

**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

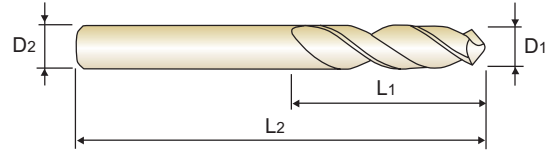
**EXTRA KURZ  
EXTRA-COURTE  
EXTRA CORTA**

► **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>

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	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
TiN	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

◎ : 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	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	◎	◎				○															

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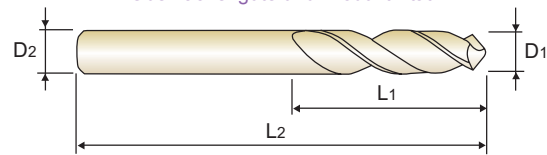
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four facet



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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
TiN			
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
	D1	L1	L2
TiN			
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

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► 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	10	29	32	38	15	35	15	23	10	10	26	3	25		21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	○									◎	◎	○	◎							

ISO	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys				Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron		
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRC											15	30	25	38	34			55	60	42	55
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Recommended	◎	◎				○															

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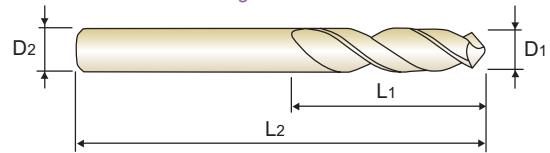
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**for STAINLESS STEELS  
für rostfreier Stäle**



HSS-E
38°
h7
h8
130°
120°
P.200-201

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

up to 4mm over 4mm

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>
TiN			
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

EDP No.	Drill Diameter	Flute Length	Overall Length
	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>
TiN			
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

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	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron		
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HRc	13	25	28	32	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	○										◎	○	◎								
ISO	N									S							H				
	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



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								
	11	High alloyed steel, and tool steel							
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								
	29	Non Metallic Materials							
	30								
S	31	Heat Resistant Super Alloys							
	32								
	33								
	34								
	35	Titanium Alloys							
	36								
	37								
H	38	Hardened steel							
	39								
	40	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

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	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	Copper and Copper Alloys (Bronze / Brass)	CuSn, lead-free copper and electrolytic copper	100		
	28					
	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		Annealed	250	25	
	34		Cured	350	38	
	35	Ni or Co Based 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	

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

		1	
		2	
		3	
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		12	<b>M</b>
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⊙	⊙	14	
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