

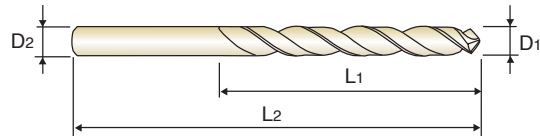
### HSS-EX, HPD-SUS TWIST DRILLS for STAINLESS STEELS **JOBBER** HSS-EX, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE **KURZ**

- ▶ **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-EX 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-EX-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 Stähle

HSS EX
W 38°
h7
h8
130°
120°
P.156
D<sub>1</sub>=D<sub>2</sub>

up to 4mm over 4mm

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>	TiN	D <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>
DJ544020	2.0	24	56	DJ544044	4.4	47	91
DJ544021	2.1	24	56	DJ544045	4.5	47	91
DJ544022	2.2	27	59	DJ544046	4.6	47	91
DJ544023	2.3	27	59	DJ544047	4.7	47	91
DJ544024	2.4	30	62	DJ544048	4.8	52	96
DJ544025	2.5	30	62	DJ544049	4.9	52	96
DJ544026	2.6	30	62	DJ544050	5.0	52	96
DJ544027	2.7	33	65	DJ544051	5.1	52	96
DJ544028	2.8	33	65	DJ544052	5.2	52	96
DJ544029	2.9	33	65	DJ544053	5.3	52	96
DJ544030	3.0	33	65	DJ544054	5.4	57	101
DJ544031	3.1	36	68	DJ544055	5.5	57	101
DJ544032	3.2	36	68	DJ544056	5.6	57	101
DJ544033	3.3	36	68	DJ544057	5.7	57	101
DJ544034	3.4	39	71	DJ544058	5.8	57	101
DJ544035	3.5	39	71	DJ544059	5.9	57	101
DJ544036	3.6	39	71	DJ544060	6.0	57	101
DJ544037	3.7	39	71	DJ544061	6.1	63	107
DJ544038	3.8	43	75	DJ544062	6.2	63	107
DJ544039	3.9	43	75	DJ544063	6.3	63	107
DJ544040	4.0	43	75	DJ544064	6.4	63	107
DJ544041	4.1	43	87	DJ544065	6.5	63	107
DJ544042	4.2	43	87	DJ544066	6.6	63	107
DJ544043	4.3	47	91	DJ544067	6.7	63	107

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

◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze	CFRP
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~								
◎						○	◎	○	○	○		

**HSS-EX, HPD-SUS TWIST DRILLS for STAINLESS STEELS *JOBBER***  
**HSS-EX, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE *KURZ***

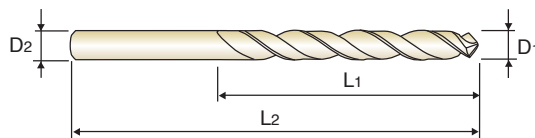
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**for STAINLESS STEELS  
für rostfreier Stähle**

up to 13mm over 13mm



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W 38°
h7
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130°
120°
P.156

up to 4mm over 4mm

D1=D2

Unit : mm

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TiN	D1	L1	L2	TiN	D1	L1	L2
DJ544068	6.8	69	113	DJ544092	9.2	81	131
DJ544069	6.9	69	113	DJ544093	9.3	81	131
DJ544070	7.0	69	113	DJ544094	9.4	81	131
DJ544071	7.1	69	113	DJ544095	9.5	81	131
DJ544072	7.2	69	113	DJ544096	9.6	87	137
DJ544073	7.3	69	113	DJ544097	9.7	87	137
DJ544074	7.4	69	113	DJ544098	9.8	87	137
DJ544075	7.5	69	113	DJ544099	9.9	87	137
DJ544076	7.6	75	119	DJ544100	10.0	87	137
DJ544077	7.7	75	119	DJ544101	10.1	87	144
DJ544078	7.8	75	119	DJ544102	10.2	87	144
DJ544079	7.9	75	119	DJ544103	10.3	87	144
DJ544080	8.0	75	119	DJ544104	10.4	87	144
DJ544081	8.1	75	125	DJ544105	10.5	87	144
DJ544082	8.2	75	125	DJ544106	10.6	87	144
DJ544083	8.3	75	125	DJ544107	10.7	94	151
DJ544084	8.4	75	125	DJ544108	10.8	94	151
DJ544085	8.5	75	125	DJ544109	10.9	94	151
DJ544086	8.6	81	131	DJ544110	11.0	94	151
DJ544087	8.7	81	131	DJ544111	11.1	94	151
DJ544088	8.8	81	131	DJ544112	11.2	94	151
DJ544089	8.9	81	131	DJ544113	11.3	94	151
DJ544090	9.0	81	131	DJ544114	11.4	94	151
DJ544091	9.1	81	131	DJ544115	11.5	94	151

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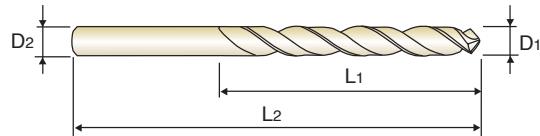
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TiN	D1	L1	L2	TiN	D1	L1	L2
DJ544116	11.6	94	151	DJ544141	14.1	109	169
DJ544117	11.7	94	151	DJ544145	14.5	109	169
DJ544118	11.8	94	151	DJ544150	15.0	109	169
DJ544119	11.9	101	158	DJ544155	15.5	112	172
DJ544120	12.0	101	158	DJ544156	15.6	112	172
DJ544121	12.1	101	158	DJ544160	16.0	112	172
DJ544122	12.2	101	158	DJ544165	16.5	115	181
DJ544123	12.3	101	158	DJ544170	17.0	115	181
DJ544124	12.4	101	158	DJ544175	17.5	118	184
DJ544125	12.5	101	158	DJ544176	17.6	118	184
DJ544126	12.6	101	158	DJ544180	18.0	118	184
DJ544127	12.7	101	158	DJ544185	18.5	122	188
DJ544128	12.8	101	158	DJ544190	19.0	122	188
DJ544129	12.9	101	158	DJ544195	19.5	125	191
DJ544130	13.0	101	158	DJ544196	19.6	125	191
DJ544135	13.5	106	166	DJ544200	20.0	125	191
DJ544140	14.0	106	166				

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◎						○	◎	○	○	○		



## PREMIUM HSS COBALT, HPD TWIST DRILLS, TiN COATED PREMIUM HSS KOBALT, HPD SPIRALBOHRER, TiN-BESCHICHTET

### D4541, D4542 SERIES

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

WORK MATERIAL	CARBON STEELS		ALLOY STEELS (SCM-SNC-SNCM)		TOOL STEELS ALLOY STEELS (SKD11)		CAST IRON TOOL STEELS		ALUMINUM ALLOYS MAGNESIUM ALLOYS	
	20 ~ 25 m/min		20 ~ 25 m/min		8 ~ 13 m/min		35 ~ 40 m/min		80 ~ 100 m/min	
DRILLING SPEED	20 ~ 25 m/min		20 ~ 25 m/min		8 ~ 13 m/min		35 ~ 40 m/min		80 ~ 100 m/min	
DIAMETER	N	S	N	S	N	S	N	S	N	S
2.0	4200	0.08	3600	0.08	1750	0.08	5800	0.11	10500	0.16
3.0	2900	0.13	2500	0.13	1170	0.13	4000	0.14	10500	0.25
4.0	2100	0.14	1900	0.14	880	0.14	3000	0.17	8000	0.30
5.0	1700	0.16	1500	0.16	700	0.16	2400	0.20	6500	0.36
6.0	1300	0.17	1300	0.17	580	0.17	2100	0.23	5200	0.42
8.0	1000	0.21	950	0.21	440	0.21	1500	0.26	4200	0.47
10.0	850	0.25	750	0.25	350	0.25	1100	0.32	3400	0.56
12.0	700	0.30	650	0.30	290	0.30	1000	0.38	2700	0.67
14.0	550	0.35	500	0.35	250	0.35	850	0.40	2400	0.72
16.0	520	0.38	470	0.38	220	0.38	750	0.42	2100	0.77
18.0	450	0.44	420	0.44	195	0.44	700	0.45	1900	0.80
20.0	400	0.45	350	0.45	175	0.45	600	0.51	1600	0.87
22.0	370	0.50	340	0.50	160	0.50	550	0.52	1500	0.95
24.0	350	0.54	300	0.54	145	0.54	500	0.58	1400	1.00
26.0	320	0.58	280	0.58	135	0.58	450	0.60	1300	1.05
28.0	300	0.62	260	0.62	125	0.62	420	0.63	1200	1.10
30.0	280	0.66	240	0.66	115	0.66	400	0.74	1100	1.15
32.0	260	0.70	230	0.70	110	0.70	380	0.74	950	1.20

N = R.P.M  
S = Feed per Revolution (mm/rev.)

## HSS-EX, HPD-SUS TWIST DRILLS, TiN COATED HSS-EX, HPD-SUS SPIRALBOHRER, TiN-BESCHICHTET

### DJ543, DJ544 SERIES

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

WORK MATERIAL	STAINLESS STEELS (SUS304, 200)		STAINLESS STEELS (SUS420, 440)		ALUMINUM & ALUMINIUM ALLOYS		PLASTICS COPPER COPPER ALLOYS		MILD STEELS LOW CARBON STEELS	
	13 ~ 18 m/min		15 ~ 20 m/min		70 ~ 90 m/min		30 ~ 35 m/min		30 ~ 40 m/min	
DRILLING SPEED	13 ~ 18 m/min		15 ~ 20 m/min		70 ~ 90 m/min		30 ~ 35 m/min		30 ~ 40 m/min	
DIAMETER	N	S	N	S	N	S	N	S	N	S
2.0	2600	0.03	3100	0.07	11000	0.09	5600	0.06	6300	0.08
3.0	1800	0.04	2100	0.08	7350	0.13	3750	0.08	4200	0.13
4.0	1300	0.06	1600	0.10	7050	0.18	2800	0.10	3200	0.14
5.0	1050	0.08	1250	0.15	5500	0.22	2250	0.13	2500	0.16
6.0	900	0.09	1050	0.18	4600	0.26	1850	0.15	2100	0.18
8.0	650	0.12	800	0.24	3500	0.34	1350	0.20	1550	0.22
10.0	550	0.15	630	0.30	2800	0.40	1100	0.25	1250	0.26
12.0	450	0.18	530	0.36	2300	0.50	950	0.30	1050	0.32
14.0	400	0.33	450	0.44	2050	0.55	800	0.33	900	0.36
16.0	350	0.36	390	0.48	1750	0.62	700	0.35	790	0.40
18.0	300	0.39	350	0.50	1600	0.70	620	0.40	700	0.45
20.0	260	0.43	320	0.53	1450	0.75	560	0.40	620	0.47

N = R.P.M  
S = Feed per Revolution (mm/rev.)