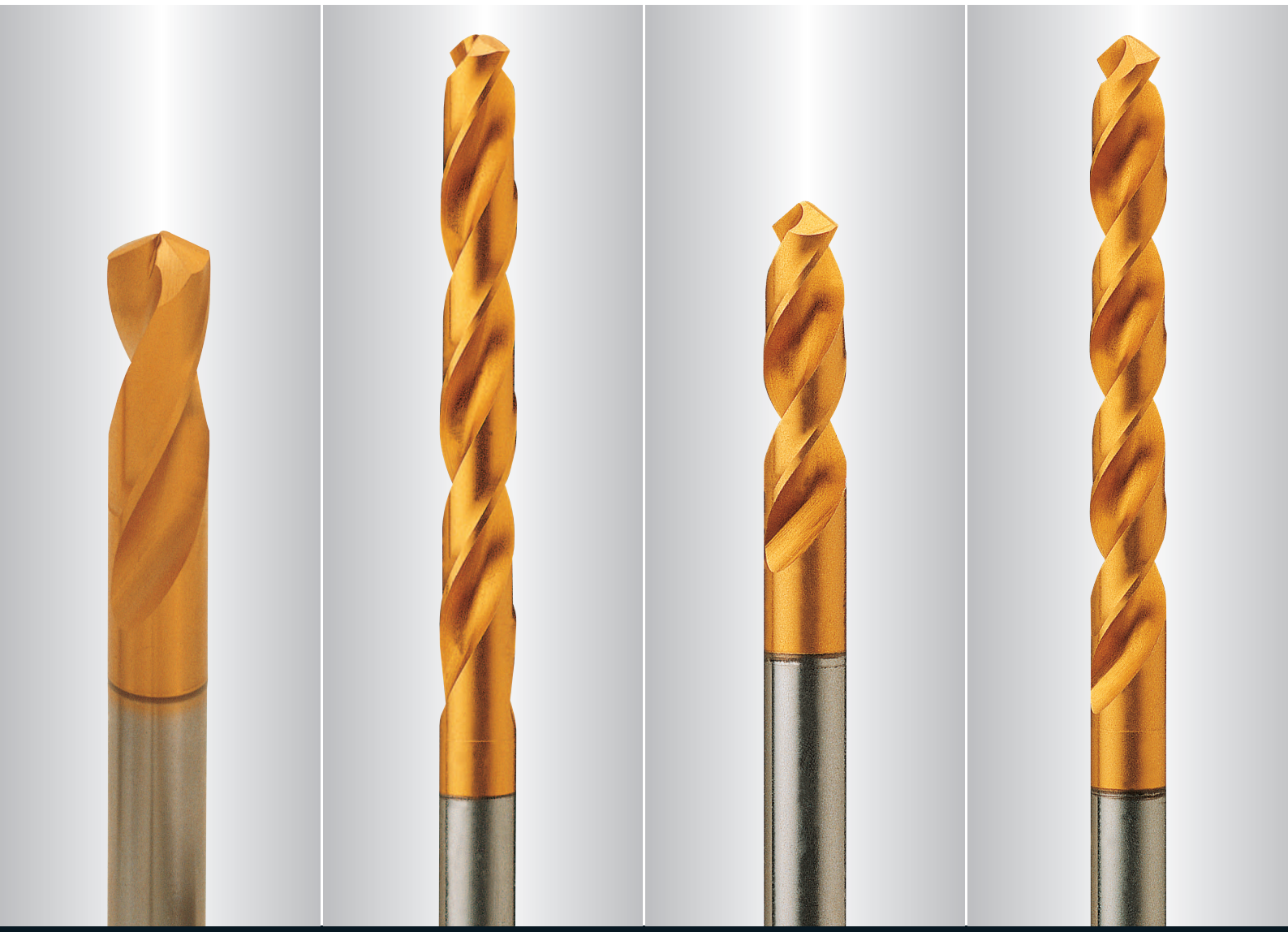
HSS

YG

Being the best through innovation



HPD DRILLS

HPD BOHRER

- PREMIUM HSS HPD STRAIGHT SHANK DRILLS
  General Steels and Stainless Steels
- PREMIUM-HSS HPD ZYLINDERSCHAFT BOHRER
  Für normale und rostfreie Stähle

HPD - HIGH PERFORMANCE DRILLS

HPD Drills for High precision drilling in general steels.
HPD-SUS Drills for High precision drilling in Stainless steels

ITEM	MODEL	DESCRIPTION		SIZE MIN	SIZE MAX	PAGE
D4541		PREMIUM HSS COBALT, HPD TWIST DRILLS for STEELS PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE	*STUB* *EXTRA KURZ*	D2.0	D13.0	110
D4542		PREMIUM HSS COBALT, HPD TWIST DRILLS for STEELS PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE	*JOBBER* *KURZ*	D2.0	D32.0	114
DJ543		HSS-EX, HPD-SUS DRILLS for STAINLESS STEELS HSS-EX, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE	*STUB* *EXTRA KURZ*	D2.0	D13.0	119
DJ544		HSS-EX, HPD-SUS DRILLS for STAINLESS STEELS HSS-EX, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE	*JOBBER* *KURZ*	D2.0	D20.0	121
		RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN				124

◎ : Excellent
○ : Good

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

HPD DRILLS

D4541 SERIES

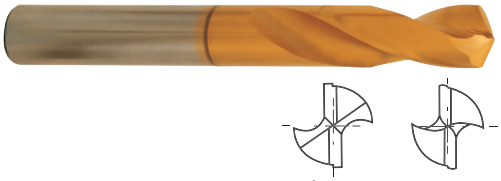
PREMIUM HSS COBALT, HPD TWIST DRILLS for STEELS — *STUB*
PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE — *EXTRA KURZ*

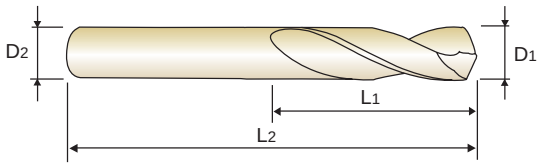
▶ **Application** : Designed for accurate drilling on NC/CNC machines. Drilling hard and tough materials, alloyed tool steels, inconel, nimonic, cast iron, aluminum die casting, etc.

▶ **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, Nimonic, 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.





PREMIUM HSS-Co | N 25° | h7 | h8 | 130° P.124

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4541020	2.0	12	44
D4541920	2.05	12	44
D4541021	2.1	12	44
D4541921	2.15	13	45
D4541022	2.2	13	45
D4541922	2.25	13	45
D4541023	2.3	13	45
D4541923	2.35	13	45
D4541024	2.4	14	46
D4541924	2.45	14	46
D4541025	2.5	14	46
D4541925	2.55	14	46
D4541026	2.6	14	46
D4541926	2.65	14	46
D4541027	2.7	16	48
D4541927	2.75	16	48
D4541028	2.8	16	48
D4541928	2.85	16	48
D4541029	2.9	16	48
D4541929	2.95	16	48
D4541030	3.0	16	48
D4541930	3.05	18	50
D4541031	3.1	18	50
D4541931	3.15	18	50

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4541032	3.2	18	50
D4541932	3.25	18	50
D4541033	3.3	18	50
D4541933	3.35	18	50
D4541034	3.4	20	52
D4541934	3.45	20	52
D4541035	3.5	20	52
D4541935	3.55	20	52
D4541036	3.6	20	52
D4541936	3.65	20	52
D4541037	3.7	20	52
D4541937	3.75	20	52
D4541038	3.8	22	54
D4541938	3.85	22	54
D4541039	3.9	22	54
D4541939	3.95	22	54
D4541040	4.0	22	54
D4541940	4.05	22	66
D4541041	4.1	22	66
D4541941	4.15	22	66
D4541042	4.2	22	66
D4541942	4.25	22	66
D4541043	4.3	24	68
D4541943	4.35	24	68

▶ TiCN(D7541), TiAlN(DQ541) 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎	○			○	○	○	○			

HPD DRILLS

D4541 SERIES

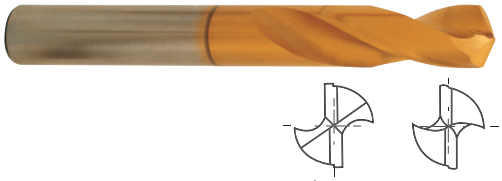
PREMIUM HSS COBALT, HPD TWIST DRILLS for STEELS — *STUB*
PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE — *EXTRA KURZ*

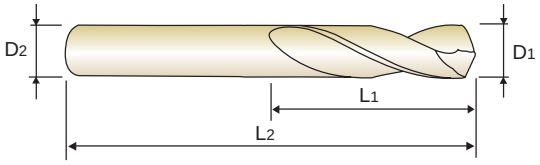
▶ **Application** : Designed for accurate drilling on NC/CNC machines. Drilling hard and tough materials, alloyed tool steels, inconel, nimonic, cast iron, aluminum die casting, etc.

▶ **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, Nimonic, 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.





PREMIUM HSS-Co | N 25° | h7 | h8 | 130° P.124

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4541044	4.4	24	68
D4541944	4.45	24	68
D4541045	4.5	24	68
D4541945	4.55	24	68
D4541046	4.6	24	68
D4541946	4.65	24	68
D4541047	4.7	24	68
D4541947	4.75	24	68
D4541048	4.8	26	70
D4541948	4.85	26	70
D4541049	4.9	26	70
D4541949	4.95	26	70
D4541050	5.0	26	70
D4541950	5.05	26	70
D4541051	5.1	26	70
D4541951	5.15	26	70
D4541052	5.2	26	70
D4541952	5.25	26	70
D4541053	5.3	26	70
D4541953	5.35	28	72
D4541054	5.4	28	72
D4541954	5.45	28	72
D4541055	5.5	28	72
D4541955	5.55	28	72

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4541056	5.6	28	72
D4541956	5.65	28	72
D4541057	5.7	28	72
D4541957	5.75	28	72
D4541058	5.8	28	72
D4541958	5.85	28	72
D4541059	5.9	28	72
D4541959	5.95	28	72
D4541060	6.0	28	72
D4541061	6.1	31	75
D4541062	6.2	31	75
D4541063	6.3	31	75
D4541064	6.4	31	75
D4541065	6.5	31	75
D4541965	6.55	31	75
D4541066	6.6	31	75
D4541966	6.65	31	75
D4541067	6.7	31	75
D4541068	6.8	34	78
D4541069	6.9	34	78
D4541070	7.0	34	78
D4541071	7.1	34	78
D4541072	7.2	34	78
D4541073	7.3	34	78

▶ TiCN(D7541), TiAlN(DQ541) 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎	○			○	○	○	○			

HPD DRILLS

D4541 SERIES

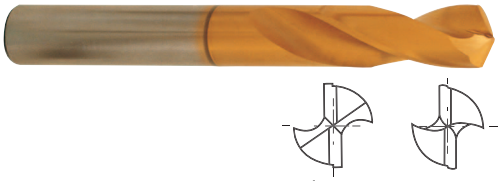
PREMIUM HSS COBALT, HPD TWIST DRILLS for STEELS — *STUB*
PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE — *EXTRA KURZ*

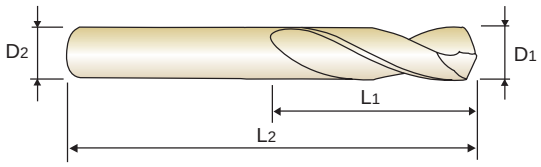
▶ **Application** : Designed for accurate drilling on NC/CNC machines. Drilling hard and tough materials, alloyed tool steels, inconel, nimonic, cast iron, aluminum die casting, etc.

▶ **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, Nimonic, 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.





PREMIUM HSS-Co | N 25° | h7 | h8 | 130° P.124

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4541973	7.35	34	78
D4541074	7.4	34	78
D4541075	7.5	34	78
D4541975	7.55	37	81
D4541076	7.6	37	81
D4541976	7.65	37	81
D4541077	7.7	37	81
D4541078	7.8	37	81
D4541079	7.9	37	81
D4541080	8.0	37	81
D4541081	8.1	37	87
D4541082	8.2	37	87
D4541083	8.3	37	87
D4541983	8.35	37	87
D4541084	8.4	37	87
D4541085	8.5	37	87
D4541985	8.55	40	90
D4541086	8.6	40	90
D4541986	8.65	40	90
D4541087	8.7	40	90
D4541088	8.8	40	90
D4541089	8.9	40	90
D4541090	9.0	40	90
D4541091	9.1	40	90

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4541092	9.2	40	90
D4541992	9.25	40	90
D4541093	9.3	40	90
D4541993	9.35	40	90
D4541094	9.4	40	90
D4541994	9.45	40	90
D4541095	9.5	40	90
D4541995	9.55	43	93
D4541096	9.6	43	93
D4541996	9.65	43	93
D4541097	9.7	43	93
D4541098	9.8	43	93
D4541099	9.9	43	93
D4541999	9.95	43	93
D4541100	10.0	43	93
D4541101	10.1	43	100
D4541102	10.2	43	100
D4541802	10.25	43	100
D4541103	10.3	43	100
D4541803	10.35	43	100
D4541104	10.4	43	100
D4541105	10.5	43	100
D4541805	10.55	43	100
D4541106	10.6	43	100

▶ TiCN(D7541), TiAlN(DQ541) 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎	○			○	○	○	○			

PREMIUM HSS COBALT, HPD TWIST DRILLS for STEELS

STUB

PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE

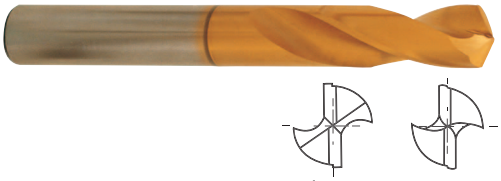
EXTRA KURZ

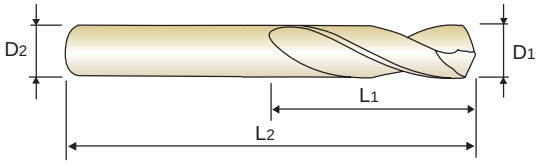
▶ **Application** : Designed for accurate drilling on NC/CNC machines. Drilling hard and tough materials, alloyed tool steels, inconel, nimonic, cast iron, aluminum die casting, etc.

▶ **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, Nimonic, 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.





PREMIUM HSS-Co | N 25° | h7 | h8 | 130° P.124

$D_1=D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4541806	10.65	47	104
D4541107	10.7	47	104
D4541108	10.8	47	104
D4541109	10.9	47	104
D4541809	10.95	47	104
D4541110	11.0	47	104
D4541111	11.1	47	104
D4541112	11.2	47	104
D4541812	11.25	47	104
D4541113	11.3	47	104
D4541813	11.35	47	104
D4541114	11.4	47	104
D4541115	11.5	47	104
D4541815	11.55	47	104
D4541116	11.6	47	104

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4541117	11.7	47	104
D4541118	11.8	47	104
D4541119	11.9	51	108
D4541120	12.0	51	108
D4541121	12.1	51	108
D4541122	12.2	51	108
D4541123	12.3	51	108
D4541124	12.4	51	108
D4541125	12.5	51	108
D4541126	12.6	51	108
D4541127	12.7	51	108
D4541128	12.8	51	108
D4541129	12.9	51	108
D4541130	13.0	51	108

▶ TiCN(D7541), TiAlN(DQ541) 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎	○			○	○	○	○			

HPD DRILLS

D4542 SERIES

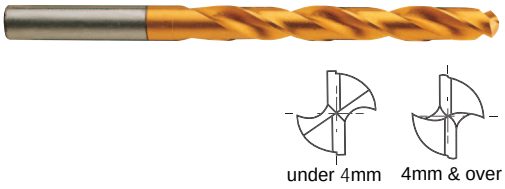
PREMIUM HSS COBALT, HPD TWIST DRILLS for STEELS — JOBBER
PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE — KURZ

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

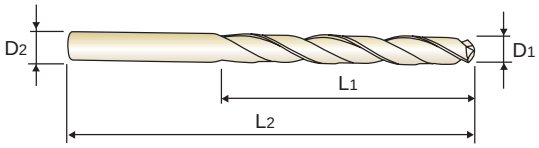
▶ **Advantage** : Helical thinning - good chip removal, self-centering, reducing thrust and improving accuracy.
Reinforced web and jobbers length - increasing rigidity and suitable for 4D~5D drilling
Premium Cobalt HSS with superior TiN coating - higher speed and feed, longer tool life
High quality &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



PREMIUM HSS-Co | N 30° | h7 | h6 | h8 | 130° | P.124

up to 13mm over 13mm

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4542020	2.0	124	56
D4542920	2.05	24	56
D4542021	2.1	24	56
D4542921	2.15	27	59
D4542022	2.2	27	59
D4542922	2.25	27	59
D4542023	2.3	27	59
D4542923	2.35	27	59
D4542024	2.4	30	62
D4542924	2.45	30	62
D4542025	2.5	30	62
D4542925	2.55	30	62
D4542026	2.6	30	62
D4542926	2.65	30	62
D4542027	2.7	33	65
D4542927	2.75	33	65
D4542028	2.8	33	65
D4542928	2.85	33	65
D4542029	2.9	33	65
D4542929	2.95	33	65
D4542030	3.0	33	65
D4542930	3.05	36	68
D4542031	3.1	36	68
D4542931	3.15	36	68
D4542032	3.2	36	68

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4542932	3.25	36	68
D4542033	3.3	36	68
D4542933	3.35	36	68
D4542034	3.4	39	71
D4542934	3.45	39	71
D4542035	3.5	39	71
D4542935	3.55	39	71
D4542036	3.6	39	71
D4542936	3.65	39	71
D4542037	3.7	39	71
D4542937	3.75	39	71
D4542038	3.8	43	75
D4542938	3.85	43	75
D4542039	3.9	43	75
D4542939	3.95	43	75
D4542040	4.0	43	75
D4542940	4.05	43	87
D4542041	4.1	43	87
D4542941	4.15	43	87
D4542042	4.2	43	87
D4542942	4.25	43	87
D4542043	4.3	47	91
D4542943	4.35	47	91
D4542044	4.4	47	91
D4542944	4.45	47	91

▶ TiCN(D7542), TiAlN(DQ542) 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎	○			○	○	○	○			

HPD DRILLS

D4542 SERIES

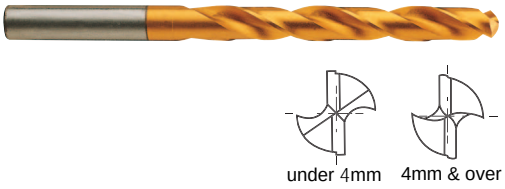
PREMIUM HSS COBALT, HPD TWIST DRILLS for STEELS — JOBBER
PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE — KURZ

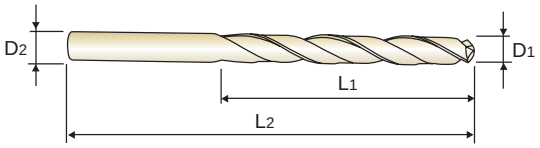
▶ **Application** : Designed for high speed non-step 4D ~ 5D drilling. Drilling mild steels, cast iron, aluminum, alloyed tool steels, etc.

▶ **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.





PREMIUM HSS-Co | N 30° | h7 | h6 | h8 | 130°

up to 13mm over 13mm

P.124

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4542045	4.5	47	91
D4542945	4.55	47	91
D4542046	4.6	47	91
D4542946	4.65	47	91
D4542047	4.7	47	91
D4542947	4.75	47	91
D4542048	4.8	52	96
D4542948	4.85	52	96
D4542049	4.9	52	96
D4542949	4.95	52	96
D4542050	5.0	52	96
D4542950	5.05	52	96
D4542051	5.1	52	96
D4542951	5.15	52	96
D4542052	5.2	52	96
D4542952	5.25	52	96
D4542053	5.3	52	96
D4542953	5.35	57	101
D4542054	5.4	57	101
D4542954	5.45	57	101
D4542055	5.5	57	101
D4542955	5.55	57	101
D4542056	5.6	57	101
D4542956	5.65	57	101
D4542057	5.7	57	101

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4542957	5.75	57	101
D4542058	5.8	57	101
D4542958	5.85	57	101
D4542059	5.9	57	101
D4542959	5.95	57	101
D4542060	6.0	57	101
D4542960	6.05	63	107
D4542061	6.1	63	107
D4542961	6.15	63	107
D4542062	6.2	63	107
D4542962	6.25	63	107
D4542063	6.3	63	107
D4542963	6.35	63	107
D4542064	6.4	63	107
D4542964	6.45	63	107
D4542065	6.5	63	107
D4542965	6.55	63	107
D4542066	6.6	63	107
D4542966	6.65	63	107
D4542067	6.7	63	107
D4542967	6.75	69	113
D4542068	6.8	69	113
D4542968	6.85	69	113
D4542069	6.9	69	113
D4542969	6.95	69	113

▶ TiCN(D7542), TiAlN(DQ542) 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎	○			○	○	○	○			

HPD DRILLS

D4542 SERIES

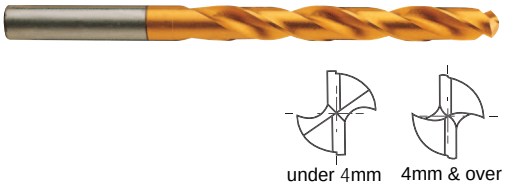
PREMIUM HSS COBALT, HPD TWIST DRILLS for STEELS — JOBBER
PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE — KURZ

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

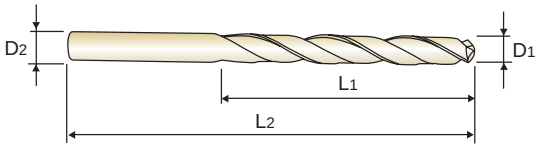
▶ **Advantage** : Helical thinning - good chip removal, self-centering, reducing thrust and improving accuracy.
Reinforced web and jobbers length - increasing rigidity and suitable for 4D~5D drilling
Premium Cobalt HSS with superior TiN coating - higher speed and feed, longer tool life
High quality &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



PREMIUM HSS-Co | N 30° | h7 | h6 | h8 | 130° | P.124

up to 13mm over 13mm

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4542070	7.0	69	113
D4542970	7.05	69	113
D4542071	7.1	69	113
D4542971	7.15	69	113
D4542072	7.2	69	113
D4542972	7.25	69	113
D4542073	7.3	69	113
D4542973	7.35	69	113
D4542074	7.4	69	113
D4542974	7.45	69	113
D4542075	7.5	69	113
D4542975	7.55	75	119
D4542076	7.6	75	119
D4542976	7.65	75	119
D4542077	7.7	75	119
D4542977	7.75	75	119
D4542078	7.8	75	119
D4542978	7.85	75	119
D4542079	7.9	75	119
D4542979	7.95	75	119
D4542080	8.0	75	119
D4542980	8.05	75	125
D4542081	8.1	75	125
D4542981	8.15	75	125
D4542082	8.2	75	125

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4542982	8.25	75	125
D4542083	8.3	75	125
D4542983	8.35	75	125
D4542084	8.4	75	125
D4542984	8.45	75	125
D4542085	8.5	75	125
D4542985	8.55	81	131
D4542086	8.6	81	131
D4542986	8.65	81	131
D4542087	8.7	81	131
D4542987	8.75	81	131
D4542088	8.8	81	131
D4542988	8.85	81	131
D4542089	8.9	81	131
D4542989	8.95	81	131
D4542090	9.0	81	131
D4542990	9.05	81	131
D4542091	9.1	81	131
D4542991	9.15	81	131
D4542092	9.2	81	131
D4542992	9.25	81	131
D4542093	9.3	81	131
D4542993	9.35	81	131
D4542094	9.4	81	131
D4542994	9.45	81	131

▶ TiCN(D7542), TiAlN(DQ542) 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎	○			○	○	○	○			

HPD DRILLS

D4542 SERIES

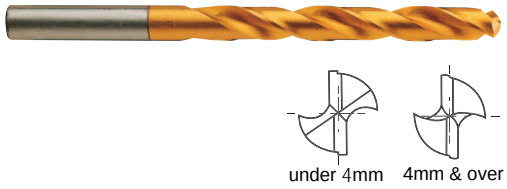
PREMIUM HSS COBALT, HPD TWIST DRILLS for STEELS — JOBBER
PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE — KURZ

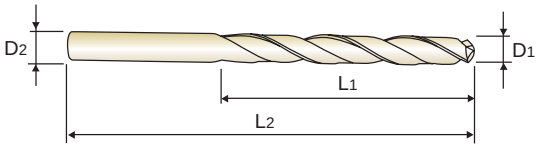
▶ **Application** : Designed for high speed non-step 4D ~ 5D drilling. Drilling mild steels, cast iron, aluminum, alloyed tool steels, etc.

▶ **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.





PREMIUM HSS-Co | N 30° | h7 | h6 | h8 | 130° | P.124

up to 13mm over 13mm

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2	TiN	D_1	L_1	L_2
D4542095	9.5	81	131	D4542807	10.75	94	151
D4542995	9.55	87	137	D4542108	10.8	94	151
D4542096	9.6	87	137	D4542808	10.85	94	151
D4542996	9.65	87	137	D4542109	10.9	94	151
D4542097	9.7	87	137	D4542809	10.95	94	151
D4542997	9.75	87	137	D4542110	11.0	94	151
D4542098	9.8	87	137	D4542810	11.05	94	151
D4542998	9.85	87	137	D4542111	11.1	94	151
D4542099	9.9	87	137	D4542811	11.15	94	151
D4542999	9.95	87	137	D4542112	11.2	94	151
D4542100	10.0	87	137	D4542812	11.25	94	151
D4542800	10.05	87	144	D4542113	11.3	94	151
D4542101	10.1	87	144	D4542813	11.35	94	151
D4542801	10.15	87	144	D4542114	11.4	94	151
D4542102	10.2	87	144	D4542814	11.45	94	151
D4542802	10.25	87	144	D4542115	11.5	94	151
D4542103	10.3	87	144	D4542815	11.55	94	151
D4542803	10.35	87	144	D4542116	11.6	94	151
D4542104	10.4	87	144	D4542816	11.65	94	151
D4542804	10.45	87	144	D4542117	11.7	94	151
D4542105	10.5	87	144	D4542817	11.75	94	151
D4542805	10.55	87	144	D4542118	11.8	94	151
D4542106	10.6	87	144	D4542818	11.85	101	158
D4542806	10.65	94	151	D4542119	11.9	101	158
D4542107	10.7	94	151	D4542819	11.95	101	158

▶ TiCN(D7542), TiAlN(DQ542) 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎	○			○	○	○	○			

HPD DRILLS

D4542 SERIES

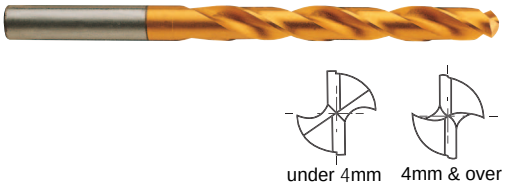
PREMIUM HSS COBALT, HPD TWIST DRILLS for STEELS — *JOBBER*
PREMIUM HSS KOBALT, HPD SPIRALBOHRER für STÄHLE — *KURZ*

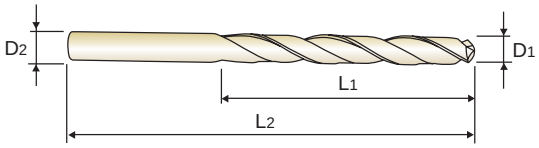
▶ **Application** : Designed for high speed non-step 4D ~ 5D drilling. Drilling mild steels, cast iron, aluminum, alloyed tool steels, etc.

▶ **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.





PREMIUM HSS-Co | N 30° | h7 (up to 13mm) | h6 (over 13mm) | h8 | 130° P.124

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4542120	12.0	101	158
D4542121	12.1	101	158
D4542122	12.2	101	158
D4542123	12.3	101	158
D4542124	12.4	101	158
D4542125	12.5	101	158
D4542126	12.6	101	158
D4542127	12.7	101	158
D4542128	12.8	101	158
D4542129	12.9	101	158
D4542130	13.0	101	158
D4542135	13.5	90	150
D4542140	14.0	90	150
D4542141	14.1	95	155
D4542145	14.5	95	155
D4542150	15.0	95	161
D4542155	15.5	100	166
D4542156	15.6	100	166
D4542160	16.0	100	166
D4542165	16.5	106	172
D4542170	17.0	106	172
D4542175	17.5	112	178
D4542176	17.6	112	178
D4542180	18.0	112	178
D4542185	18.5	118	184

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
D4542190	19.0	118	194
D4542195	19.5	125	201
D4542196	19.6	125	201
D4542200	20.0	125	201
D4542205	20.5	128	204
D4542210	21.0	128	204
D4542211	21.1	128	204
D4542215	21.5	132	208
D4542220	22.0	132	208
D4542225	22.5	136	212
D4542230	23.0	136	212
D4542235	23.5	136	212
D4542240	24.0	140	220
D4542245	24.5	140	220
D4542250	25.0	140	220
D4542255	25.5	145	225
D4542260	26.0	145	225
D4542265	26.5	145	225
D4542270	27.0	150	230
D4542280	28.0	150	230
D4542290	29.0	155	235
D4542300	30.0	155	235
D4542310	31.0	160	240
D4542320	32.0	165	245

▶ TiCN(D7542), TiAlN(DQ542) 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎	○			○	○	○	○			

HPD DRILLS

DJ543 SERIES

HSS-EX, HPD-SUS TWIST DRILLS for STAINLESS STEELS *STUB*

HSS-EX, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE *EXTRA KURZ*

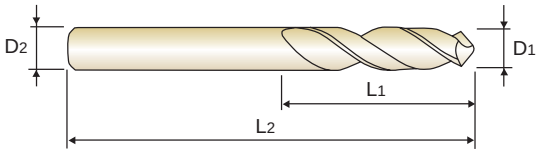
▶ **Application** : Designed for drilling stainless steels, mild steels, aluminum, aluminum alloys, aluminum die casting, copper, copper alloys, etc.

▶ **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 deflecton.
High vanadium HSS-EX 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-EX-Material mit TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.

four facet



for STAINLESS STEELS
für rostfreier Stähle

HSS EX | W 38° | h7 | h8 | 130° | 120° | up to 4mm | over 4mm

P.124

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2	TiN	D_1	L_1	L_2
DJ543020	2.0	12	44	DJ543048	4.8	26	70
DJ543021	2.1	12	44	DJ543049	4.9	26	70
DJ543022	2.2	13	45	DJ543050	5.0	26	70
DJ543023	2.3	13	45	DJ543051	5.1	26	70
DJ543024	2.4	14	46	DJ543052	5.2	26	70
DJ543025	2.5	14	46	DJ543053	5.3	26	70
DJ543026	2.6	14	46	DJ543054	5.4	28	72
DJ543027	2.7	16	48	DJ543055	5.5	28	72
DJ543028	2.8	16	48	DJ543056	5.6	28	72
DJ543029	2.9	16	48	DJ543057	5.7	28	72
DJ543030	3.0	16	48	DJ543058	5.8	28	72
DJ543031	3.1	18	50	DJ543059	5.9	28	72
DJ543032	3.2	18	50	DJ543060	6.0	28	72
DJ543033	3.3	18	50	DJ543061	6.1	31	75
DJ543034	3.4	20	52	DJ543062	6.2	31	75
DJ543035	3.5	20	52	DJ543063	6.3	31	75
DJ543036	3.6	20	52	DJ543064	6.4	31	75
DJ543037	3.7	20	52	DJ543065	6.5	31	75
DJ543038	3.8	22	54	DJ543066	6.6	31	75
DJ543039	3.9	22	54	DJ543067	6.7	31	75
DJ543040	4.0	22	54	DJ543068	6.8	34	78
DJ543041	4.1	22	66	DJ543069	6.9	34	78
DJ543042	4.2	22	66	DJ543070	7.0	34	78
DJ543043	4.3	24	68	DJ543071	7.1	34	78
DJ543044	4.4	24	68	DJ543072	7.2	34	78
DJ543045	4.5	24	68	DJ543073	7.3	34	78
DJ543046	4.6	24	68	DJ543074	7.4	34	78
DJ543047	4.7	24	68	DJ543075	7.5	34	78

▶ TiCN(DW543), TiAlN(DY543) 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎						○	◎	○	○	○	

HPD DRILLS

DJ543 SERIES

HSS-EX, HPD-SUS TWIST DRILLS for STAINLESS STEELS *STUB*

HSS-EX, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE *EXTRA KURZ*

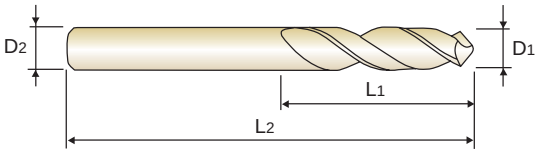
▶ **Application** : Designed for drilling stainless steels, mild steels, aluminum, aluminum alloys, aluminum die casting, copper, copper alloys, etc.

▶ **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 deflecton.
High vanadium HSS-EX 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-EX-Material mit TiN-Beschichtung, höhere Geschwindigkeit und Vorschub, längere Standzeit, verbesserte Oberflächengüte und Produktivität.

four facet



for STAINLESS STEELS
für rostfreier Stähle

HSS EX | W 38° | h7 | h8 | 130° | 120° | up to 4mm | over 4mm

P.124

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2	TiN	D_1	L_1	L_2
DJ543076	7.6	37	81	DJ543104	10.4	43	100
DJ543077	7.7	37	81	DJ543105	10.5	43	100
DJ543078	7.8	37	81	DJ543106	10.6	43	100
DJ543079	7.9	37	81	DJ543107	10.7	47	104
DJ543080	8.0	37	81	DJ543108	10.8	47	104
DJ543081	8.1	37	87	DJ543109	10.9	47	104
DJ543082	8.2	37	87	DJ543110	11.0	47	104
DJ543083	8.3	37	87	DJ543111	11.1	47	104
DJ543084	8.4	37	87	DJ543112	11.2	47	104
DJ543085	8.5	37	87	DJ543113	11.3	47	104
DJ543086	8.6	40	90	DJ543114	11.4	47	104
DJ543087	8.7	40	90	DJ543115	11.5	47	104
DJ543088	8.8	40	90	DJ543116	11.6	47	104
DJ543089	8.9	40	90	DJ543117	11.7	47	104
DJ543090	9.0	40	90	DJ543118	11.8	47	104
DJ543091	9.1	40	90	DJ543119	11.9	51	108
DJ543092	9.2	40	90	DJ543120	12.0	51	108
DJ543093	9.3	40	90	DJ543121	12.1	51	108
DJ543094	9.4	40	90	DJ543122	12.2	51	108
DJ543095	9.5	40	90	DJ543123	12.3	51	108
DJ543096	9.6	43	93	DJ543124	12.4	51	108
DJ543097	9.7	43	93	DJ543125	12.5	51	108
DJ543098	9.8	43	93	DJ543126	12.6	51	108
DJ543099	9.9	43	93	DJ543127	12.7	51	108
DJ543100	10.0	43	93	DJ543128	12.8	51	108
DJ543101	10.1	43	100	DJ543129	12.9	51	108
DJ543102	10.2	43	100	DJ543130	13.0	51	108
DJ543103	10.3	43	100				

▶ TiCN(DW543), TiAlN(DY543) 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
~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

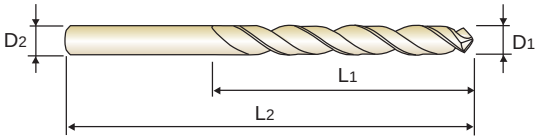
KURZ

▶ **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 toole 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.



for STAINLESS STEELS
für rostfreier Stähle

up to 13mm over 13mm

HSS EX | W 38° | h7 | h8 | 130° | 120° | P.124

up to 4mm over 4mm

$D_1=D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
DJ544020	2.0	24	56
DJ544021	2.1	24	56
DJ544022	2.2	27	59
DJ544023	2.3	27	59
DJ544024	2.4	30	62
DJ544025	2.5	30	62
DJ544026	2.6	30	62
DJ544027	2.7	33	65
DJ544028	2.8	33	65
DJ544029	2.9	33	65
DJ544030	3.0	33	65
DJ544031	3.1	36	68
DJ544032	3.2	36	68
DJ544033	3.3	36	68
DJ544034	3.4	39	71
DJ544035	3.5	39	71
DJ544036	3.6	39	71
DJ544037	3.7	39	71
DJ544038	3.8	43	75
DJ544039	3.9	43	75
DJ544040	4.0	43	75
DJ544041	4.1	43	87
DJ544042	4.2	43	87
DJ544043	4.3	47	91

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
DJ544044	4.4	47	91
DJ544045	4.5	47	91
DJ544046	4.6	47	91
DJ544047	4.7	47	91
DJ544048	4.8	52	96
DJ544049	4.9	52	96
DJ544050	5.0	52	96
DJ544051	5.1	52	96
DJ544052	5.2	52	96
DJ544053	5.3	52	96
DJ544054	5.4	57	101
DJ544055	5.5	57	101
DJ544056	5.6	57	101
DJ544057	5.7	57	101
DJ544058	5.8	57	101
DJ544059	5.9	57	101
DJ544060	6.0	57	101
DJ544061	6.1	63	107
DJ544062	6.2	63	107
DJ544063	6.3	63	107
DJ544064	6.4	63	107
DJ544065	6.5	63	107
DJ544066	6.6	63	107
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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎						○	◎	○	○	○	

HPD DRILLS

DJ544 SERIES

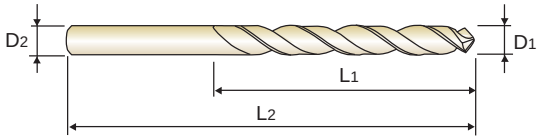
HSS-EX, HPD-SUS TWIST DRILLS for STAINLESS STEELS — *JOBBER*
HSS-EX, HPD-SUS SPIRALBOHRER für ROSTFREIER STÄHLE — *KURZ*

▶ **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 toole 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.



for STAINLESS STEELS
für rostfreier Stähle

HSS EX | W 38° | h7 | h8 | 130° (up to 4mm) | 120° (over 4mm) | P.124

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2	TiN	D_1	L_1	L_2
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

▶ 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
~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

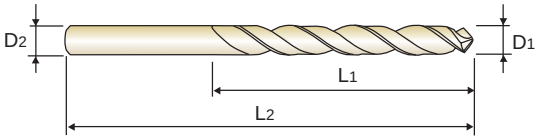
KURZ

▶ **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 toole 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.



for STAINLESS STEELS
für rostfreier Stähle

HSS EX | W 38° | h7 | h8 | 130° | 120°

up to 4mm over 4mm

P.124

$D_1 = D_2$

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
DJ544116	11.6	94	151
DJ544117	11.7	94	151
DJ544118	11.8	94	151
DJ544119	11.9	101	158
DJ544120	12.0	101	158
DJ544121	12.1	101	158
DJ544122	12.2	101	158
DJ544123	12.3	101	158
DJ544124	12.4	101	158
DJ544125	12.5	101	158
DJ544126	12.6	101	158
DJ544127	12.7	101	158
DJ544128	12.8	101	158
DJ544129	12.9	101	158
DJ544130	13.0	101	158
DJ544135	13.5	106	166
DJ544140	14.0	106	166

EDP No.	Drill Diameter	Flute Length	Overall Length
TiN	D_1	L_1	L_2
DJ544141	14.1	109	169
DJ544145	14.5	109	169
DJ544150	15.0	109	169
DJ544155	15.5	112	172
DJ544156	15.6	112	172
DJ544160	16.0	112	172
DJ544165	16.5	115	181
DJ544170	17.0	115	181
DJ544175	17.5	118	184
DJ544176	17.6	118	184
DJ544180	18.0	118	184
DJ544185	18.5	122	188
DJ544190	19.0	122	188
DJ544195	19.5	125	191
DJ544196	19.6	125	191
DJ544200	20.0	125	191

▶ 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎						○	◎	○	○	○	

HPD DRILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

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.

Unit : mm

WORK MATERIAL	CARBON STEELS		ALLOY STEELS (SCM-SNC-SNCM)		TOOL STEELS ALLOY STEELS (SKD11)		CAST IRON TOOL STEELS		ALUMINUM ALLOYS MAGNESIUM ALLOYS	
DIAMETER	N	S	N	S	N	S	N	S	N	S
2	4200	0.08	3600	0.08	1750	0.08	5800	0.11	10500	0.16
3	2900	0.13	2500	0.13	1170	0.13	4000	0.14	10500	0.25
4	2100	0.14	1900	0.14	880	0.14	3000	0.17	8000	0.30
5	1700	0.16	1500	0.16	700	0.16	2400	0.20	6500	0.36
6	1300	0.17	1300	0.17	580	0.17	2100	0.23	5200	0.42
8	1000	0.21	950	0.21	440	0.21	1500	0.26	4200	0.47
10	850	0.25	750	0.25	350	0.25	1100	0.32	3400	0.56
12	700	0.30	650	0.30	290	0.30	1000	0.38	2700	0.67
14	550	0.35	500	0.35	250	0.35	850	0.40	2400	0.72
16	520	0.38	470	0.38	220	0.38	750	0.42	2100	0.77
18	450	0.44	420	0.44	195	0.44	700	0.45	1900	0.80
20	400	0.45	350	0.45	175	0.45	600	0.51	1600	0.87
22	370	0.50	340	0.50	160	0.50	550	0.52	1500	0.95
24	350	0.54	300	0.54	145	0.54	500	0.58	1400	1.00
26	320	0.58	280	0.58	135	0.58	450	0.60	1300	1.05
28	300	0.62	260	0.62	125	0.62	420	0.63	1200	1.10
30	280	0.66	240	0.66	115	0.66	400	0.74	1100	1.15
32	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

Unit : mm

WORK MATERIAL	STAINLESS STEELS (SUS304, 200)		STAINLESS STEELS (SUS420, 440)		ALUMINUM & ALUMINIUM ALLOYS		PLASTICS COPPER COPPER ALLOYS		MILD STEELS LOW CARBON STEELS	
DIAMETER	N	S	N	S	N	S	N	S	N	S
2	2600	0.03	3100	0.07	11000	0.09	5600	0.06	6300	0.08
3	1800	0.04	2100	0.08	7350	0.13	3750	0.08	4200	0.13
4	1300	0.06	1600	0.10	7050	0.18	2800	0.10	3200	0.14
5	1050	0.08	1250	0.15	5500	0.22	2250	0.13	2500	0.16
6	900	0.09	1050	0.18	4600	0.26	1850	0.15	2100	0.18
8	650	0.12	800	0.24	3500	0.34	1350	0.20	1550	0.22
10	550	0.15	630	0.30	2800	0.40	1100	0.25	1250	0.26
12	450	0.18	530	0.36	2300	0.50	950	0.30	1050	0.32
14	400	0.33	450	0.44	2050	0.55	800	0.33	900	0.36
16	350	0.36	390	0.48	1750	0.62	700	0.35	790	0.40
18	300	0.39	350	0.50	1600	0.70	620	0.40	700	0.45
20	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.)