05	43	87
D4542041	4.10	43	87
D4542941	4.15	43	87

► TiCN(D7542), TiAlN(DQ542) are available on your request.

► NEXT PAGE

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	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 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	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											15	30	25	38	34			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																					





### HSSCo8, HPD TWIST DRILLS for STEELS

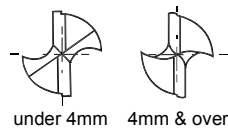
**JOBBER**

- PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE**
- Forets HPD HSSCo Premium pour Aciers, série courte**
- PUNTE ELICOIDALI HPD IN PREMIUM HSS Co, PER ACCIAI**

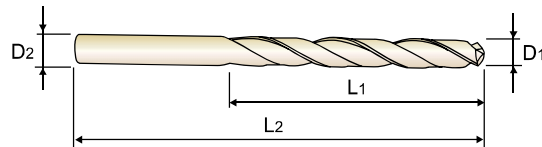
**KURZ  
COURTE  
CORTA**

- Application** : Designed for high speed non-step 4D~5D drilling. Drilling mild steels, cast iron, aluminum, alloyed tool steels, etc.
- Advantage** : Helical thinning - good chip removal, self-centering, reducing thrust and improving accuracy. Reinforced web and jobbers length - increasing rigidity and suitable for 4D~5D drilling. Premium Cobalt HSS with superior TiN coating - higher speed and feed, longer tool life. High quality & good surface finish, high productivity.

- Anwendung** : Zum Hochgeschwindigkeitsbohren 4D~5D Bohrtiefe geeignet zum Bearbeiten von Stahl, Gusseisen, Aluminium, Legierungen, Werkzeugstahl, usw.
- Vorteile** : Gute Spanabfuhr, selbstzentriert, geringere Abdrängung und verbesserte Genauigkeit, kurze Ausführung, verbesserte Stabilität, zum Bearbeiten von Premium kobalt HSS mit hochwertiger TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.



under 4mm 4mm & over



**D1=D2**

up to 13mm over 13mm

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D1	L1	L2
D4542042	4.20	43	87
D4542942	4.25	43	87
D4542043	4.30	47	91
D4542943	4.35	47	91
D4542044	4.40	47	91
D4542944	4.45	47	91
D4542045	4.50	47	91
D4542945	4.55	47	91
D4542046	4.60	47	91
D4542946	4.65	47	91
D4542047	4.70	47	91
D4542947	4.75	47	91
D4542048	4.80	52	96
D4542948	4.85	52	96
D4542049	4.90	52	96
D4542949	4.95	52	96
D4542050	5.00	52	96
D4542950	5.05	52	96
D4542051	5.10	52	96
D4542951	5.15	52	96
D4542052	5.20	52	96
D4542952	5.25	52	96

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D1	L1	L2
D4542053	5.30	52	96
D4542953	5.35	57	101
D4542054	5.40	57	101
D4542954	5.45	57	101
D4542055	5.50	57	101
D4542955	5.55	57	101
D4542056	5.60	57	101
D4542956	5.65	57	101
D4542057	5.70	57	101
D4542957	5.75	57	101
D4542058	5.80	57	101
D4542958	5.85	57	101
D4542059	5.90	57	101
D4542959	5.95	57	101
D4542060	6.00	57	101
D4542960	6.05	63	107
D4542961	6.15	63	107
D4542062	6.20	63	107
D4542962	6.25	63	107
D4542063	6.30	63	107
D4542963	6.35	63	107

TiCN(D7542), TiAlN(DQ542) are available on your request.

▶ NEXT PAGE

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	10	11	12	13	14	15	16	17	18	19	20
HRc	13	23	25	28	32	10	29	32	38	15	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	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	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											15	30	25	38	34			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																					

◎ : Excellent ○ : Good



**HSSCo8, HPD TWIST DRILLS for STEELS**

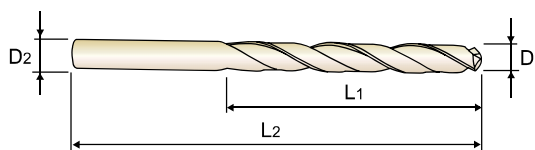
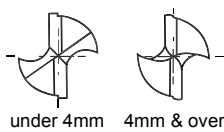
**JOBBER**

- 🇩🇪 PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE
- 🇫🇷 Forets HPD HSSCo Premium pour Aciers, série courte
- 🇮🇹 PUNTE ELICOIDALI HPD IN PREMIUM HSS Co, PER ACCIAI

**KURZ  
COURTE  
CORTA**

- ▶ **Application** : Designed for high speed non-step 4D~5D drilling. Drilling mild steels, cast iron, aluminum, alloyed tool steels, etc.
- ▶ **Advantage** : Helical thinning - good chip removal, self-centering, reducing thrust and improving accuracy. Reinforced web and jobbers length - increasing rigidity and suitable for 4D~5D drilling. Premium Cobalt HSS with superior TiN coating - higher speed and feed, longer tool life. High quality & good surface finish, high productivity.

- ▶ **Anwendung** : Zum Hochgeschwindigkeitsbohren 4D~5D Bohrtiefe geeignet zum Bearbeiten von Stahl, Gusseisen, Aluminium, Legierungen, Werkzeugstahl, usw.
- ▶ **Vorteile** : Gute Spanabfuhr, selbstzentriert, geringere Abdrängung und verbesserte Genauigkeit, kurze Ausführung, verbesserte Stabilität, zum Bearbeiten von Premium kobalt HSS mit hochwertiger TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.



HSS Co8
30°
h7
h6
h8
130°
P.198-199

up to 13mm    over 13mm

D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D4542064	6.40	63	107
D4542964	6.45	63	107
D4542065	6.50	63	107
D4542965	6.55	63	107
D4542066	6.60	63	107
D4542966	6.65	63	107
D4542067	6.70	63	107
D4542967	6.75	69	113
D4542068	6.80	69	113
D4542968	6.85	69	113
D4542069	6.90	69	113
D4542969	6.95	69	113
D4542070	7.00	69	113
D4542970	7.05	69	113
D4542071	7.10	69	113
D4542971	7.15	69	113
D4542072	7.20	69	113
D4542972	7.25	69	113
D4542073	7.30	69	113
D4542973	7.35	69	113
D4542074	7.40	69	113
D4542974	7.45	69	113

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D4542075	7.50	69	113
D4542975	7.55	75	119
D4542076	7.60	75	119
D4542976	7.65	75	119
D4542077	7.70	75	119
D4542977	7.75	75	119
D4542078	7.80	75	119
D4542978	7.85	75	119
D4542079	7.90	75	119
D4542979	7.95	75	119
D4542080	8.00	75	119
D4542980	8.05	75	125
D4542081	8.10	75	125
D4542981	8.15	75	125
D4542082	8.20	75	125
D4542982	8.25	75	125
D4542083	8.30	75	125
D4542983	8.35	75	125
D4542084	8.40	75	125
D4542984	8.45	75	125
D4542085	8.50	75	125
D4542985	8.55	81	131

▶ TiCN(D7542), TiAlN(DQ542) are available on your request.

▶ 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	30	10	29	32	38	15	35	15	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			
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			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																					



**D4542** SERIES

**HSSCo8, HPD TWIST DRILLS for STEELS**

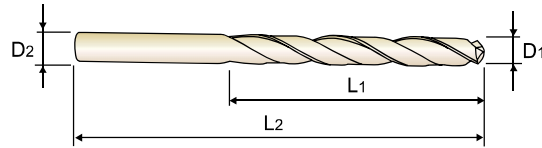
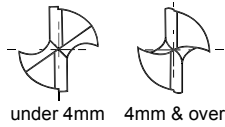
**JOBBER**

- PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE
- Forets HPD HSSCo Premium pour Aciers, série courte
- PUNTE ELICOIDALI HPD IN PREMIUM HSS Co, PER ACCIAI

**KURZ  
COURTE  
CORTA**

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- Advantage** : Helical thinning - good chip removal, self-centering, reducing thrust and improving accuracy. Reinforced web and jobbers length - increasing rigidity and suitable for 4D~5D drilling. Premium Cobalt HSS with superior TiN coating - higher speed and feed, longer tool life. High quality & good surface finish, high productivity.

- Anwendung** : Zum Hochgeschwindigkeitsbohren 4D~5D Bohrtiefe geeignet zum Bearbeiten von Stahl, Gusseisen, Aluminium, Legierungen, Werkzeugstahl, usw.
- Vorteile** : Gute Spanabfuhr, selbstzentriert, geringere Abdrängung und verbesserte Genauigkeit, kurze Ausführung, verbesserte Stabilität, zum Bearbeiten von Premium kobalt HSS mit hochwertiger TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.



HSS Co8
30°
h7
h6
h8
130°
P.198-199

up to 13mm    over 13mm

D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
TiN			
D4542086	8.60	81	131
D4542986	8.65	81	131
D4542087	8.70	81	131
D4542987	8.75	81	131
D4542088	8.80	81	131
D4542988	8.85	81	131
D4542089	8.90	81	131
D4542989	8.95	81	131
D4542090	9.00	81	131
D4542990	9.05	81	131
D4542091	9.10	81	131
D4542991	9.15	81	131
D4542092	9.20	81	131
D4542992	9.25	81	131
D4542093	9.30	81	131
D4542993	9.35	81	131
D4542094	9.40	81	131
D4542994	9.45	81	131
D4542095	9.50	81	131
D4542995	9.55	87	137
D4542096	9.60	87	137
D4542996	9.65	87	137

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
TiN			
D4542097	9.70	87	137
D4542997	9.75	87	137
D4542098	9.80	87	137
D4542998	9.85	87	137
D4542099	9.90	87	137
D4542999	9.95	87	137
D4542100	10.00	87	137
D4542800	10.05	87	144
D4542101	10.10	87	144
D4542801	10.15	87	144
D4542102	10.20	87	144
D4542802	10.25	87	144
D4542103	10.30	87	144
D4542803	10.35	87	144
D4542104	10.40	87	144
D4542804	10.45	87	144
D4542105	10.50	87	144
D4542805	10.55	87	144
D4542106	10.60	87	144
D4542806	10.65	94	151
D4542107	10.70	94	151
D4542807	10.75	94	151

TiCN(D7542), TiAlN(DQ542) are available on your request.

▶ 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	23	25	28	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 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	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											15	30	25	38	34			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																					



**HSSCo8, HPD TWIST DRILLS for STEELS**

**JOBBER**

- PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE
- Forets HPD HSSCo Premium pour Aciers, série courte
- PUNTE ELICOIDALI HPD IN PREMIUM HSS Co, PER ACCIAI

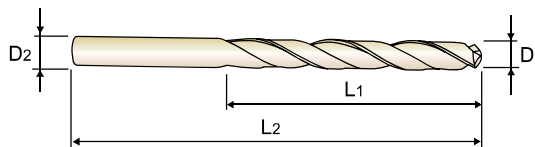
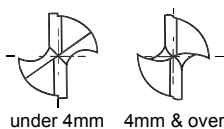
**KURZ  
COURTE  
CORTA**

► **Application** : Designed for high speed non-step 4D~5D drilling. Drilling mild steels, cast iron, aluminum, alloyed tool steels, etc.

► **Advantage** : Helical thinning - good chip removal, self-centering, reducing thrust and improving accuracy. Reinforced web and jobbers length - increasing rigidity and suitable for 4D~5D drilling. Premium Cobalt HSS with superior TiN coating - higher speed and feed, longer tool life. High quality & good surface finish, high productivity.

► **Anwendung** : Zum Hochgeschwindigkeitsbohren 4D~5D Bohrtiefe geeignet zum Bearbeiten von Stahl, Gusseisen, Aluminium, Legierungen, Werkzeugstahl, usw.

► **Vorteile** : Gute Spanabfuhr, selbstzentriert, geringere Abdrängung und verbesserte Genauigkeit, kurze Ausführung, verbesserte Stabilität, zum Bearbeiten von Premium kobalt HSS mit hochwertiger TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.



HSS Co8
30°
h7
h6
h8
130°
P.198-199

up to 13mm over 13mm

D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D4542108	10.80	94	151
D4542808	10.85	94	151
D4542109	10.90	94	151
D4542809	10.95	94	151
D4542110	11.00	94	151
D4542810	11.05	94	151
D4542111	11.10	94	151
D4542811	11.15	94	151
D4542112	11.20	94	151
D4542812	11.25	94	151
D4542113	11.30	94	151
D4542813	11.35	94	151
D4542114	11.40	94	151
D4542814	11.45	94	151
D4542115	11.50	94	151
D4542815	11.55	94	151
D4542116	11.60	94	151
D4542816	11.65	94	151
D4542117	11.70	94	151
D4542817	11.75	94	151
D4542118	11.80	94	151
D4542818	11.85	101	158

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D4542119	11.90	101	158
D4542819	11.95	101	158
D4542120	12.00	101	158
D4542121	12.10	101	158
D4542122	12.20	101	158
D4542123	12.30	101	158
D4542124	12.40	101	158
D4542125	12.50	101	158
D4542126	12.60	101	158
D4542127	12.70	101	158
D4542128	12.80	101	158
D4542129	12.90	101	158
D4542130	13.00	101	158
D4542135	13.50	90	150
D4542140	14.00	90	150
D4542141	14.10	95	155
D4542145	14.50	95	155
D4542150	15.00	95	161
D4542155	15.50	100	166
D4542156	15.60	100	166
D4542160	16.00	100	166
D4542165	16.50	106	172

► TiCN(D7542), TiAlN(DQ542) are available on your request.

► NEXT PAGE

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	36	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)			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											15	30	25	38	34			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																					

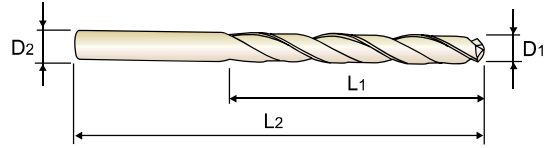
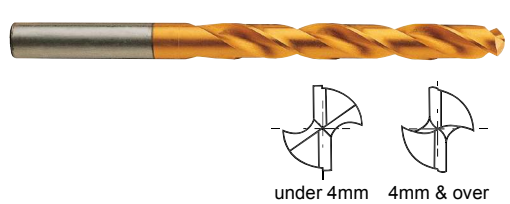
**HSSCo8, HPD TWIST DRILLS for STEELS**

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

- PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE
- Forets HPD HSSCo Premium pour Aciers, série courte
- PUNTE ELICOIDALI HPD IN PREMIUM HSS Co, PER ACCIAI

- Application** : Designed for high speed non-step 4D~5D drilling. Drilling mild steels, cast iron, aluminum, alloyed tool steels, etc.
- Advantage** : Helical thinning - good chip removal, self-centering, reducing thrust and improving accuracy. Reinforced web and jobbers length - increasing rigidity and suitable for 4D~5D drilling. Premium Cobalt HSS with superior TiN coating - higher speed and feed, longer tool life. High quality & good surface finish, high productivity.

- Anwendung** : Zum Hochgeschwindigkeitsbohren 4D~5D Bohrtiefe geeignet zum Bearbeiten von Stahl, Gusseisen, Aluminium, Legierungen, Werkzeugstahl, usw.
- Vorteile** : Gute Spanabfuhr, selbstzentriert, geringere Abdrängung und verbesserte Genauigkeit, kurze Ausführung, verbesserte Stabilität, zum Bearbeiten von Premium kobalt HSS mit hochwertiger TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.



up to 13mm over 13mm D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D4542170	17.00	106	172
D4542175	17.50	112	178
D4542176	17.60	112	178
D4542180	18.00	112	178
D4542185	18.50	118	184
D4542190	19.00	118	194
D4542195	19.50	125	201
D4542196	19.60	125	201
D4542200	20.00	125	201
D4542205	20.50	128	204
D4542210	21.00	128	204
D4542211	21.10	128	204
D4542215	21.50	132	208
D4542220	22.00	132	208
D4542225	22.50	136	212

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D4542230	23.00	136	212
D4542235	23.50	136	212
D4542240	24.00	140	220
D4542245	24.50	140	220
D4542250	25.00	140	220
D4542255	25.50	145	225
D4542260	26.00	145	225
D4542265	26.50	145	225
D4542270	27.00	150	230
D4542280	28.00	150	230
D4542290	29.00	155	235
D4542300	30.00	155	235
D4542310	31.00	160	240
D4542320	32.00	165	245

► TiCN(D7542), TiAlN(DQ542) are available on your request.

◎ : 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	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	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	200	280	250	350	320	400Rm	1050Rm	550	630	400	550
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550					
Recommended																										

# HSS-E, HPD-SUS TWIST DRILLS for STAINLESS STEELS

STUB

- 🇩🇪 HSS-E, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE
- 🇫🇷 Forets HPD-SUS HSS-E pour INOX, série extra-courte
- 🇮🇹 PUNTE ELICOIDALI HPD-SUS IN HSS-E, PER ACCIAI INOX

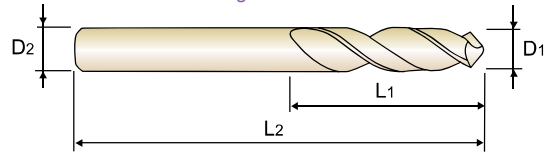
- EXTRA KURZ
- EXTRA-COURTE
- EXTRA CORTA

▶ **Application** : Designed for drilling stainless steels, mild steels, aluminum, aluminum alloys, aluminum die casting, copper, copper alloys, etc.

▶ **Advantage** : High helix-sharp cutting edges to avoid built-up and to be suitable for high performance drilling  
Wide flute and stub length-increasing chip removal and reducing vibration and deflection.  
High vanadium HSS-E material with superior TiN coating - higher speed and feed, longer tool life  
High quality & good surface finish, high productivity.

▶ **Anwendung** : Geeignet zum Bearbeiten von rostfreier stähle, Aluminium, Aluminium-Legierungen, Aluminium-Guss, Kupfer, Kupfer-Legierungen usw.

▶ **Vorteile** : Durch hohen Helix wird Spanstau vermieden, geeignet zum Hochleistungsbohren, durch die breiten Schneiden und die kurze Ausführung wird die Spanabfuhr erhöht und Vibrationen und Stoß reduziert. Hoch Vanadium HSS-E-Material mit TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.



for STAINLESS STEELS  
für rostfreier Stäle



HSS-E

38°

h7

h8

130°

120°

P.200-201

up to 4mm    over 4mm

D<sub>1</sub>=D<sub>2</sub>

EDP No.	Drill Diameter	Flute Length	Overall Length
	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>
DJ543020	2.00	12	44
DJ543021	2.10	12	44
DJ543022	2.20	13	45
DJ543023	2.30	13	45
DJ543024	2.40	14	46
DJ543025	2.50	14	46
DJ543026	2.60	14	46
DJ543027	2.70	16	48
DJ543028	2.80	16	48
DJ543029	2.90	16	48
DJ543030	3.00	16	48
DJ543031	3.10	18	50
DJ543032	3.20	18	50
DJ543033	3.30	18	50
DJ543034	3.40	20	52
DJ543035	3.50	20	52
DJ543036	3.60	20	52
DJ543037	3.70	20	52
DJ543038	3.80	22	54
DJ543039	3.90	22	54
DJ543040	4.00	22	54
DJ543041	4.10	22	66

EDP No.	Drill Diameter	Flute Length	Overall Length
	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>
DJ543042	4.20	22	66
DJ543043	4.30	24	68
DJ543044	4.40	24	68
DJ543045	4.50	24	68
DJ543046	4.60	24	68
DJ543047	4.70	24	68
DJ543048	4.80	26	70
DJ543049	4.90	26	70
DJ543050	5.00	26	70
DJ543051	5.10	26	70
DJ543052	5.20	26	70
DJ543053	5.30	26	70
DJ543054	5.40	28	72
DJ543055	5.50	28	72
DJ543056	5.60	28	72
DJ543057	5.70	28	72
DJ543058	5.80	28	72
DJ543059	5.90	28	72
DJ543060	6.00	28	72
DJ543061	6.10	31	75
DJ543062	6.20	31	75
DJ543063	6.30	31	75

▶ TiCN(DW543), TiAlN(DY543) are available on your request.

▶ NEXT PAGE

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)			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											15	30	25	38	34			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-E, HPD-SUS TWIST DRILLS for STAINLESS STEELS

STUB

- HSS-E, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE
- Forets HPD-SUS HSS-E pour INOX, série extra-courte
- PUNTE ELICOIDALI HPD-SUS IN HSS-E, PER ACCIAI INOX

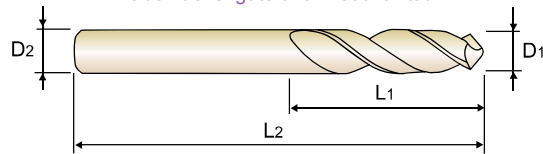
EXTRA KURZ  
EXTRA-COURTE  
EXTRA CORTA

- ▶ **Application** : Designed for drilling stainless steels, mild steels, aluminum, aluminum alloys, aluminum die casting, copper, copper alloys, etc.
- ▶ **Advantage** : High helix-sharp cutting edges to avoid built-up and to be suitable for high performance drilling  
Wide flute and stub length-increasing chip removal and reducing vibration and deflection.  
High vanadium HSS-E material with superior TiN coating - higher speed and feed, longer tool life  
High quality & good surface finish, high productivity.

- ▶ **Anwendung** : Geeignet zum Bearbeiten von rostfreier stähle, Aluminium, Aluminium-Legierungen, Aluminium-Guss, Kupfer, Kupfer-Legierungen usw.
- ▶ **Vorteile** : Durch hohen Helix wird Spanstau vermieden, geeignet zum Hochleistungsbohren, durch die breiten Schneiden und die kurze Ausführung wird die Spanabfuhr erhöht und Vibrationen und Stoß reduziert. Hoch Vanadium HSS-E-Material mit TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.



four facet



for STAINLESS STEELS  
für rostfreier Stäle

HSS-E
38°
h7
h8
130°
120°
P.200-201

up to 4mm over 4mm

D<sub>1</sub>=D<sub>2</sub>

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>
DJ543064	6.40	31	75
DJ543065	6.50	31	75
DJ543066	6.60	31	75
DJ543067	6.70	31	75
DJ543068	6.80	34	78
DJ543069	6.90	34	78
DJ543070	7.00	34	78
DJ543071	7.10	34	78
DJ543072	7.20	34	78
DJ543073	7.30	34	78
DJ543074	7.40	34	78
DJ543075	7.50	34	78
DJ543076	7.60	37	81
DJ543077	7.70	37	81
DJ543078	7.80	37	81
DJ543079	7.90	37	81
DJ543080	8.00	37	81
DJ543081	8.10	37	87
DJ543082	8.20	37	87
DJ543083	8.30	37	87
DJ543084	8.40	37	87
DJ543085	8.50	37	87

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>
DJ543086	8.60	40	90
DJ543087	8.70	40	90
DJ543088	8.80	40	90
DJ543089	8.90	40	90
DJ543090	9.00	40	90
DJ543091	9.10	40	90
DJ543092	9.20	40	90
DJ543093	9.30	40	90
DJ543094	9.40	40	90
DJ543095	9.50	40	90
DJ543096	9.60	43	93
DJ543097	9.70	43	93
DJ543098	9.80	43	93
DJ543099	9.90	43	93
DJ543100	10.00	43	93
DJ543101	10.10	43	100
DJ543102	10.20	43	100
DJ543103	10.30	43	100
DJ543104	10.40	43	100
DJ543105	10.50	43	100
DJ543106	10.60	43	100
DJ543107	10.70	47	104

▶ TiCN(DW543), TiAlN(DY543) are available on your request.

▶ NEXT PAGE

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	12	13	25	28	32	10	29	32	38	15	35	15	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 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	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											15	30	25	38	34			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	◎	◎				○															

◎ : Excellent ○ : Good

**HSS-E, HPD-SUS TWIST DRILLS for STAINLESS STEELS**

**STUB**

- 🇩🇪 HSS-E, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE
- 🇫🇷 Forets HPD-SUS HSS-E pour INOX, série extra-courte
- 🇮🇹 PUNTE ELICOIDALI HPD-SUS IN HSS-E, PER ACCIAI INOX

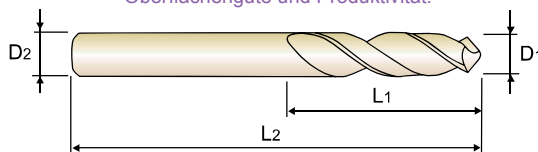
**EXTRA KURZ  
EXTRA-COURTE  
EXTRA CORTA**

► **Application** : Designed for drilling stainless steels, mild steels, aluminum, aluminum alloys, aluminum die casting, copper, copper alloys, etc.

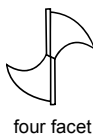
► **Advantage** : High helix-sharp cutting edges to avoid built-up and to be suitable for high performance drilling  
Wide flute and stub length-increasing chip removal and reducing vibration and deflection.  
High vanadium HSS-E material with superior TiN coating - higher speed and feed, longer tool life  
High quality & good surface finish, high productivity.

► **Anwendung** : Geeignet zum Bearbeiten von rostfreier stähle, Aluminium, Aluminium-Legierungen, Aluminium-Guss, Kupfer, Kupfer-Legierungen usw.

► **Vorteile** : Durch hohen Helix wird Spanstau vermieden, geeignet zum Hochleistungsbohren, durch die breiten Schneiden und die kurze Ausführung wird die Spanabfuhr erhöht und Vibrationen und Stoß reduziert. Hoch Vanadium HSS-E-Material mit TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.



**for STAINLESS STEELS  
für rostfreier Stäle**



HSS-E
38°
h7
h8
130°
120°
P.200-201

up to 4mm    over 4mm

D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DJ543108	10.80	47	104
DJ543109	10.90	47	104
DJ543110	11.00	47	104
DJ543111	11.10	47	104
DJ543112	11.20	47	104
DJ543113	11.30	47	104
DJ543114	11.40	47	104
DJ543115	11.50	47	104
DJ543116	11.60	47	104
DJ543117	11.70	47	104
DJ543118	11.80	47	104
DJ543119	11.90	51	108

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
DJ543120	12.00	51	108
DJ543121	12.10	51	108
DJ543122	12.20	51	108
DJ543123	12.30	51	108
DJ543124	12.40	51	108
DJ543125	12.50	51	108
DJ543126	12.60	51	108
DJ543127	12.70	51	108
DJ543128	12.80	51	108
DJ543129	12.90	51	108
DJ543130	13.00	51	108

► TiCN(DW543), TiAlN(DY543) are available on your request.

◎ : 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)			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											15	30	25	38	34			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-E, HPD-SUS TWIST DRILLS for STAINLESS STEELS

JOBBER

- HSS-E, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE
- Forets HPD-SUS HSS-E pour INOX, série courte
- PUNTE ELICOIDALI HPD-SUS IN HSS-E, PER ACCIAI INOX

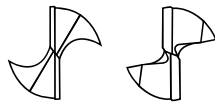
KURZ  
COURTE  
CORTA

► **Application** : Designed for 4D~5D drilling stainless steels, mild steels, aluminum, aluminum alloys, aluminum die casting, copper, copper alloys, etc.

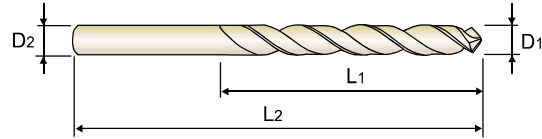
► **Advantage** : High helix-sharp cutting edges to avoid built-up and to be suitable for high performance drilling  
Reinforced web and jobbers length-increasing rigidity and suitable for 4D~5D drilling.  
High vanadium HSS-E material with superior TiN coating - higher speed and feed, longer tool life  
High quality & good surface finish, high productivity.

► **Anwendung** : Für 4D~5D Bohrtiefe, geeignet für rostfreier stähle, Stahl, Aluminium, Aluminium-Legierungen, Aluminium-Guss, Kupfer, Kupfer-Legierung usw.

► **Vorteile** : Helixwinkel, durch scharfe Hauptschneide wird Spanstau vermieden, geeignet zum Hochleistungsbohren, verstärkte Kerndicke, kurze Ausführung, Hoch Vanadium HSS-E-Material mit TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Stabilität, Oberflächengüte und Produktivität.



up to 13mm over 13mm



for STAINLESS STEELS  
für rostfreier Stäle

up to 4mm over 4mm D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length	Unit : mm			
				TiN	D1	L1	L2
DJ544020	2.00	24	56				
DJ544021	2.10	24	56				
DJ544022	2.20	27	59				
DJ544023	2.30	27	59				
DJ544024	2.40	30	62				
DJ544025	2.50	30	62				
DJ544026	2.60	30	62				
DJ544027	2.70	33	65				
DJ544028	2.80	33	65				
DJ544029	2.90	33	65				
DJ544030	3.00	33	65				
DJ544031	3.10	36	68				
DJ544032	3.20	36	68				
DJ544033	3.30	36	68				
DJ544034	3.40	39	71				
DJ544035	3.50	39	71				
DJ544036	3.60	39	71				
DJ544037	3.70	39	71				
DJ544038	3.80	43	75				
DJ544039	3.90	43	75				
DJ544040	4.00	43	75				
DJ544041	4.10	43	87				

EDP No.	Drill Diameter	Flute Length	Overall Length	Unit : mm			
				TiN	D1	L1	L2
DJ544042	4.20	43	87				
DJ544043	4.30	47	91				
DJ544044	4.40	47	91				
DJ544045	4.50	47	91				
DJ544046	4.60	47	91				
DJ544047	4.70	47	91				
DJ544048	4.80	52	96				
DJ544049	4.90	52	96				
DJ544050	5.00	52	96				
DJ544051	5.10	52	96				
DJ544052	5.20	52	96				
DJ544053	5.30	52	96				
DJ544054	5.40	57	101				
DJ544055	5.50	57	101				
DJ544056	5.60	57	101				
DJ544057	5.70	57	101				
DJ544058	5.80	57	101				
DJ544059	5.90	57	101				
DJ544060	6.00	57	101				
DJ544061	6.10	63	107				
DJ544062	6.20	63	107				
DJ544063	6.30	63	107				

► TiCN(DW544), TiAlN(DY544) are available on your request.

► 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	23	25	28	32	10	29	32	38	10	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											15	30	25	38	34			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-E, HPD-SUS TWIST DRILLS for STAINLESS STEELS

JOBBER

- 🇩🇪 HSS-E, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE
- 🇫🇷 Forets HPD-SUS HSS-E pour INOX, série courte
- 🇮🇹 PUNTE ELICOIDALI HPD-SUS IN HSS-E, PER ACCIAI INOX

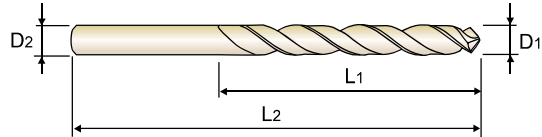
KURZ  
COURTE  
CORTA

▶ **Application** : Designed for 4D~5D drilling stainless steels, mild steels, aluminum, aluminum alloys, aluminum die casting, copper, copper alloys, etc.

▶ **Advantage** : High helix-sharp cutting edges to avoid built-up and to be suitable for high performance drilling  
Reinforced web and jobbers length-increasing rigidity and suitable for 4D~5D drilling.  
High vanadium HSS-E material with superior TiN coating - higher speed and feed, longer tool life  
High quality & good surface finish, high productivity.

▶ **Anwendung** : Für 4D~5D Bohrtiefe, geeignet für rostfreier stähle, Stahl, Aluminium, Aluminium-Legierungen, Aluminium-Guss, Kupfer, Kupfer-Legierung usw.

▶ **Vorteile** : Helixwinkel, durch scharfe Hauptschneide wird Spanstau vermieden, geeignet zum Hochleistungsbohren, verstärkte Kerndicke, kurze Ausführung, Hoch Vanadium HSS-E-Material mit TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Stabilität, Oberflächengüte und Produktivität.



for STAINLESS STEELS  
für rostfreier Stäle



up to 13mm over 13mm

HSS-E
38°
h7
h8
130°
120°
P.200-201

D1=D2

up to 4mm over 4mm

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D1	L1	L2
DJ544064	6.40	63	107
DJ544065	6.50	63	107
DJ544066	6.60	63	107
DJ544067	6.70	63	107
DJ544068	6.80	69	113
DJ544069	6.90	69	113
DJ544070	7.00	69	113
DJ544071	7.10	69	113
DJ544072	7.20	69	113
DJ544073	7.30	69	113
DJ544074	7.40	69	113
DJ544075	7.50	69	113
DJ544076	7.60	75	119
DJ544077	7.70	75	119
DJ544078	7.80	75	119
DJ544079	7.90	75	119
DJ544080	8.00	75	119
DJ544081	8.10	75	125
DJ544082	8.20	75	125
DJ544083	8.30	75	125
DJ544084	8.40	75	125
DJ544085	8.50	75	125

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D1	L1	L2
DJ544086	8.60	81	131
DJ544087	8.70	81	131
DJ544088	8.80	81	131
DJ544089	8.90	81	131
DJ544090	9.00	81	131
DJ544091	9.10	81	131
DJ544092	9.20	81	131
DJ544093	9.30	81	131
DJ544094	9.40	81	131
DJ544095	9.50	81	131
DJ544096	9.60	87	137
DJ544097	9.70	87	137
DJ544098	9.80	87	137
DJ544099	9.90	87	137
DJ544100	10.00	87	137
DJ544101	10.10	87	144
DJ544102	10.20	87	144
DJ544103	10.30	87	144
DJ544104	10.40	87	144
DJ544105	10.50	87	144
DJ544106	10.60	87	144
DJ544107	10.70	94	151

▶ TiCN(DW544), TiAlN(DY544) are available on your request.

▶ 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	10	29	32	38	10	15	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)			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											15	30	25	38	34			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-E, HPD-SUS TWIST DRILLS for STAINLESS STEELS

JOBBER

- HSS-E, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE
- Forets HPD-SUS HSS-E pour INOX, série courte
- PUNTE ELICOIDALI HPD-SUS IN HSS-E, PER ACCIAI INOX

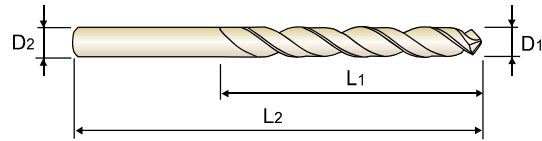
KURZ  
COURTE  
CORTA

- ▶ **Application** : Designed for 4D~5D drilling stainless steels, mild steels, aluminum, aluminum alloys, aluminum die casting, copper, copper alloys, etc.
- ▶ **Advantage** : High helix-sharp cutting edges to avoid built-up and to be suitable for high performance drilling  
Reinforced web and jobbers length-increasing rigidity and suitable for 4D~5D drilling.  
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- ▶ **Vorteile** : Helixwinkel, durch scharfe Hauptschneide wird Spanstau vermieden, geeignet zum Hochleistungsbohren, verstärkte Kerndicke, kurze Ausführung, Hoch Vanadium HSS-E-Material mit TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Stabilität, Oberflächengüte und Produktivität.



up to 13mm over 13mm



for STAINLESS STEELS  
für rostfreier Stäle

up to 4mm over 4mm D1=D2

EDP No.	Drill Diameter	Flute Length	Overall Length
DJ544108	10.80	94	151
DJ544109	10.90	94	151
DJ544110	11.00	94	151
DJ544111	11.10	94	151
DJ544112	11.20	94	151
DJ544113	11.30	94	151
DJ544114	11.40	94	151
DJ544115	11.50	94	151
DJ544116	11.60	94	151
DJ544117	11.70	94	151
DJ544118	11.80	94	151
DJ544119	11.90	101	158
DJ544120	12.00	101	158
DJ544121	12.10	101	158
DJ544122	12.20	101	158
DJ544123	12.30	101	158
DJ544124	12.40	101	158
DJ544125	12.50	101	158
DJ544126	12.60	101	158
DJ544127	12.70	101	158
DJ544128	12.80	101	158

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
DJ544129	12.90	101	158
DJ544130	13.00	101	158
DJ544135	13.50	106	166
DJ544140	14.00	106	166
DJ544141	14.10	109	169
DJ544145	14.50	109	169
DJ544150	15.00	109	169
DJ544155	15.50	112	172
DJ544156	15.60	112	172
DJ544160	16.00	112	172
DJ544165	16.50	115	181
DJ544170	17.00	115	181
DJ544175	17.50	118	184
DJ544176	17.60	118	184
DJ544180	18.00	118	184
DJ544185	18.50	122	188
DJ544190	19.00	122	188
DJ544195	19.50	125	191
DJ544196	19.60	125	191
DJ544200	20.00	125	191

▶ TiCN(DW544), TiAlN(DY544) are available on your request.

◎ : 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		
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	38	10	29	32	38	45	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	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											15	30	25	38	34			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	◎	◎				○															



D4541, D4542 SERIES

HPD DRILLS for STEELS

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

ISO	VDI 3323	Material Description	Vc (m/min)	Parameter	Drill Diameter (mm)							
					2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0
P	1	Non-alloy steel	35	RPM FEED	5570 0.04-0.10	3710 0.07-0.13	2790 0.09-0.15	2230 0.12-0.18	1860 0.13-0.19	1390 0.18-0.24	1110 0.20-0.30	930 0.22-0.32
	2		25	RPM FEED	3980 0.04-0.10	2650 0.07-0.13	1990 0.09-0.15	1590 0.12-0.18	1330 0.13-0.19	990 0.18-0.24	800 0.20-0.30	660 0.22-0.32
	3		25	RPM FEED	3980 0.04-0.10	2650 0.07-0.13	1990 0.09-0.15	1590 0.12-0.18	1330 0.13-0.19	990 0.18-0.24	800 0.20-0.30	660 0.22-0.32
	4											
	5											
	6	Low alloy steel	30	RPM FEED	4770 0.04-0.10	3180 0.07-0.13	2390 0.09-0.15	1910 0.12-0.18	1590 0.13-0.19	1190 0.18-0.24	950 0.20-0.30	800 0.22-0.32
	7		25	RPM FEED	3980 0.04-0.10	2650 0.07-0.13	1990 0.09-0.15	1590 0.12-0.18	1330 0.13-0.19	990 0.18-0.24	800 0.20-0.30	660 0.22-0.32
	8											
	9											
	10		High alloyed steel, and tool steel	15	RPM FEED	2390 0.04-0.10	1590 0.07-0.13	1190 0.09-0.15	950 0.12-0.18	800 0.13-0.19	600 0.18-0.24	480 0.20-0.30
	11											
M	12	Stainless steel										
	13											
	14											
K	15	Grey cast iron	40	RPM FEED	6370 0.06-0.12	4240 0.09-0.15	3180 0.12-0.18	2550 0.15-0.21	2120 0.16-0.22	1590 0.22-0.28	1270 0.26-0.36	1060 0.28-0.38
	16											
	17	Nodular cast iron										
	18	Malleable cast iron										
	19											
20												
N	21	Aluminum- wrought alloy										
	22											
	23	Aluminum-cast, alloyed										
	24											
	25											
	26	Copper and Copper Alloys (Bronze / Brass)										
	27											
	28	Non Metallic Materials										
	29											
	30											
S	31	Heat Resistant Super Alloys										
	32											
	33											
	34											
	35	Titanium Alloys										
	36											
	37											
H	38	Hardened steel										
	39											
	40	Chilled Cast Iron										
	41	Hardened Cast Iron										

Please decrease the feed rate (15~20%) in D4542 SERIES HPD drills.  
Den Vorschub in der D4542 Gruppe HPD Bohrer bitte verringern.

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

VDI 3323	Parameter	Drill Diameter (mm)									
		14.0	16.0	18.0	20.0	22.0	24.0	26.0	28.0	30.0	32.0
1	RPM	800	700	620	560	510	460	430	400	370	350
	FEED	0.25-0.35	0.28-0.38	0.34-0.44	0.35-0.45	0.40-0.50	0.44-0.54	0.48-0.58	0.52-0.62	0.56-0.66	0.60-0.70
2	RPM	570	500	440	400	360	330	310	280	270	250
	FEED	0.25-0.35	0.28-0.38	0.34-0.44	0.35-0.45	0.40-0.50	0.44-0.54	0.48-0.58	0.52-0.62	0.56-0.66	0.60-0.70
3	RPM	570	500	440	400	360	330	310	280	270	250
	FEED	0.25-0.35	0.28-0.38	0.34-0.44	0.35-0.45	0.40-0.50	0.44-0.54	0.48-0.58	0.52-0.62	0.56-0.66	0.60-0.70
4											
5											
6	RPM	680	600	530	480	430	400	370	340	320	300
	FEED	0.25-0.35	0.28-0.38	0.34-0.44	0.35-0.45	0.40-0.50	0.44-0.54	0.48-0.58	0.52-0.62	0.56-0.66	0.60-0.70
7	RPM	570	500	440	400	360	330	310	280	270	250
	FEED	0.25-0.35	0.28-0.38	0.34-0.44	0.35-0.45	0.40-0.50	0.44-0.54	0.48-0.58	0.52-0.62	0.56-0.66	0.60-0.70
8											
9											
10	RPM	340	300	270	240	220	200	180	170	160	150
	FEED	0.25-0.35	0.28-0.38	0.34-0.44	0.35-0.45	0.40-0.50	0.44-0.54	0.48-0.58	0.52-0.62	0.56-0.66	0.60-0.70
11											
12											
13											
14											
15	RPM	910	800	710	640	580	530	490	450	420	400
	FEED	0.32-0.42	0.35-0.45	0.42-0.52	0.44-0.54	0.50-0.60	0.54-0.64	0.59-0.69	0.64-0.74	0.69-0.79	0.74-0.84
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39	Please decrease the feed rate (15~20%) in D4542 SERIES HPD drills. Den Vorschub in der D4542 Gruppe HPD Bohrer bitte verringern.										
40											
41											

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



DJ543, DJ544 SERIES

HPD-SUS DRILLS for STAINLESS STEELS

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

ISO	VDI 3323	Material Description	Vc (m/min)	Parameter	Drill Diameter (mm)				
					2.0	3.0	4.0	5.0	6.0
P	1	Non-alloy steel	35	RPM FEED	5570 0.04-0.1	3710 0.07-0.13	2790 0.09-0.15	2230 0.12-0.18	1860 0.13-0.19
	2								
	3								
	4								
	5								
	6	Low alloy steel							
	7								
	8								
	9								
	10		High alloyed steel, and tool steel						
	11								
M	12	Stainless steel	20	RPM FEED	3180 0.03-0.07	2120 0.05-0.09	1590 0.06-0.12	1270 0.09-0.15	1060 0.12-0.18
	13		18	RPM FEED	2860 0.03-0.07	1910 0.05-0.09	1430 0.06-0.12	1150 0.09-0.15	950 0.12-0.18
	14		15	RPM FEED	2390 0.02-0.05	1590 0.03-0.07	1190 0.04-0.10	950 0.06-0.12	800 0.07-0.13
K	15	Grey cast iron							
	16								
	17	Nodular cast iron							
	18								
	19								
20	Malleable cast iron								
N	21	Aluminum- wrought alloy	90	RPM FEED	14320 0.05-0.12	9550 0.10-0.18	7160 0.12-0.22	5730 0.15-0.25	4770 0.17-0.27
	22		90	RPM FEED	14320 0.05-0.12	9550 0.10-0.18	7160 0.12-0.22	5730 0.15-0.25	4770 0.17-0.27
	23	Aluminum-cast, alloyed							
	24								
	25								
	26	Copper and Copper Alloys (Bronze / Brass)	35	RPM FEED	5570 0.03-0.06	3710 0.05-0.09	2790 0.05-0.11	2230 0.08-0.14	1860 0.11-0.17
	27								
	28	Non Metallic Materials							
	29								
	30								
S	31	Heat Resistant Super Alloys							
	32								
	33								
	34								
	35	Titanium Alloys							
	36								
	37								
H	38	Hardened steel							
	39								
	40	Chilled Cast Iron							
	41	Hardened Cast Iron							

Please decrease the feed rate (15~20%) in DJ544 SERIES HPD-SUS drills.  
Den Vorschub in der DJ544 Gruppe HPD-SUS Bohrer bitte verringern

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

VDI 3323	Parameter	Drill Diameter (mm)						
		8.0	10.0	12.0	14.0	16.0	18.0	20.0
1	RPM	1390	1110	930	800	700	620	560
	FEED	0.18-0.24	0.20-0.30	0.22-0.32	0.25-0.35	0.28-0.38	0.34-0.44	0.35-0.45
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12	RPM	800	640	530	450	400	350	320
	FEED	0.18-0.24	0.20-0.30	0.26-0.36	0.34-0.44	0.38-0.48	0.40-0.50	0.43-0.53
13	RPM	720	570	480	410	360	320	290
	FEED	0.18-0.24	0.20-0.30	0.26-0.36	0.34-0.44	0.38-0.48	0.40-0.50	0.43-0.53
14	RPM	600	480	400	340	300	270	240
	FEED	0.10-0.160	0.12-0.22	0.14-0.24	0.24-0.34	0.28-0.38	0.30-0.40	0.33-0.43
15								
16								
17								
18								
19								
20								
21	RPM	3580	2860	2390	2050	1790	1590	1430
	FEED	0.25-0.35	0.35-0.45	0.40-0.55	0.45-0.60	0.55-0.70	0.60-0.75	0.65-0.80
22	RPM	3580	2860	2390	2050	1790	1590	1430
	FEED	0.25-0.35	0.35-0.45	0.40-0.55	0.45-0.60	0.55-0.70	0.60-0.75	0.65-0.80
23								
24								
25								
26	RPM	1390	1110	930	800	700	620	560
	FEED	0.14-0.20	0.16-0.26	0.18-0.28	0.22-0.32	0.26-0.36	0.28-0.38	0.30-0.40
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39	Please decrease the feed rate (15~20%) in DJ544 SERIES HPD-SUS drills. Den Vorschub in der DJ544 Gruppe HPD-SUS Bohrer bitte verringern							
40								
41								

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

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TECHNICAL DATA

# HIGH QUALITY PRODUCTS and ON TIME DELIVERY for WORLD-WIDE CUSTOMERS

Since 1982, YG-1 has been committed to quality, innovation and the unique customer experience.

Our performance and experience have granted YG-1 the global impression of one of the leading manufacturers of high quality cutting tool solutions. This global footprint expands over 75 countries, with international logistic centers, pledging to our customers to give the best service available today - and tomorrow.

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