



CARBIDE, DREAM DRILLS - INOX with COOLANT HOLES

LONG

● VOLLHARTMETALL DREAM SPIRALBOHRER - INOX mit KÜHLKANAL

LANG

● Forets DREAM DRILLS carbure pour INOX, avec arrosage central, série longue

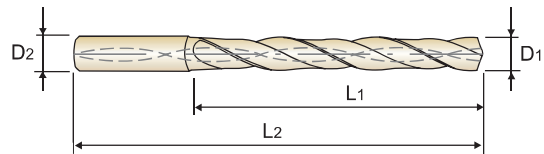
LONGUE

● PUNTE ELICOIDALI IN MD, DREAM DRILLS - INOX (con fori di refrigerazione)

LUNGA

- ▶ Special flute shape and geometry suitable for machining stainless steel
- ▶ Excellent chip evacuation from better surface treatment
- ▶ Point R-thinning achieves superior centering and chip curling
- ▶ TiAIN coating for better surface finishes and longer tool life

- ▶ Spezielle Nutenform und Geometrie für die Bearbeitung von rostfreiem Stahl
- ▶ Hervorragende Spanabfuhr durch bessere Oberflächenbehandlung
- ▶ Vorzügliche Zentrierung und Spanbruch durch die R-Ausspitzung
- ▶ TiAIN-Beschichtung für bessere Oberflächengüte der Bohrung und längere Standzeit



P.129-130

5 × D

EDP No.	Drill Diameter	Shank Diameter	Flute Length		Overall Length
			L1	L2	
TiAIN	D1	D2	L1	L2	
DH452010	1.0	3	8	55	
DH452011	1.1	3	12	55	
DH452012	1.2	3	12	55	
DH452013	1.3	3	12	55	
DH452014	1.4	3	12	55	
DH452015	1.5	3	16	55	
DH452016	1.6	3	16	55	
DH452017	1.7	3	16	55	
DH452018	1.8	3	16	55	
DH452019	1.9	3	16	55	
DH452020	2.0	4	21	57	
DH452021	2.1	4	21	57	
DH452022	2.2	4	21	57	
DH452023	2.3	4	21	57	
DH452024	2.4	4	21	57	
DH452025	2.5	4	21	57	
DH452026	2.6	4	21	57	
DH452027	2.7	4	21	57	
DH452028	2.8	4	21	57	
DH452029	2.9	4	21	57	
DH452030	3.0	6	28	66	
DH452031	3.1	6	28	66	

EDP No.	Drill Diameter	Shank Diameter	Flute Length		Overall Length
			L1	L2	
TiAIN	D1	D2	L1	L2	
DH452032	3.2	6	28	66	
DH452033	3.3	6	28	66	
DH452034	3.4	6	28	66	
DH452035	3.5	6	28	66	
DH452036	3.6	6	28	66	
DH452037	3.7	6	28	66	
DH452038	3.8	6	36	74	
DH452039	3.9	6	36	74	
DH452040	4.0	6	36	74	
DH452041	4.1	6	36	74	
DH452042	4.2	6	36	74	
DH452043	4.3	6	36	74	
DH452044	4.4	6	36	74	
DH452045	4.5	6	36	74	
DH452046	4.6	6	36	74	
DH452047	4.7	6	36	74	
DH452048	4.8	6	44	82	
DH452049	4.9	6	44	82	
DH452050	5.0	6	44	82	
DH452051	5.1	6	44	82	
DH452052	5.2	6	44	82	
DH452053	5.3	6	44	82	

Unit : mm

▶ Other shank types 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	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	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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- ▶ Special flute shape and geometry suitable for machining stainless steel
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- ▶ Hervorragende Spanabfuhr durch bessere Oberflächenbehandlung
- ▶ Vorzügliche Zentrierung und Spanbruch durch die R-Ausspitzung
- ▶ TiAlN-Beschichtung für bessere Oberflächengüte der Bohrung und längere Standzeit



P.129-130

5 x D

Unit : mm

EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length
TiAlN	D1	D2	L1	L2
DH452054	5.4	6	44	82
DH452055	5.5	6	44	82
DH452056	5.6	6	44	82
DH452057	5.7	6	44	82
DH452058	5.8	6	44	82
DH452059	5.9	6	44	82
DH452060	6.0	6	44	82
DH452061	6.1	8	53	91
DH452062	6.2	8	53	91
DH452063	6.3	8	53	91
DH452064	6.4	8	53	91
DH452065	6.5	8	53	91
DH452066	6.6	8	53	91
DH452067	6.7	8	53	91
DH452068	6.8	8	53	91
DH452069	6.9	8	53	91
DH452070	7.0	8	53	91
DH452071	7.1	8	53	91
DH452072	7.2	8	53	91
DH452073	7.3	8	53	91
DH452074	7.4	8	53	91
DH452075	7.5	8	53	91

EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length
TiAlN	D1	D2	L1	L2
DH452076	7.6	8	53	91
DH452077	7.7	8	53	91
DH452078	7.8	8	53	91
DH452079	7.9	8	53	91
DH452080	8.0	8	53	91
DH452081	8.1	10	61	103
DH452082	8.2	10	61	103
DH452083	8.3	10	61	103
DH452084	8.4	10	61	103
DH452085	8.5	10	61	103
DH452086	8.6	10	61	103
DH452087	8.7	10	61	103
DH452088	8.8	10	61	103
DH452089	8.9	10	61	103
DH452090	9.0	10	61	103
DH452091	9.1	10	61	103
DH452092	9.2	10	61	103
DH452093	9.3	10	61	103
DH452094	9.4	10	61	103
DH452095	9.5	10	61	103
DH452096	9.6	10	61	103
DH452097	9.7	10	61	103

▶ Other shank types 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	30	10	29	32	38	15	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	◎	◎	○	○	○												○				

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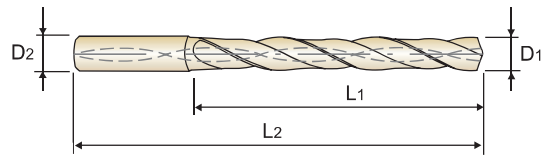
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P.129-130

5 × D

EDP No.	Drill Diameter	Shank Diameter	Flute Length		Overall Length
	D1	D2	L1	L2	
DH452098	9.8	10	61	103	
DH452099	9.9	10	61	103	
DH452100	10.0	10	61	103	
DH452101	10.1	12	71	118	
DH452102	10.2	12	71	118	
DH452103	10.3	12	71	118	
DH452104	10.4	12	71	118	
DH452105	10.5	12	71	118	
DH452106	10.6	12	71	118	
DH452107	10.7	12	71	118	
DH452108	10.8	12	71	118	
DH452109	10.9	12	71	118	
DH452110	11.0	12	71	118	
DH452111	11.1	12	71	118	
DH452112	11.2	12	71	118	
DH452113	11.3	12	71	118	
DH452114	11.4	12	71	118	
DH452115	11.5	12	71	118	
DH452116	11.6	12	71	118	
DH452117	11.7	12	71	118	

EDP No.	Drill Diameter	Shank Diameter	Flute Length		Overall Length
	D1	D2	L1	L2	
DH452118	11.8	12	71	118	
DH452119	11.9	12	71	118	
DH452120	12.0	12	71	118	
DH452125	12.5	14	77	124	
DH452130	13.0	14	77	124	
DH452135	13.5	14	77	124	
DH452140	14.0	14	77	124	
DH452145	14.5	16	83	133	
DH452150	15.0	16	83	133	
DH452155	15.5	16	83	133	
DH452160	16.0	16	83	133	
DH452165	16.5	18	93	143	
DH452170	17.0	18	93	143	
DH452175	17.5	18	93	143	
DH452180	18.0	18	93	143	
DH452185	18.5	20	101	153	
DH452190	19.0	20	101	153	
DH452195	19.5	20	101	153	
DH452200	20.0	20	101	153	

Unit : mm

► Other shank types are available on your request.

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
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

DH451, DH452, DH453 SERIES with COOLANT HOLES

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

ISO	VDI 3323	Material Description	Vc (m/min)	Parameter	Drill Diameter (mm)		Vc (m/min)	Parameter	Drill Diameter (mm)													
					1.0	2.0			3.0	4.0	5.0	6.0										
P	1	Non-alloy steel	70	RPM	22280	11140	100	RPM	10610	7960	6370	5310										
	2			FEED	0.02-0.04	0.04-0.06		FEED	0.04-0.10	0.06-0.12	0.12-0.18	0.14-0.20										
	3			RPM	22280	11140		RPM	10610	7960	6370	5310										
	4			FEED	0.02-0.04	0.04-0.06		FEED	0.04-0.10	0.06-0.12	0.12-0.18	0.14-0.20										
	5																					
	6	Low alloy steel	70	RPM	22280	11140	100	RPM	10610	7960	6370	5310										
	7			FEED	0.02-0.04	0.04-0.06		FEED	0.04-0.10	0.06-0.12	0.12-0.18	0.14-0.20										
	8			50	RPM	15920		7960	70	RPM	7430	5570	4460	3710								
	9			FEED	0.02-0.04	0.04-0.06		FEED	0.04-0.10	0.06-0.12	0.12-0.18	0.14-0.20										
	10	High alloyed steel, and tool steel																				
	11																					
M	12	Stainless steel	40	RPM	12730	6370	50	RPM	5310	3980	3180	2650										
	13			FEED	0.02-0.04	0.02-0.04		FEED	0.03-0.05	0.05-0.09	0.07-0.11	0.09-0.13										
	14			25	RPM	7960		3980	40	RPM	4240	3180	2550	2120								
K	15	Grey cast iron																				
	16																					
	17	Nodular cast iron																				
	18																					
	19																					
20	Malleable cast iron																					
N	21	Aluminum-wrought alloy	130	RPM	41380	20690	180	RPM	19100	14320	11460	9550										
	22			FEED	0.04-0.10	0.08-0.14		FEED	0.14-0.20	0.19-0.25	0.20-0.26	0.22-0.28										
	23	Aluminum-cast, alloyed	110	RPM	35010	17510	160	RPM	16980	12730	10190	8490										
	24			FEED	0.04-0.10	0.08-0.14		FEED	0.14-0.20	0.19-0.25	0.20-0.26	0.22-0.28										
	25			RPM	35010	17510		160	RPM	16980	12730	10190	8490									
	26			FEED	0.04-0.10	0.08-0.14		FEED	0.14-0.20	0.19-0.25	0.20-0.26	0.22-0.28										
	27	Copper and Copper Alloys (Bronze / Brass)																				
	28																					
	29	Non Metallic Materials																				
	30																					
S	31	Heat Resistant Super Alloys																				
	32																					
	33																					
	34																					
	35																					
	36																					
	37												Titanium Alloys	25	RPM	7960	3980	40	RPM	4240	3180	2550
38	Hardened steel																					
39																						
40													Chilled Cast Iron									
41													Hardened Cast Iron									

► Recommend to reduce the feed rate as following

► NEXT PAGE

Feed 100% : DH451(3xD), DH452(5xD) **Feed 85%** : DH453(8xD)

DH451, DH452, DH453 SERIES with **COOLANT HOLES**

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

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

ISO	VDI 3323	Material Description	Vc (m/min)	Parameter	Drill Diameter (mm)						
					8.0	10.0	12.0	14.0	16.0	18.0	20.0
P	1	Non-alloy steel	100	RPM	3980	3180	2650	2270	1990	1770	1590
	2			FEED	0.16-0.22	0.20-0.26	0.18-0.28	0.20-0.30	0.22-0.32	0.26-0.36	0.28-0.38
	3			RPM	3980	3180	2650	2270	1990	1770	1590
	4			FEED	0.16-0.22	0.20-0.26	0.18-0.28	0.20-0.30	0.22-0.32	0.26-0.36	0.28-0.38
	5										
	6	Low alloy steel	100	RPM	3980	3180	2650	2270	1990	1770	1590
	7			FEED	0.16-0.22	0.20-0.26	0.18-0.28	0.20-0.30	0.22-0.32	0.26-0.36	0.28-0.38
	8			RPM	2790	2230	1860	1590	1390	1240	1110
	9			FEED	0.16-0.22	0.20-0.26	0.18-0.28	0.20-0.30	0.22-0.32	0.26-0.36	0.28-0.38
	10										
	11	High alloyed steel, and tool steel									
M	12	Stainless steel	50	RPM	1990	1590	1330	1140	990	880	800
	13			FEED	0.09-0.13	0.10-0.15	0.11-0.16	0.12-0.17	0.13-0.18	0.14-0.19	0.15-0.20
	14			RPM	1590	1270	1060	910	800	710	640
K	15	Grey cast iron	60	FEED	0.09-0.13	0.10-0.15	0.11-0.16	0.12-0.17	0.13-0.18	0.14-0.19	0.15-0.20
	16			RPM	2390	1910	1590	1360	1190	1060	950
	17	Nodular cast iron		FEED	0.10-0.14	0.11-0.16	0.12-0.17	0.13-0.18	0.14-0.19	0.15-0.20	0.16-0.21
	18										
	19			Malleable cast iron							
20											
N	21	Aluminum-wrought alloy	180	RPM	7160	5730	4770	4090	3580	3180	2860
	22			FEED	0.24-0.30	0.29-0.35	0.29-0.35	0.30-0.40	0.30-0.40	0.33-0.43	0.35-0.45
	23	Aluminum-cast, alloyed		RPM	7160	5730	4770	4090	3580	3180	2860
	24			FEED	0.24-0.30	0.29-0.35	0.29-0.35	0.30-0.40	0.30-0.40	0.33-0.43	0.35-0.45
	25			RPM	6370	5090	4240	3640	3180	2830	2550
	26			FEED	0.24-0.30	0.29-0.35	0.29-0.35	0.30-0.40	0.30-0.40	0.33-0.43	0.35-0.45
	27	Copper and Copper Alloys (Bronze / Brass)		RPM	6370	5090	4240	3640	3180	2830	2550
	28			FEED	0.24-0.30	0.29-0.35	0.29-0.35	0.30-0.40	0.30-0.40	0.33-0.43	0.35-0.45
	29	Non Metallic Materials		RPM	5170	4140	3450	2960	2590	2300	2070
	30			FEED	0.22-0.28	0.24-0.30	0.24-0.30	0.25-0.35	0.25-0.35	0.28-0.38	0.30-0.40
S	31	Heat Resistant Super Alloys									
	32										
	33										
	34										
	35	Titanium Alloys									
	36										
	37		RPM	1590	1270	1060	910	800	710	640	
H	38	Hardened steel	40	FEED	0.08-0.12	0.09-0.14	0.10-0.15	0.11-0.16	0.12-0.17	0.13-0.18	0.14-0.19
	39										
	40			Chilled Cast Iron							
	41			Hardened Cast Iron							

► Recommend to reduce the feed rate as following
Feed 100% : DH451(3xD), DH452(5xD) **Feed 85%** : DH453(8xD)