

SERIES	YA1A	YA2C	YB1A	YB2C
TYPE	A		B	
SIZE MIN	12.00		14.00	
SIZE MAX	13.89		15.87	
PAGE	58		59	
SURFACE TREATMENT	TiAlN	TiCN	TiAlN	TiCN

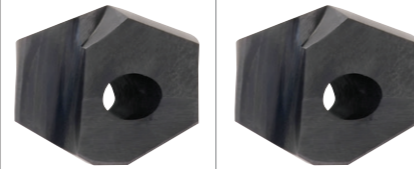
CARBIDE INSERTS & HOLDERS

i-DREAM DRILLS

For General Steels and Stainless Steels

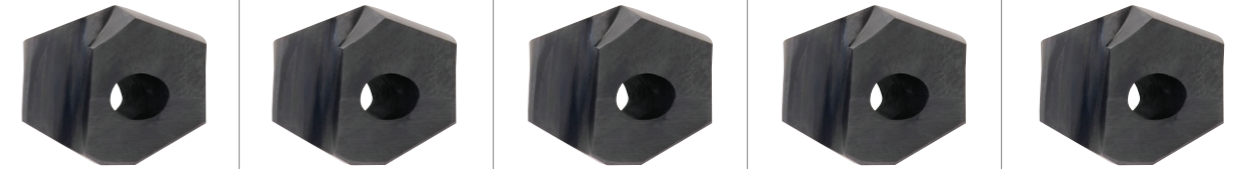
◎ : Excellent ○ : Good

Recommended cutting conditions : P.68



ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment	HB	HRc	TiAlN	TiCN	TiAlN	TiCN	
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	Non Metallic Materials	CuZn, CuSnZn (Brass)	90				○		○
	28		CuSn, lead-free copper and electrolytic copper	100				○		○
	29		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		Ni or Co Based Cured	350	38					
	35		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	Hardened Cast Iron	Cast	400	42					
	41		Hardened	550	55					

YC1A	YC2C	YD1A	YD2C	YE1A	YE2C	YF1A	YF2C	YG1A	YG2C
C		D		E		F		G	
16.00		18.00		20.00		22.00		24.00	
17.86		19.84		21.83		23.81		25.80	
60		61		62		63		64	
TiAlN	TiCN	TiAlN	TiCN	TiAlN	TiCN	TiAlN	TiCN	TiAlN	TiCN



◎	○	◎	○	◎	○	◎	○	◎	○	1
◎	○	◎	○	◎	○	◎	○	◎	○	2
◎	○	◎	○	◎	○	◎	○	◎	○	3
◎	○	◎	○	◎	○	◎	○	◎	○	4
◎	○	◎	○	◎	○	◎	○	◎	○	5
◎	○	◎	○	◎	○	◎	○	◎	○	6
◎	○	◎	○	◎	○	◎	○	◎	○	7
◎	○	◎	○	◎	○	◎	○	◎	○	8
◎	○	◎	○	◎	○	◎	○	◎	○	9
◎	○	◎	○	◎	○	◎	○	◎	○	10
◎	○	◎	○	◎	○	◎	○	◎	○	11
	◎		◎		◎		◎		◎	12
	◎		◎		◎		◎		◎	13
	◎		◎		◎		◎		◎	14
◎		◎		◎		◎		◎		15
◎		◎		◎		◎		◎		16
◎		◎		◎		◎		◎		17
◎		◎		◎		◎		◎		18
◎		◎		◎		◎		◎		19
◎		◎		◎		◎		◎		20
	○		○		○		○		○	21
	○		○		○		○		○	22
	○		○		○		○		○	23
	○		○		○		○		○	24
	○		○		○		○		○	25
	○		○		○		○		○	26
	○		○		○		○		○	27
	○		○		○		○		○	28
										29
										30
										31
										32
										33
										34
										35
										36
										37
										38
										39
										40
										41

SELECTION GUIDE



SERIES	YH1A	YH2C
TYPE	H	
SIZE MIN	26.00	
SIZE MAX	27.78	
PAGE	65	
SURFACE TREATMENT	TiAlN	TiCN

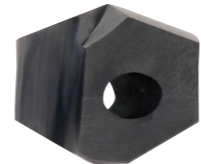
CARBIDE INSERTS & HOLDERS

i-DREAM DRILLS

For General Steels and Stainless Steels

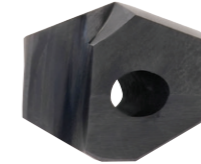
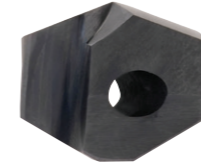
◎ : Excellent ○ : Good

Recommended cutting conditions : P.68



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	Non Metallic Materials	CuZn, CuSnZn (Brass)	90			○	
	28		CuSn, lead-free copper and electrolytic copper	100			○	
	29		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	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		

				ZH*3	ZH*5	ZH*7
I	J					
28.00	30.00					
29.77	31.75					
66	67					
TiAlN	TiCN	TiAlN	TiCN	3XD	5XD	7XD



◎	○	◎	○				1
◎	○	◎	○				2
◎	○	◎	○				3
◎	○	◎	○				4
◎	○	◎	○				5
◎	○	◎	○				6
◎	○	◎	○				7
◎	○	◎	○				8
◎	○	◎	○				9
◎	○	◎	○				10
◎	○	◎	○				11
	◎		◎				12
	◎		◎				13
	◎		◎				14
◎		◎					15
◎		◎					16
◎		◎					17
◎		◎					18
◎		◎					19
◎		◎					20
	○		○				21
	○		○				22
	○		○				23
	○		○				24
	○		○				25
	○		○				26
	○		○				27
	○		○				28
							29
							30
							31
							32
							33
							34
							35
							36
							37
							38
							39
							40
							41

i-DREAM DRILL INSERTS & HOLDERS

- i-DREAM DRILL EINSÄTZE UND HALTER
- PLAQUETTES ET PORTE-PLAQUETTE I-DREAM DRILL - USAGE GÉNÉRAL / INOX
- INSERTI & PORTAINSERTI i-DREAM DRILL

- Features of i-Dream Drill Inserts-
Merkmale des i-Dream Drill Einsätze

- Secure and accurate seating resulting in accurate repeatability and concentricity.
Der sichere und genaue Sitz der Platte garantiert genaue Wiederholbarkeit beim Einsatz und beim Rundlauf.
- i-Dream Drill General / i-Dream Drill allgemeinen**
- For most steels materials / In den meisten Stahlsorten
- i-Dream Drill INOX / i-Dream Drill INOX**
- For tough, ductile materials and stainless steels
Für zähe, verformbare Werkstoffe und rostfreie Stähle.
- Light, sharp cutting edge / Scharfe Schneidkante
- Soft cutting action / Weicher Schnitt
- Minimize cutting forces / Minimaler Schneidendruck
- Reduce built-up edge / Reduzierte Gratbildung

- Features of i-Dream Drill Holders-
Merkmale des i-Dream Drill Halters-

- Special Alloy Steels maintain its hardness and toughness under high temperatures.
Speziell legierter Stahl, der seine Härte und Zähigkeit auch bei hohen Temperaturen behält.
- Innovative surface treatment improves wear resistance and reduces corrosion.
Innovative Oberflächenbehandlung, die die Verschleissfestigkeit erhöht und die Korrosion vermindert.
- High Performance flute design allows maximum chip evacuation and minimum interference.
Optimierte Nutenform für maximale Spanabfuhr.



Series Range	Insert EDP No.		Insert O.D.			Holder EDP No.	Shank Dia.	Shank Length	Flange Dia.	Drilling Depth		Overall Length	Screw No.
	General (TiAlN)	INOX (TiCN)	h7							L1	L3 Ref.		
(mm)			dec.	frac.	mm		SD	L2	FD				
A Ø12.00 to Ø13.99	YA1A1200	YA2C1200	.4724		12.00	ZH12003020 ZH12005020 ZH12007020	20	50	25	3D	36	112.4	TX1213T08
	YA1A1210	YA2C1210	.4764		12.10					5D	60	136.4	
	YA1A1220	YA2C1220	.4803		12.20					7D	84	160.4	
	YA1A1230	YA2C1230	.4844	31/64	12.30								
	YA1A1250	YA2C1250	.4921		12.50								
	YA1A1260	YA2C1260	.4961		12.60								
	YA1A1270	YA2C1270	.5000	1/2	12.70	ZH12503020 ZH12505020 ZH12507020	20	50	25	3D	37.5	113.4	
	YA1A1280	YA2C1280	.5039		12.80					5D	62.5	138.4	
	YA1A1290	YA2C1290	.5079		12.90					7D	87.5	163.4	
	YA1A1300	YA2C1300	.5118		13.00								
	YA1A1310	YA2C1310	.5156	33/64	13.10								
	YA1A1320	YA2C1320	.5197		13.20								
	YA1A1349	YA2C1349	.5312	17/32	13.49	ZH13003020 ZH13005020 ZH13007020	20	50	25	3D	39	115.4	
	YA1A1350	YA2C1350	.5315		13.50					5D	65	141.4	
	YA1A1360	YA2C1360	.5354		13.60					7D	91	167.4	
	YA1A1370	YA2C1370	.5394		13.70								
	YA1A1380	YA2C1380	.5433		13.80								
	YA1A1389	YA2C1389	.5469	35/64	13.89								
YA1A1350	YA2C1350	.5315		13.50	ZH13503020 ZH13505020 ZH13507020	20	50	25	3D	40.5	116.4	TX1314T08	
YA1A1360	YA2C1360	.5354		13.60					5D	67.5	143.4		
YA1A1370	YA2C1370	.5394		13.70					7D	94.5	170.4		
YA1A1380	YA2C1380	.5433		13.80									
YA1A1389	YA2C1389	.5469	35/64	13.89									

► Other diameters of insert and shank types of holder are available upon request.

◎ : Excellent ○ : Good

ISO	P										M					K				
Material Description	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
YA1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YA2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

ISO	N					S					H										
Material Description	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			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
YA1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YA2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

i-DREAM DRILL INSERTS & HOLDERS

- i-DREAM DRILL EINSÄTZE UND HALTER
- PLAQUETTES ET PORTE-PLAQUETTE I-DREAM DRILL - USAGE GÉNÉRAL / INOX
- INSERTI & PORTAINSERTI i-DREAM DRILL

- Features of i-Dream Drill Inserts-
Merkmale des i-Dream Drill Einsätze

- Secure and accurate seating resulting in accurate repeatability and concentricity.
Der sichere und genaue Sitz der Platte garantiert genaue Wiederholbarkeit beim Einsatz und beim Rundlauf.
- i-Dream Drill General / i-Dream Drill allgemeinen**
- For most steels materials / In den meisten Stahlsorten
- i-Dream Drill INOX / i-Dream Drill INOX**
- For tough, ductile materials and stainless steels
Für zähe, verformbare Werkstoffe und rostfreie Stähle.
- Light, sharp cutting edge / Scharfe Schneidkante
- Soft cutting action / Weicher Schnitt
- Minimize cutting forces / Minimaler Schneidendruck
- Reduce built-up edge / Reduzierte Gratbildung

- Features of i-Dream Drill Holders-
Merkmale des i-Dream Drill Halters-

- Special Alloy Steels maintain its hardness and toughness under high temperatures.
Speziell legierter Stahl, der seine Härte und Zähigkeit auch bei hohen Temperaturen behält.
- Innovative surface treatment improves wear resistance and reduces corrosion.
Innovative Oberflächenbehandlung, die die Verschleissfestigkeit erhöht und die Korrosion vermindert.
- High Performance flute design allows maximum chip evacuation and minimum interference.
Optimierte Nutenform für maximale Spanabfuhr.



Series Range	Insert EDP No.		Insert O.D.			Holder EDP No.	Shank Dia.	Shank Length	Flange Dia.	Drilling Depth		Overall Length	Screw No.
	General (TiAlN)	INOX (TiCN)	h7							L1	L3 Ref.		
(mm)			dec.	frac.	mm		SD	L2	FD				
B Ø14.00 to Ø15.99	YB1A1400	YB2C1400	.5512		14.00	ZH14003020 ZH14005020 ZH14007020	20	50	25	3D	42	118.9	TX1415T08
	YB1A1410	YB2C1410	.5551		14.10					5D	70	146.9	
	YB1A1420	YB2C1420	.5591		14.20					7D	98	174.9	
	YB1A1429	YB2C1429	.5625	9/16	14.29								
	YB1A1430	YB2C1430	.5630		14.30								
	YB1A1440	YB2C1440	.5669		14.40								
	YB1A1450	YB2C1450	.5709		14.50	ZH14503020 ZH14505020 ZH14507020	20	50	25	3D	43.5	120.9	
	YB1A1460	YB2C1460	.5748		14.60					5D	72.5	149.9	
	YB1A1468	YB2C1468	.5781	37/64	14.68					7D	101.5	178.9	
	YB1A1480	YB2C1480	.5827		14.80								
	YB1A1500	YB2C1500	.5906		15.00								
	YB1A1508	YB2C1508	.5938	19/32	15.08								
	YB1A1510	YB2C1510	.5945		15.10	ZH15003020 ZH15005020 ZH15007020	20	50	25	3D	45	122.9	
	YB1A1520	YB2C1520	.5984		15.20					5D	75	152.9	
	YB1A1530	YB2C1530	.6024		15.30					7D	105	182.9	
	YB1A1548	YB2C1548	.6094	39/64	15.48								
	YB1A1550	YB2C1550	.6102		15.50								
	YB1A1560	YB2C1560	.6142		15.60								
YB1A1570	YB2C1570	.6181		15.70	ZH15503020 ZH15505020 ZH15507020	20	50	25	3D	46.5	123.9		
YB1A1580	YB2C1580	.6220		15.80					5D	77.5	154.9		
YB1A1587	YB2C1587	.6250	5/8	15.87					7D	108.5	185.9		

► Other diameters of insert and shank types of holder are available upon request.

◎ : Excellent ○ : Good

ISO	P										M					K				
Material Description	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
YB1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YB2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

ISO	N					S					H										
Material Description	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			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
YB1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YB2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

i-DREAM DRILL INSERTS & HOLDERS

- **i-DREAM DRILL EINSÄTZE UND HALTER**
- **PLAQUETTES ET PORTE-PLAQUETTE I-DREAM DRILL - USAGE GÉNÉRAL / INOX**
- **INSERTI & PORTAINSERTI i-DREAM DRILL**

- Features of i-Dream Drill Inserts-**
Merkmale des i-Dream Drill Einsätze
- ▶ Secure and accurate seating resulting in accurate repeatability and concentricity.
Der sichere und genaue Sitz der Platte garantiert genaue Wiederholbarkeit beim Einsatz und beim Rundlauf.
 - i-Dream Drill General / i-Dream Drill allgemeinen**
 - ▶ For most steels materials / In den meisten Stahlsorten
i-Dream Drill INOX / i-Dream Drill INOX
 - ▶ For tough, ductile materials and stainless steels
Für zähe, verformbare Werkstoffe und rostfreie Stähle.
 - ▶ Light, sharp cutting edge / Scharfe Schneidkante
 - ▶ Soft cutting action / Weicher Schnitt
 - ▶ Minimize cutting forces / Minimaler Schneidendruck
 - ▶ Reduce built-up edge / Reduzierte Gratbildung

- Features of i-Dream Drill Holders-**
Merkmale des i-Dream Drill Halters-
- ▶ Special Alloy Steels maintain its hardness and toughness under high temperatures.
Speziell legierter Stahl, der seine Härte und Zähigkeit auch bei hohen Temperaturen behält.
 - ▶ Innovative surface treatment improves wear resistance and reduces corrosion.
Innovative Oberflächenbehandlung, die die Verschleissfestigkeit erhöht und die Korrosion vermindert.
 - ▶ High Performance flute design allows maximum chip evacuation and minimum interference.
Optimierte Nutenform für maximale Spanabfuhr.



Series Range	Insert EDP No.		Insert O.D.			Holder EDP No.	Shank Dia.	Shank Length	Flange Dia.	Drilling Depth	Overall Length	Screw No.		
	General (TiAlN)	INOX (TiCN)	h7											
(mm)			dec.	frac.	mm		SD	L2	FD	L1	L3 Ref.			
C Ø16.00 to Ø17.99	YC1A1600	YC2C1600	.6299		16.00	ZH16003020 ZH16005020 ZH16007020	20	50	25	3D	48	125.0	TX1617T08	
	YC1A1609	YC2C1609	.6335		16.09					5D	80	157.0		
	YC1A1620	YC2C1620	.6378		16.20					7D	112	189.0		
	YC1A1627	YC2C1627	.6406	41/64	16.27									
	YC1A1630	YC2C1630	.6417		16.30									
	YC1A1650	YC2C1650	.6496		16.50									
		YC1A1667	YC2C1667	.6562	21/32	16.67	ZH16503020 ZH16505020 ZH16507020	20	50	25	3D	49.5	127.0	TX1718T08
		YC1A1680	YC2C1680	.6614		16.80					5D	82.5	160.0	
		YC1A1700	YC2C1700	.6693		17.00					7D	115.5	193.0	
		YC1A1707	YC2C1707	.6719	43/64	17.07								
		YC1A1746	YC2C1746	.6875	11/16	17.46								
		YC1A1750	YC2C1750	.6890		17.50								
		YC1A1780	YC2C1780	.7008		17.80	ZH17503020 ZH17505020 ZH17507020	20	50	25	3D	52.5	130.0	
		YC1A1786	YC2C1786	.7031	45/64	17.86					5D	87.5	165.0	

▶ Other diameters of insert and shank types of holder are available upon request.

◎ : Excellent ○ : Good

ISO	P										M				K					
Material Description	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
YC1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YC2C	○	○	○	○	○	○	○	○	○	○	○	◎	◎	◎						

ISO	N					S					H										
Material Description	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			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
YC1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YC2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

i-DREAM DRILL INSERTS & HOLDERS

- **i-DREAM DRILL EINSÄTZE UND HALTER**
- **PLAQUETTES ET PORTE-PLAQUETTE I-DREAM DRILL - USAGE GÉNÉRAL / INOX**
- **INSERTI & PORTAINSERTI i-DREAM DRILL**

- Features of i-Dream Drill Inserts-**
Merkmale des i-Dream Drill Einsätze
- ▶ Secure and accurate seating resulting in accurate repeatability and concentricity.
Der sichere und genaue Sitz der Platte garantiert genaue Wiederholbarkeit beim Einsatz und beim Rundlauf.
 - i-Dream Drill General / i-Dream Drill allgemeinen**
 - ▶ For most steels materials / In den meisten Stahlsorten
i-Dream Drill INOX / i-Dream Drill INOX
 - ▶ For tough, ductile materials and stainless steels
Für zähe, verformbare Werkstoffe und rostfreie Stähle.
 - ▶ Light, sharp cutting edge / Scharfe Schneidkante
 - ▶ Soft cutting action / Weicher Schnitt
 - ▶ Minimize cutting forces / Minimaler Schneidendruck
 - ▶ Reduce built-up edge / Reduzierte Gratbildung

- Features of i-Dream Drill Holders-**
Merkmale des i-Dream Drill Halters-
- ▶ Special Alloy Steels maintain its hardness and toughness under high temperatures.
Speziell legierter Stahl, der seine Härte und Zähigkeit auch bei hohen Temperaturen behält.
 - ▶ Innovative surface treatment improves wear resistance and reduces corrosion.
Innovative Oberflächenbehandlung, die die Verschleissfestigkeit erhöht und die Korrosion vermindert.
 - ▶ High Performance flute design allows maximum chip evacuation and minimum interference.
Optimierte Nutenform für maximale Spanabfuhr.



Series Range	Insert EDP No.		Insert O.D.			Holder EDP No.	Shank Dia.	Shank Length	Flange Dia.	Drilling Depth	Overall Length	Screw No.		
	General (TiAlN)	INOX (TiCN)	h7											
(mm)			dec.	frac.	mm		SD	L2	FD	L1	L3 Ref.			
D Ø18.00 to Ø19.99	YD1A1800	YD2C1800	.7087		18.00	ZH18003025 ZH18005025 ZH18007025	25	56	32	3D	54	140.3	TX1819T15	
	YD1A1826	YD2C1826	.7188	23/32	18.26					5D	90	176.3		
	YD1A1850	YD2C1850	.7283		18.50					7D	126	212.3		
	YD1A1865	YD2C1865	.7344	47/64	18.65									
	YD1A1880	YD2C1880	.7402		18.80									
	YD1A1900	YD2C1900	.7480		19.00									
		YD1A1905	YD2C1905	.7500	3/4	19.05	ZH19003025 ZH19005025 ZH19007025	25	56	32	3D	57	144.3	TX1920T15
		YD1A1927	YD2C1927	.7587		19.27					5D	95	182.3	
		YD1A1945	YD2C1945	.7656	49/64	19.45					7D	133	220.3	
		YD1A1950	YD2C1950	.7677		19.50								
		YD1A1980	YD2C1980	.7795		19.80								
		YD1A1984	YD2C1984	.7812	25/32	19.84								
							ZH19503025 ZH19505025 ZH19507025	25	56	32	3D	58.5	145.3	
						5D					97.5	184.3		
						7D					136.5	223.3		

▶ Other diameters of insert and shank types of holder are available upon request.

◎ : Excellent ○ : Good

ISO	P										M				K					
Material Description	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
YD1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YD2C	○	○	○	○	○	○	○	○	○	○	○	◎	◎	◎						

ISO	N					S					H										
Material Description	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			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
YD1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YD2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

i-DREAM DRILL INSERTS & HOLDERS

- i-DREAM DRILL EINSÄTZE UND HALTER
- PLAQUETTES ET PORTE-PLAQUETTE I-DREAM DRILL - USAGE GÉNÉRAL / INOX
- INSERTI & PORTAINSERTI i-DREAM DRILL

- Features of i-Dream Drill Inserts-
Merkmale des i-Dream Drill Einsätze

- ▶ Secure and accurate seating resulting in accurate repeatability and concentricity.
Der sichere und genaue Sitz der Platte garantiert genaue Wiederholbarkeit beim Einsatz und beim Rundlauf.
- i-Dream Drill General / i-Dream Drill allgemeinen**
- ▶ For most steels materials / In den meisten Stahlsorten
- i-Dream Drill INOX / i-Dream Drill INOX**
- ▶ For tough, ductile materials and stainless steels
Für zähe, verformbare Werkstoffe und rostfreie Stähle.
- ▶ Light, sharp cutting edge / Scharfe Schneidkante
- ▶ Soft cutting action / Weicher Schnitt
- ▶ Minimize cutting forces / Minimaler Schneidendruck
- ▶ Reduce built-up edge / Reduzierte Gratbildung

- Features of i-Dream Drill Holders-
Merkmale des i-Dream Drill Halter-

- ▶ Special Alloy Steels maintain its hardness and toughness under high temperatures.
Speziell legierter Stahl, der seine Härte und Zähigkeit auch bei hohen Temperaturen behält.
- ▶ Innovative surface treatment improves wear resistance and reduces corrosion.
Innovative Oberflächenbehandlung, die die Verschleissfestigkeit erhöht und die Korrosion vermindert.
- ▶ High Performance flute design allows maximum chip evacuation and minimum interference.
Optimierte Nutenform für maximale Spanabfuhr.



Series Range	Insert EDP No.		Insert O.D.			Holder EDP No.	Shank Dia.	Shank Length	Flange Dia.	Drilling Depth		Overall Length	Screw No.
	General (TiAlN)	INOX (TiCN)	h7							L1	L3 Ref.		
(mm)			dec.	frac.	mm		SD	L2	FD				
E Ø20.00 to Ø21.99	YE1A2000	YE2C2000	.7874		20.00	ZH20003025				3D 60	145.5	TX2021T20	
	YE1A2024	YE2C2024	.7969	51/64	20.24	ZH20005025	25	56	32	5D 100	185.5		
						ZH20007025				7D 140	225.5		
	YE1A2050	YE2C2050	.8071		20.50	ZH20503025				3D 61.5	147.5		
	YE1A2064	YE2C2064	.8125	13/16	20.64	ZH20505025	25	56	32	5D 102.5	188.5		
	YE1A2070	YE2C2070	.8150		20.70	ZH20507025				7D 143.5	229.5		
	YE1A2100	YE2C2100	.8268		21.00	ZH21003025				3D 63	149.5		
	YE1A2103	YE2C2103	.8281	53/64	21.03	ZH21005025	25	56	32	5D 105	191.5		
	YE1A2143	YE2C2143	.8438	27/32	21.43	ZH21007025				7D 147	233.5		
	YE1A2150	YE2C2150	.8465		21.50	ZH21503025				3D 64.5	150.5	TX2122T20	
YE1A2170	YE2C2170	.8543		21.70	ZH21505025	25	56	32	5D 107.5	193.5			
YE1A2183	YE2C2183	.8594	55/64	21.83	ZH21507025				7D 150.5	236.5			

▶ Other diameters of insert and shank types of holder are available upon 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
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
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	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
YE1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
YE2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	

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			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
YE1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YE2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

i-DREAM DRILL INSERTS & HOLDERS

- i-DREAM DRILL EINSÄTZE UND HALTER
- PLAQUETTES ET PORTE-PLAQUETTE I-DREAM DRILL - USAGE GÉNÉRAL / INOX
- INSERTI & PORTAINSERTI i-DREAM DRILL

- Features of i-Dream Drill Inserts-
Merkmale des i-Dream Drill Einsätze

- ▶ Secure and accurate seating resulting in accurate repeatability and concentricity.
Der sichere und genaue Sitz der Platte garantiert genaue Wiederholbarkeit beim Einsatz und beim Rundlauf.
- i-Dream Drill General / i-Dream Drill allgemeinen**
- ▶ For most steels materials / In den meisten Stahlsorten
- i-Dream Drill INOX / i-Dream Drill INOX**
- ▶ For tough, ductile materials and stainless steels
Für zähe, verformbare Werkstoffe und rostfreie Stähle.
- ▶ Light, sharp cutting edge / Scharfe Schneidkante
- ▶ Soft cutting action / Weicher Schnitt
- ▶ Minimize cutting forces / Minimaler Schneidendruck
- ▶ Reduce built-up edge / Reduzierte Gratbildung

- Features of i-Dream Drill Holders-
Merkmale des i-Dream Drill Halter-

- ▶ Special Alloy Steels maintain its hardness and toughness under high temperatures.
Speziell legierter Stahl, der seine Härte und Zähigkeit auch bei hohen Temperaturen behält.
- ▶ Innovative surface treatment improves wear resistance and reduces corrosion.
Innovative Oberflächenbehandlung, die die Verschleissfestigkeit erhöht und die Korrosion vermindert.
- ▶ High Performance flute design allows maximum chip evacuation and minimum interference.
Optimierte Nutenform für maximale Spanabfuhr.



Series Range	Insert EDP No.		Insert O.D.			Holder EDP No.	Shank Dia.	Shank Length	Flange Dia.	Drilling Depth		Overall Length	Screw No.
	General (TiAlN)	INOX (TiCN)	h7							L1	L3 Ref.		
(mm)			dec.	frac.	mm		SD	L2	FD				
F Ø22.00 to Ø23.99	YF1A2200	YF2C2200	.8661		22.00	ZH22003025				3D 66	152.4	TX2223T20	
	YF1A2223	YF2C2223	.8750	7/8	22.23	ZH22005025	25	56	32	5D 110	196.4		
						ZH22007025				7D 154	240.4		
	YF1A2250	YF2C2250	.8858		22.50	ZH22503025				3D 67.5	153.4		
	YF1A2262	YF2C2262	.8906	57/64	22.62	ZH22505025	25	56	32	5D 112.5	198.4		
	YF1A2270	YF2C2270	.8937		22.70	ZH22507025				7D 157.5	243.4		
	YF1A2300	YF2C2300	.9055		23.00	ZH23003025				3D 69	155.4		
	YF1A2302	YF2C2302	.9062	29/32	23.02	ZH23005025	25	56	32	5D 115	201.4		
	YF1A2342	YF2C2342	.9219	59/64	23.42	ZH23007025				7D 161	247.4		
	YF1A2350	YF2C2350	.9252		23.50	ZH23503025				3D 70.5	157.4	TX2324T20	
YF1A2370	YF2C2370	.9331		23.70	ZH23505025	25	56	32	5D 117.5	204.4			
YF1A2381	YF2C2381	.9375	15/16	23.81	ZH23507025				7D 164.5	251.4			

▶ Other diameters of insert and shank types of holder are available upon 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
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
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	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
YF1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
YF2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	

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			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
YF1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YF2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

i-DREAM DRILL INSERTS & HOLDERS

- i-DREAM DRILL EINSÄTZE UND HALTER
- PLAQUETTES ET PORTE-PLAQUETTE I-DREAM DRILL - USAGE GÉNÉRAL / INOX
- INSERTI & PORTAINSERTI i-DREAM DRILL

- Features of i-Dream Drill Inserts-
Merkmale des i-Dream Drill Einsätze

- ▶ Secure and accurate seating resulting in accurate repeatability and concentricity.
Der sichere und genaue Sitz der Platte garantiert genaue Wiederholbarkeit beim Einsatz und beim Rundlauf.
- i-Dream Drill General / i-Dream Drill allgemeinen**
- ▶ For most steels materials / In den meisten Stahlsorten
- i-Dream Drill INOX / i-Dream Drill INOX**
- ▶ For tough, ductile materials and stainless steels
Für zähe, verformbare Werkstoffe und rostfreie Stähle.
- ▶ Light, sharp cutting edge / Scharfe Schneidkante
- ▶ Soft cutting action / Weicher Schnitt
- ▶ Minimize cutting forces / Minimaler Schneidendruck
- ▶ Reduce built-up edge / Reduzierte Gratbildung

- Features of i-Dream Drill Holders-
Merkmale des i-Dream Drill Halters-

- ▶ Special Alloy Steels maintain its hardness and toughness under high temperatures.
Speziell legierter Stahl, der seine Härte und Zähigkeit auch bei hohen Temperaturen behält.
- ▶ Innovative surface treatment improves wear resistance and reduces corrosion.
Innovative Oberflächenbehandlung, die die Verschleissfestigkeit erhöht und die Korrosion vermindert.
- ▶ High Performance flute design allows maximum chip evacuation and minimum interference.
Optimierte Nutenform für maximale Spanabfuhr.



Series Range (mm)	Insert EDP No.		Insert O.D.			Holder EDP No.	Shank Dia. SD	Shank Length L2	Flange Dia. FD	Drilling Depth		Overall Length L3 Ref.	Screw No.			
	General (TiAlN)	INOX (TiCN)	h7							L1	L3 Ref.					
G Ø24.00 to Ø25.99	YG1A2400	YG2C2400	.9449		24.00	ZH24003032	32	60	37	3D	72	164.8	TX2425T20			
	YG1A2421	YG2C2421	.9531	61/64	24.21	ZH24005032				5D	120	212.8				
	YG1A2450	YG2C2450	.9646		24.50	ZH24007032				7D	168	260.8				
	YG1A2461	YG2C2461	.9688	31/32	24.61	ZH24503032	32	60	37	3D	73.5	165.8		TX2526T20		
	YG1A2470	YG2C2470	.9724		24.70	ZH24505032				5D	122.5	214.8				
	YG1A2500	YG2C2500	.9843	63/64	25.00	ZH25003032				7D	171.5	263.8				
	YG1A2540	YG2C2540	1.0000	1	25.40	ZH25005032	32	60	37	3D	75	167.8			TX2728T25	
	YG1A2550	YG2C2550	1.0039		25.50	ZH25007032				5D	125	217.8				
	YG1A2567	YG2C2567	1.0106		25.67	ZH25503032				7D	175	267.8				
	YG1A2570	YG2C2570	1.0118		25.70	ZH25505032	32	60	37	3D	76.5	170.8				TX2728T25
	YG1A2580	YG2C2580	1.0156	1-1/64	25.80	ZH25505032				5D	127.5	221.8				
						ZH25507032				7D	178.5	272.8				

▶ Other diameters of insert and shank types of holder are available upon 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	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				
YG1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎				
YG2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				

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			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
YG1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YG2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

i-DREAM DRILL INSERTS & HOLDERS

- i-DREAM DRILL EINSÄTZE UND HALTER
- PLAQUETTES ET PORTE-PLAQUETTE I-DREAM DRILL - USAGE GÉNÉRAL / INOX
- INSERTI & PORTAINSERTI i-DREAM DRILL

- Features of i-Dream Drill Inserts-
Merkmale des i-Dream Drill Einsätze

- ▶ Secure and accurate seating resulting in accurate repeatability and concentricity.
Der sichere und genaue Sitz der Platte garantiert genaue Wiederholbarkeit beim Einsatz und beim Rundlauf.
- i-Dream Drill General / i-Dream Drill allgemeinen**
- ▶ For most steels materials / In den meisten Stahlsorten
- i-Dream Drill INOX / i-Dream Drill INOX**
- ▶ For tough, ductile materials and stainless steels
Für zähe, verformbare Werkstoffe und rostfreie Stähle.
- ▶ Light, sharp cutting edge / Scharfe Schneidkante
- ▶ Soft cutting action / Weicher Schnitt
- ▶ Minimize cutting forces / Minimaler Schneidendruck
- ▶ Reduce built-up edge / Reduzierte Gratbildung

- Features of i-Dream Drill Holders-
Merkmale des i-Dream Drill Halters-

- ▶ Special Alloy Steels maintain its hardness and toughness under high temperatures.
Speziell legierter Stahl, der seine Härte und Zähigkeit auch bei hohen Temperaturen behält.
- ▶ Innovative surface treatment improves wear resistance and reduces corrosion.
Innovative Oberflächenbehandlung, die die Verschleissfestigkeit erhöht und die Korrosion vermindert.
- ▶ High Performance flute design allows maximum chip evacuation and minimum interference.
Optimierte Nutenform für maximale Spanabfuhr.



Series Range (mm)	Insert EDP No.		Insert O.D.			Holder EDP No.	Shank Dia. SD	Shank Length L2	Flange Dia. FD	Drilling Depth		Overall Length L3 Ref.	Screw No.			
	General (TiAlN)	INOX (TiCN)	h7							L1	L3 Ref.					
H Ø26.00 to Ø27.99	YH1A2600	YH2C2600	1.0236		26.00	ZH26003032	32	60	37	3D	78	171.2	TX2627T25			
	YH1A2619	YH2C2619	1.0312	1-1/32	26.19	ZH26005032				5D	130	223.2				
	YH1A2650	YH2C2650	1.0433		26.50	ZH26007032				7D	182	275.2				
	YH1A2659	YH2C2659	1.0469	1-3/64	26.59	ZH26503032	32	60	37	3D	79.5	172.2		TX2728T25		
	YH1A2699	YH2C2699	1.0625	1-1/16	26.99	ZH26505032				5D	132.5	225.2				
	YH1A2700	YH2C2700	1.0630		27.00	ZH26507032				7D	185.5	278.2				
	YH1A2750	YH2C2750	1.0827		27.50	ZH27003032	32	60	37	3D	81	174.2			TX2728T25	
	YH1A2778	YH2C2778	1.0938	1-3/32	27.78	ZH27005032				5D	135	228.2				
						ZH27007032				7D	189	282.2				
						ZH27503032	32	60	37	3D	82.5	175.2				TX2728T25
						ZH27505032				5D	137.5	230.2				
						ZH27507032				7D	192.5	285.2				

▶ Other diameters of insert and shank types of holder are available upon 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	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				
YH1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎				
YH2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				

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			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
YH1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
YH2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

i-DREAM DRILL INSERTS & HOLDERS

- i-DREAM DRILL EINSÄTZE UND HALTER
- PLAQUETTES ET PORTE-PLAQUETTE I-DREAM DRILL - USAGE GÉNÉRAL / INOX
- INSERTI & PORTAINSERTI i-DREAM DRILL

- Features of i-Dream Drill Inserts-
Merkmale des i-Dream Drill Einsätze

- Secure and accurate seating resulting in accurate repeatability and concentricity.
Der sichere und genaue Sitz der Platte garantiert genaue Wiederholbarkeit beim Einsatz und beim Rundlauf.
- i-Dream Drill General / i-Dream Drill allgemeinen**
- For most steels materials / In den meisten Stahlsorten
- i-Dream Drill INOX / i-Dream Drill INOX**
- For tough, ductile materials and stainless steels
Für zähe, verformbare Werkstoffe und rostfreie Stähle.
- Light, sharp cutting edge / Scharfe Schneidkante
- Soft cutting action / Weicher Schnitt
- Minimize cutting forces / Minimaler Schneidendruck
- Reduce built-up edge / Reduzierte Gratbildung

- Features of i-Dream Drill Holders-
Merkmale des i-Dream Drill Halters-

- Special Alloy Steels maintain its hardness and toughness under high temperatures.
Speziell legierter Stahl, der seine Härte und Zähigkeit auch bei hohen Temperaturen behält.
- Innovative surface treatment improves wear resistance and reduces corrosion.
Innovative Oberflächenbehandlung, die die Verschleissfestigkeit erhöht und die Korrosion vermindert.
- High Performance flute design allows maximum chip evacuation and minimum interference.
Optimierte Nutenform für maximale Spanabfuhr.



Series Range (mm)	Insert EDP No.		Insert O.D.			Holder EDP No.	Shank Dia. SD	Shank Length L2	Flange Dia. FD	Drilling Depth		Overall Length L3 Ref.	Screw No.
	General (TiAlN)	INOX (TiCN)	dec.	h7 frac.	mm					L1	L3 Ref.		
I Ø28.00 to Ø29.99	YI1A2800	YI2C2800	1.1024		28.00	ZH28003032				3D 84	178.2	TX2829T25	
	YI1A2818	YI2C2818	1.1094	1-7/64	28.18	ZH28005032	32	60	37	5D 140	234.2		
						ZH28007032				7D 196	290.2		
	YI1A2850	YI2C2850	1.1220		28.50	ZH28503032				3D 85.5	179.2		
	YI1A2858	YI2C2858	1.1250	1-1/8	28.58	ZH28505032	32	60	37	5D 142.5	236.2		
						ZH28507032				7D 199.5	293.2		
	YI1A2900	YI2C2900	1.1417		29.00	ZH29003032				3D 87	182.2		
	YI1A2937	YI2C2937	1.1562	1-5/32	29.37	ZH29005032	32	60	37	5D 145	240.2		
						ZH29007032				7D 203	298.2		
	YI1A2950	YI2C2950	1.1614		29.50	ZH29503032				3D 88.5	183.2	TX2930T25	
	YI1A2977	YI2C2977	1.1719	1-11/64	29.77	ZH29505032	32	60	37	5D 147.5	242.2		
						ZH29507032				7D 206.5	301.2		

► Other diameters of insert and shank types of holder are available upon 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	38	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
YI1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
YI2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	

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	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
YI1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
YI2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	

i-DREAM DRILL INSERTS & HOLDERS

- i-DREAM DRILL EINSÄTZE UND HALTER
- PLAQUETTES ET PORTE-PLAQUETTE I-DREAM DRILL - USAGE GÉNÉRAL / INOX
- INSERTI & PORTAINSERTI i-DREAM DRILL

- Features of i-Dream Drill Inserts-
Merkmale des i-Dream Drill Einsätze

- Secure and accurate seating resulting in accurate repeatability and concentricity.
Der sichere und genaue Sitz der Platte garantiert genaue Wiederholbarkeit beim Einsatz und beim Rundlauf.
- i-Dream Drill General / i-Dream Drill allgemeinen**
- For most steels materials / In den meisten Stahlsorten
- i-Dream Drill INOX / i-Dream Drill INOX**
- For tough, ductile materials and stainless steels
Für zähe, verformbare Werkstoffe und rostfreie Stähle.
- Light, sharp cutting edge / Scharfe Schneidkante
- Soft cutting action / Weicher Schnitt
- Minimize cutting forces / Minimaler Schneidendruck
- Reduce built-up edge / Reduzierte Gratbildung

- Features of i-Dream Drill Holders-
Merkmale des i-Dream Drill Halters-

- Special Alloy Steels maintain its hardness and toughness under high temperatures.
Speziell legierter Stahl, der seine Härte und Zähigkeit auch bei hohen Temperaturen behält.
- Innovative surface treatment improves wear resistance and reduces corrosion.
Innovative Oberflächenbehandlung, die die Verschleissfestigkeit erhöht und die Korrosion vermindert.
- High Performance flute design allows maximum chip evacuation and minimum interference.
Optimierte Nutenform für maximale Spanabfuhr.



Series Range (mm)	Insert EDP No.		Insert O.D.			Holder EDP No.	Shank Dia. SD	Shank Length L2	Flange Dia. FD	Drilling Depth		Overall Length L3 Ref.	Screw No.
	General (TiAlN)	INOX (TiCN)	dec.	h7 frac.	mm					L1	L3 Ref.		
J Ø30.00 to Ø31.99	YJ1A3000	YJ2C3000	1.1811		30.00	ZH30003032				3D 90	186.0	TX3031T25	
	YJ1A3016	YJ2C3016	1.1875	1-3/16	30.16	ZH30005032	32	60	37	5D 150	246.0		
						ZH30007032				7D 210	306.0		
	YJ1A3050	YJ2C3050	1.2008		30.50	ZH30503032				3D 91.5	187.0		
	YJ1A3056	YJ2C3056	1.2031	1-13/64	30.56	ZH30505032	32	60	37	5D 152.5	248.0		
						ZH30507032				7D 213.5	309.0		
	YJ1A3096	YJ2C3096	1.2188	1-7/32	30.96	ZH31003032				3D 93	188.0		
	YJ1A3100	YJ2C3100	1.2205		31.00	ZH31005032	32	60	37	5D 155	250.0		
						ZH31007032				7D 217	312.0		
	YJ1A3150	YJ2C3150	1.2402		31.50	ZH31503032				3D 94.5	191.0	TX3132T25	
	YJ1A3175	YJ2C3175	1.2500	1-1/4	31.75	ZH31505032	32	60	37	5D 157.5	254.0		
						ZH31507032				7D 220.5	317.0		

► Other diameters of insert and shank types of holder are available upon 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	38	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
YJ1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
YJ2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	

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	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
YJ1A	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
YJ2C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	

**YA1A, YB1A, YC1A, YD1A, YE1A,
YF1A, YG1A, YH1A, YI1A, YJ1A** SERIES

i-DREAM DRILLS - GENERAL

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

ISO	VDI 3323	Material Description	Vc (m/min)	Feed(mm/rev)				
				Ø12.00-14.99	Ø15.00-17.99	Ø18.00-21.99	Ø22.00-26.99	Ø27.00-31.99
P	1	Non-alloy steel	95-120	0.16-0.28	0.21-0.35	0.27-0.40	0.34-0.52	0.37-0.55
	2		80-105	0.14-0.24	0.21-0.35	0.27-0.40	0.34-0.52	0.37-0.55
	3		60-80	0.12-0.20	0.17-0.28	0.22-0.32	0.30-0.46	0.33-0.49
	4		55-70	0.10-0.16	0.15-0.25	0.21-0.30	0.25-0.38	0.29-0.43
	5		55-70	0.10-0.16	0.15-0.25	0.21-0.30	0.25-0.38	0.29-0.43
	6	Low alloy steel	70-90	0.12-0.20	0.17-0.28	0.22-0.32	0.30-0.46	0.34-0.50
	7		60-80	0.12-0.20	0.15-0.25	0.22-0.32	0.30-0.46	0.34-0.50
	8		55-70	0.10-0.16	0.13-0.21	0.21-0.30	0.25-0.38	0.29-0.43
	9		45-60	0.08-0.12	0.13-0.21	0.21-0.30	0.25-0.38	0.29-0.43
	10	High alloyed steel, and tool steel	50-65	0.10-0.16	0.13-0.21	0.18-0.26	0.20-0.31	0.24-0.35
	11		40-55	0.10-0.16	0.11-0.18	0.21-0.30	0.20-0.31	0.24-0.35
M	12	Stainless steel						
	13							
	14							
K	15	Grey cast iron	100-125	0.15-0.26	0.20-0.37	0.27-0.42	0.36-0.51	0.40-0.55
	16		75-95	0.11-0.20	0.16-0.29	0.20-0.30	0.25-0.35	0.29-0.40
	17	Nodular cast iron	95-120	0.13-0.22	0.17-0.31	0.21-0.32	0.28-0.40	0.32-0.44
	18		75-95	0.11-0.20	0.14-0.26	0.19-0.29	0.25-0.35	0.29-0.40
	19		100-125	0.13-0.22	0.17-0.31	0.21-0.32	0.28-0.40	0.32-0.44
20	Malleable cast iron	75-95	0.11-0.18	0.14-0.26	0.19-0.29	0.25-0.35	0.29-0.40	
N	21	Aluminum-wrought alloy						
	22							
	23							
	24	Aluminum-cast, alloyed						
	25							
	26	Copper and Copper Alloys (Bronze / Brass)						
	27							
	28							
	29	Non Metallic Materials						
	30							
S	31	Heat Resistant Super Alloys						
	32							
	33							
	34							
	35							
	36	Titanium Alloys						
	37							
H	38	Hardened steel						
	39							
	40	Chilled Cast Iron						
	41	Hardened Cast Iron						

► The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points. Speed and feed reductions (20% reduction in speed and 10% reduction in feed) are recommended.

► Recommend you to reduce the feed rate to 85%, 70% when you use 5xD, 7xD holders.

► For use of 7xD holder, we recommend to use a pilot drill with equal to or larger than 140° point angle (0.5xD - 1.5xD). The use of the centering pre-hole improves hole location, roundness and surface finish.

Comparison with Split Point Drill, Spade Drill & Dream Drill



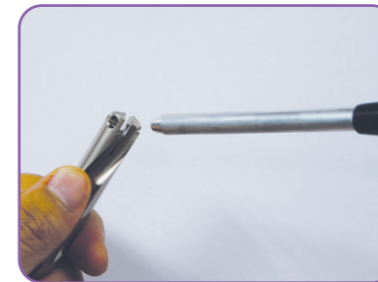
ISO	VDI 3323	Material Description	Vc (m/min)	Feed(mm/rev)				
				Ø12.00-14.99	Ø15.00-17.99	Ø18.00-21.90	Ø22.00-26.99	Ø27.00-31.99
P	1	Non-alloy steel	95-120	0.16-0.28	0.21-0.35	0.27-0.40	0.34-0.52	0.37-0.55
	2		80-105	0.14-0.24	0.21-0.35	0.27-0.40	0.34-0.52	0.37-0.55
	3		60-80	0.12-0.20	0.17-0.28	0.22-0.32	0.30-0.46	0.33-0.49
	4		55-70	0.10-0.16	0.15-0.25	0.21-0.30	0.25-0.38	0.29-0.43
	5							
	6	Low alloy steel	70-90	0.12-0.20	0.17-0.28	0.22-0.32	0.30-0.46	0.34-0.50
	7		60-80	0.12-0.20	0.15-0.25	0.22-0.32	0.30-0.46	0.34-0.50
	8							
	9							
	10	High alloyed steel, and tool steel	50-65	0.10-0.16	0.13-0.21	0.18-0.26	0.20-0.31	0.24-0.35
	11							
M	12	Stainless steel	30-45	0.08-0.14	0.09-0.15	0.10-0.16	0.12-0.20	0.14-0.22
	13		30-45	0.08-0.14	0.09-0.15	0.10-0.16	0.12-0.20	0.14-0.22
	14		45-60	0.10-0.16	0.12-0.18	0.14-0.20	0.15-0.26	0.18-0.28
K	15	Grey cast iron						
	16							
	17	Nodular cast iron						
	18							
	19							
20	Malleable cast iron							
N	21	Aluminum-wrought alloy	250-330	0.30-0.40	0.35-0.45	0.40-0.50	0.45-0.55	0.50-0.60
	22		200-250	0.30-0.40	0.35-0.45	0.40-0.50	0.45-0.55	0.50-0.60
	23	Aluminum-cast, alloyed	200-250	0.25-0.35	0.30-0.40	0.35-0.45	0.40-0.50	0.45-0.55
	24		150-220	0.25-0.35	0.30-0.40	0.35-0.45	0.40-0.50	0.45-0.55
	25		100-200	0.20-0.30	0.25-0.35	0.30-0.40	0.35-0.45	0.40-0.50
	26		115-145	0.16-0.28	0.23-0.36	0.29-0.36	0.37-0.45	0.41-0.48
	27	Copper and Copper Alloys (Bronze / Brass)	145-185	0.17-0.29	0.24-0.37	0.30-0.38	0.38-0.46	0.42-0.49
	28		95-120	0.06-0.09	0.09-0.13	0.11-0.13	0.15-0.18	0.19-0.22
	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						

► The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points. Speed and feed reductions (20% reduction in speed and 10% reduction in feed) are recommended.

► Recommend you to reduce the feed rate to 85%, 70% when you use 5xD, 7xD holders.

► For use of 7xD holder, we recommend to use a pilot drill with equal to or larger than 140° point angle (0.5xD - 1.5xD). The use of the centering pre-hole improves hole location, roundness and surface finish.

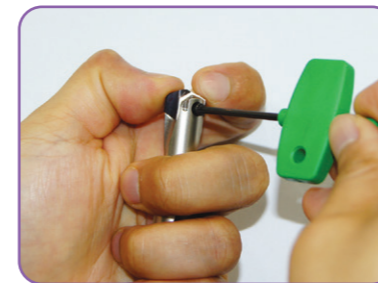
ASSEMBLY OF i-DREAM DRILLS
MONTAGE DES i-DREAM DRILLS



Make sure to clean the insert and insert seat.
 Schneideinsatz und Haltersitz sorgfältig reinigen.



Slide the drill insert into the slot of the holder and press down the insert to touch the bottom of the slot.
 Schneideinsatz in den Haltersitz einführen und den Schneideinsatz fest auf den Grund des Haltersitzes pressen.



After confirming the insert is pressed down to the bottom of the slot, tighten the screw using anti-seize compound.
 Wenn der Schneideinsatz fest auf den Grund des Haltersitzes gepresst ist, die Schraube fest anziehen und dabei Spezialfett verwenden.

WRENCH TYPE	PRODUCT NO.	T-HANDLE No.	SERIES (SIZE)
WING TYPE	TWWT08	—	A (Ø12.00-Ø13.99)
			B (Ø14.00-Ø15.99)
			C (Ø16.00-Ø17.99)
TORX BIT TYPE	TWBT15	TWH600	D (Ø18.00-Ø19.99)
	TWBT20		E, F, G (Ø20.00-Ø25.99)
	TWBT25		H, I, J (Ø26.00-Ø31.99)

Use the wing type or T-type wrench.
 Benutzen Sie den Winkeldreher oder T - Schlüsse

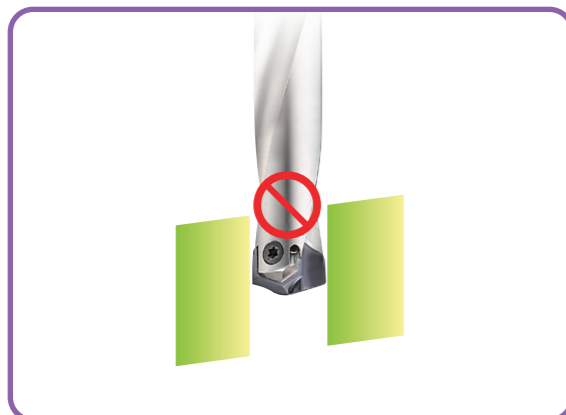
► Need to use appropriate wrenches and screws as indicated.
 Unbedingt die angegebenen Schrauben und Dreher verwenden.

► It's important to tighten up the screw properly.
 Es ist wichtig, die Schraube korrekt und fest anzuziehen.

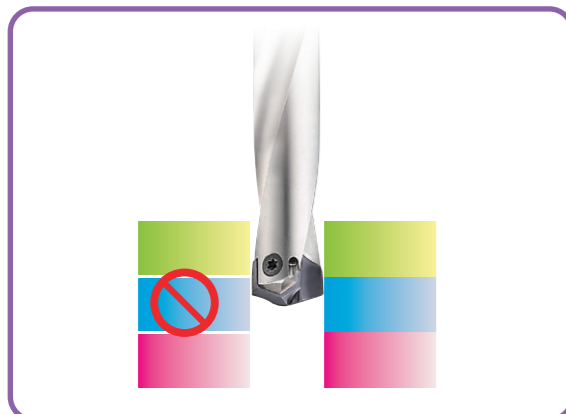
**CAUTION-NOT RECOMMENDABLE APPLICATION
ACHTUNG - NICHT EMPFOHLENE ANWENDUNG**



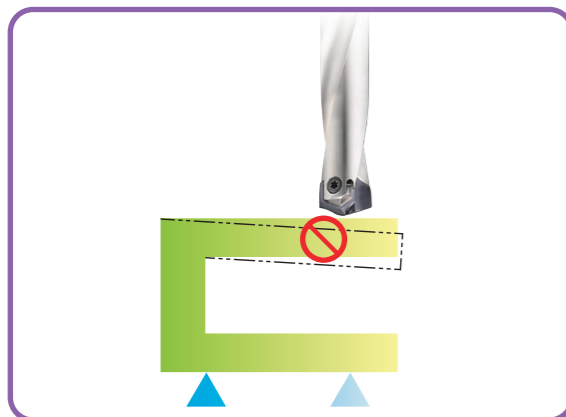
Intersecting cross hole is bigger than the drill insert's Margin Length.
Der Haltersitz ist größer als die Breite des Schneideinsatzes.



Material with slanting entrance and exit over 7 degrees. (If drilling 7 degrees or under slanting surface, reduce the feed about 30-50%)
Werkstücke mit schrägem Anschnitt oder Austritt von über 7°. (Zum Bohren von bis zu 7° Schräge den Vorschub um ca. 30-50% reduzieren).

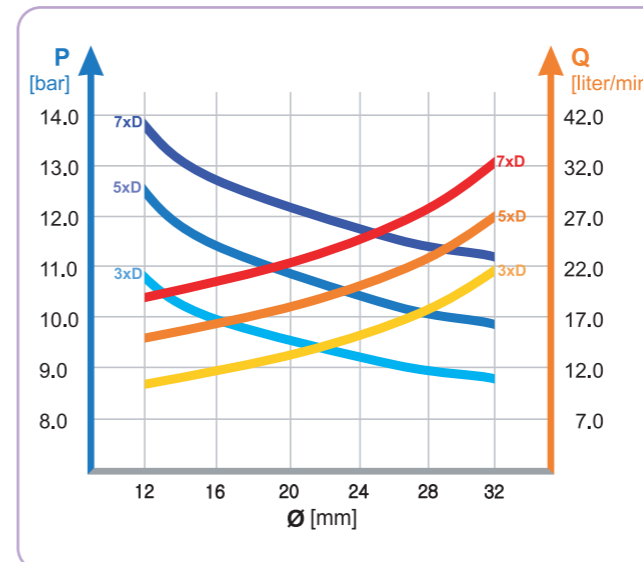


For drilling stacked plates, minimize the space between the plates.
Beim Bohren von Blechpaketen den Abstand der Bleche minimieren.
The space between stacked plates can cause insert breakage or poor chip control.
Freiraum in Blechpaketen kann den Bruch des Schneideinsatzes oder schlechte Entspannung verursachen.



The material needs to be fixtured securely before drilling.
Das Werkstück muss fest und sicher aufgespannt sein

**RECOMMENDED COOLANT PRESSURE AND FLOW RATE ON VERTICAL DRILLING
EMPFOHLENE KÜHLMITTELDRUCK UND - MENGE BEIM VERTIKALEN BOHREN**



- Recommended emulsion mix is 6 - 8%.
Empfohlene Emulsionsmischung 6 - 8%.
- For Drilling into Stainless and High Strength steels, a mix of 10% is recommended.
Beim Bohren in rostfreie und hochfeste Stähle werden 10% empfohlen.
- For horizontal drilling, 30% reduction on the coolant pressure and flow rate is possible.
Beim horizontalen Bohren können Kühlmitteldruck und - menge um 30% gemindert werden.
- Dry drilling is possible for 1-2xD drilling. But not recommended.
Trocken Bohren ist möglich bei 1-2xD. Aber nicht empfohlen.

**TROUBLE SHOOTING
PROBLEMLÖSUNGEN**



- 1) Heavy flank wear / Fast flank wear**
- Reduce cutting speed
 - Increase feed



- 2) Chipping on cutting edge**
- Reduce feed
 - Check the rigidity of spindle and chuck
 - Rigid clamping of workpiece



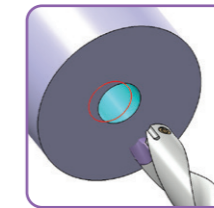
- 3) Build-up on cutting edge**
- Increase cutting speed
 - Use a coated insert



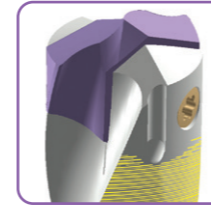
- 4) Chipping or break down on outer corner**
- Reduce feed
 - Rigid clamping of workpiece



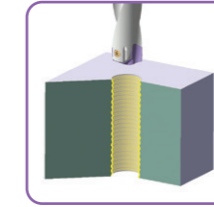
- 5) Wear of land margin**
- Rigid clamping of workpiece
 - Reduce cutting speed
 - Increase coolant flow



- 6) Unsatisfactory positioning of the hole**
- Rigid clamping of workpiece
 - Reduce feed during entrance or exit



- 7) Scratching on holder**
- Rigid clamping of workpiece
 - Reduce feed
 - Increase coolant flow



- 8) Unsatisfactory surface finish**
- Rigid clamping of workpiece
 - Increase coolant flow and pressure