

CARBIDE



Leading Through Innovation




DREAM DRILLS -FLAT BOTTOM DREAM DRILLS-FLACHBOHRER

- For holes on various angled surfaces.
- 180 degree point angle enables drilling of flat, inclined and curved surfaces.
- Für Bohrungen an schrägen Oberflächen.
- 180° Stirnwinkel ermöglicht das Bohren in flachen, schrägen und gekrümmten Flächen.

SELECTION GUIDE

SOLID CARBIDE DREAM DRILLS - FLAT BOTTOM

- For holes on various angled surface
- 180 degree point angle enables drilling of flat, inclined and curved surfaces.

ITEM	MODEL	DESCRIPTION	SIZE		PAGE
			MIN	MAX	
2 X D DPP447		CARBIDE, DREAM DRILLS - FLAT BOTTOM VHM, DREAM DRILLS - FLACHBOHRER	D3.0	D20.0	108
		RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN			111

For Angled surface, two operations are required by traditional usage.

1st operation (End mill)

Counter boring to make flat surface and guide hole



2nd operation (Drill)

Drilling to required depth of hole



For Angled surface, only one operation can be drilled by Dream Drill Flat Bottom

One operation (Dream Drill Flat Bottom)

One Drill does it all
without using both an end mill and a drill



SOLID CARBIDE DREAM DRILLS - FLAT BOTTOM

◎ : Excellent ○ : Good

P			H	M	K	N			S		
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Stainless Steels	Cast Iron	Aluminum	Copper	Bronze	CFRP	Titanium
~HRc20	HRc20~30	HRc30~40	HRc40~50	HRc50~							
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DREAM DRILLS -FLAT BOTTOM

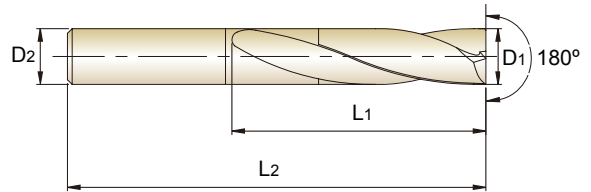
DPP447 SERIES

CARBIDE, DREAM DRILLS - FLAT BOTTOM

- ▶ **VHM, DREAM DRILLS - FLACHBOHRER**
- ▶ **DREAM DRILLS - FOND PLAT, FORET CARBURE MONOBLOC**
- ▶ **PUNTE IN MD DREAM DRILLS, TESTA PIANA**

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- ▶ High strength cutting edge to improve tool life and versatility drilling.
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- ▶ Optimierte Nutform für hervorragende Spanabfuhr.
- ▶ Hochfeste Schneidkanten zur Verbesserung der Werkzeugstandzeiten und Vielseitigkeitsbohrungen.
- ▶ Für Durchgangslöcher, minimiert die Gratbildung am Ein- und Austritt beim Bohren dünner Bleche.



2 × D

Unit : mm

EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length
X-Coating	D1	D2	L1	L2	X-Coating	D1	D2	L1	L2
DPP447030	3.0	6	16	50	DPP447056	5.6	6	24	60
DPP447031	3.1	6	16	50	DPP447057	5.7	6	26	60
DPP447032	3.2	6	16	50	DPP447058	5.8	6	26	60
DPP447033	3.3	6	16	50	DPP447059	5.9	6	26	60
DPP447034	3.4	6	18	50	DPP447060	6.0	6	26	60
DPP447035	3.5	6	18	50	DPP447061	6.1	8	28	70
DPP447036	3.6	6	18	50	DPP447062	6.2	8	28	70
DPP447037	3.7	6	18	50	DPP447063	6.3	8	28	70
DPP447038	3.8	6	18	50	DPP447064	6.4	8	30	70
DPP447039	3.9	6	18	50	DPP447065	6.5	8	30	70
DPP447040	4.0	6	18	50	DPP447066	6.6	8	30	70
DPP447041	4.1	6	20	60	DPP447067	6.7	8	30	70
DPP447042	4.2	6	20	60	DPP447068	6.8	8	30	70
DPP447043	4.3	6	20	60	DPP447069	6.9	8	30	70
DPP447044	4.4	6	20	60	DPP447070	7.0	8	30	70
DPP447045	4.5	6	22	60	DPP447071	7.1	8	34	70
DPP447046	4.6	6	22	60	DPP447072	7.2	8	34	70
DPP447047	4.7	6	22	60	DPP447073	7.3	8	34	70
DPP447048	4.8	6	22	60	DPP447074	7.4	8	34	70
DPP447049	4.9	6	22	60	DPP447075	7.5	8	34	70
DPP447050	5.0	6	22	60	DPP447076	7.6	8	34	70
DPP447051	5.1	6	24	60	DPP447077	7.7	8	34	70
DPP447052	5.2	6	24	60	DPP447078	7.8	8	34	70
DPP447053	5.3	6	24	60	DPP447079	7.9	8	34	70
DPP447054	5.4	6	24	60	DPP447080	8.0	8	34	70
DPP447055	5.5	6	24	60	DPP447081	8.1	10	38	80

▶ Other diameters and shank types are available upon request.

▶ NEXT PAGE

◎ : Excellent ○ : Good

P		H		M	K	N				S	
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~HRc20	HRc20~30	HRc30~40	HRc40~50	HRc50~							
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YG DREAM DRILLS - FLAT BOTTOM

DPP447 SERIES

CARBIDE

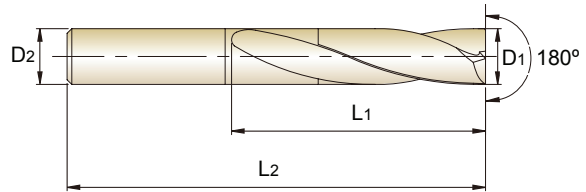
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CARBIDE, DREAM DRILLS - FLAT BOTTOM

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X-Coating	D1	D2	L1	L2	X-Coating	D1	D2	L1	L2
DPP447082	8.2	10	38	80	DPP447110	11.0	12	48	90
DPP447083	8.3	10	38	80	DPP447115	11.5	12	50	90
DPP447084	8.4	10	38	80	DPP447118	11.8	12	52	90
DPP447085	8.5	10	38	80	DPP447119	11.9	12	52	90
DPP447086	8.6	10	38	80	DPP447120	12.0	12	52	90
DPP447087	8.7	10	40	80	DPP447125	12.5	14	54	100
DPP447088	8.8	10	40	80	DPP447130	13.0	14	56	100
DPP447089	8.9	10	40	80	DPP447135	13.5	14	58	100
DPP447090	9.0	10	40	80	DPP447140	14.0	14	58	100
DPP447091	9.1	10	42	80	DPP447145	14.5	16	62	105
DPP447092	9.2	10	42	80	DPP447150	15.0	16	62	105
DPP447093	9.3	10	42	80	DPP447155	15.5	16	64	115
DPP447094	9.4	10	42	80	DPP447160	16.0	16	64	115
DPP447095	9.5	10	42	80	DPP447165	16.5	18	70	125
DPP447096	9.6	10	42	80	DPP447170	17.0	18	70	125
DPP447097	9.7	10	45	80	DPP447175	17.5	18	70	125
DPP447098	9.8	10	45	80	DPP447180	18.0	18	70	125
DPP447099	9.9	10	45	80	DPP447185	18.5	20	75	135
DPP447100	10.0	10	45	80	DPP447190	19.0	20	75	135
DPP447102	10.2	12	46	90	DPP447195	19.5	20	75	145
DPP447105	10.5	12	48	90	DPP447200	20.0	20	75	145
DPP447108	10.8	12	48	90					

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P				H	M	K	N			S	
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~HRC20	HRC20~30	HRc30~40	HRc40~50	HRc50~							
◎	◎	◎	○		○	◎	○	○			

◎ : Excellent ○ : Good

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

TECHNICAL DATA



**DREAM DRILLS
-FLAT BOTTOM**

**RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN**

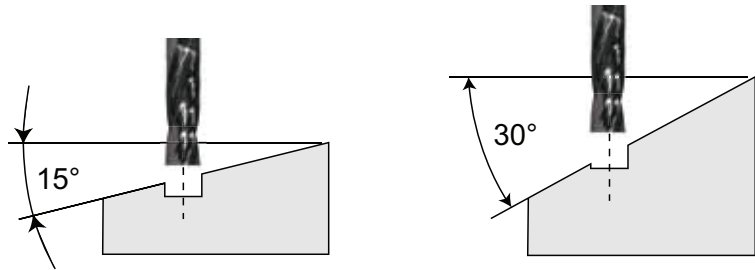
**CARBIDE, DREAM DRILLS - FLAT BOTTOM
VHM, DREAM DRILLS - FLACHBOHRER**

DPP447 SERIES

WORK MATERIAL	P								M		K		N	
	STRUCTURAL STEELS		CARBON STEELS ALLOY STEELS		PREHARDENED STEELS		HARDEND STEELS		STAINLESS STEELS		CAST IRON		ALUMINUM	
HARDNESS			<HB225		HRc30 ~ 40		HRc40 ~ 50		~ 200 HB					
DRILLING SPEED	80 m/min		70 m/min		38 m/min		25 m/min		30 m/min		68 m/min		165 m/min	
DRILLING DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
3.0	8350	0.05	7250	0.05	3890	0.05	2790	0.03	3180	0.02	7250	0.04	17850	0.06
4.0	6250	0.07	5410	0.07	2940	0.06	2100	0.04	2380	0.03	5410	0.06	13130	0.08
5.0	5040	0.08	4360	0.08	2310	0.08	1680	0.05	1910	0.04	4360	0.07	10500	0.10
6.0	4200	0.10	3630	0.10	1890	0.09	1370	0.06	1590	0.05	3630	0.09	8930	0.12
8.0	3150	0.14	2730	0.13	1470	0.12	1050	0.08	1190	0.06	2730	0.12	6670	0.16
10.0	2520	0.17	2160	0.17	1160	0.15	840	0.10	955	0.08	2160	0.15	5360	0.20
12.0	2100	0.21	1790	0.21	1000	0.18	690	0.12	796	0.10	1790	0.18	4470	0.24
16.0	1580	0.28	1370	0.28	740	0.24	530	0.16	597	0.12	1370	0.24	3360	0.32
20.0	1260	0.35	1110	0.34	580	0.31	420	0.20	477	0.15	1110	0.30	2680	0.40

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

Surface Angle	Cutting Conditions	
	RPM	FEED
0° ~ 15°	100%	100%
15° ~ 30°	100%	50%
30° ~	70%	30%

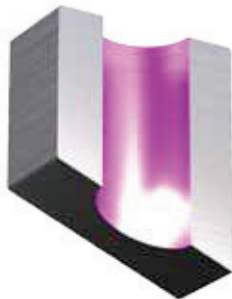


- ▶ The cutting conditions are for 2xD.
- ▶ The rigid and precise machine and holder are required.
- ▶ The recommended depth of hole is measured from the highest point of the hole on drilling in inclined and angled surfaces.
- ▶ The recommended cutting conditions are those for drilling on flat and horizontal surfaces.
- ▶ Please adjust feed rate according to the above surface angle when drilling on an inclined surface.
 - The recommended feed rate 50% or lower, in case of 15°~30° of the incline angle.
 - The recommended feed rate 30% or lower and RPM 70%, in case of 30° ~ of the incline angle.
- ▶ Please decrease cutting speed as material hardness increases.
- ▶ Only use drilling tool. Side milling, traversing, helical milling are not usable.

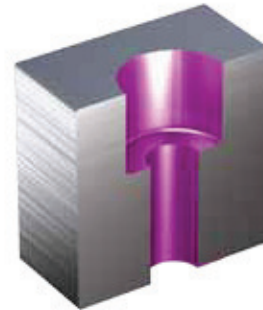
**VARIETY OF DRILLING
Arten von Bohrungen**



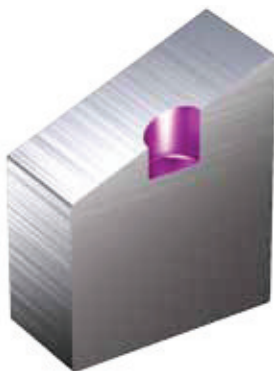
Inclined Entry



Inclined Exit



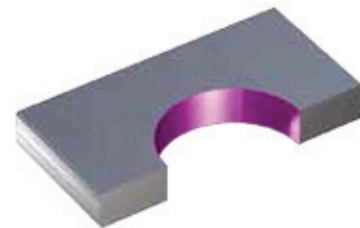
Counter Boring



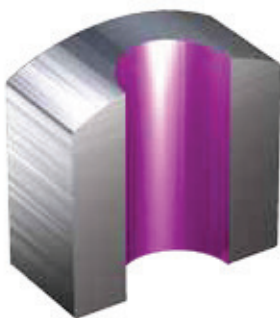
Guide Drilling



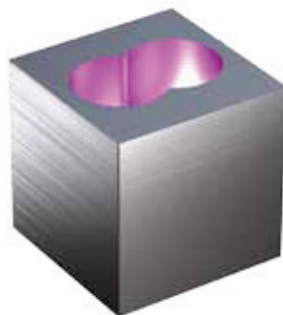
Cross Drilling



Thin Plate



Curved Surface



Chained Hole



Blind Hole for Threading

i-ONE DRILLS

i-DREAM DRILLS

DREAM DRILLS -GENERAL

DREAM DRILLS -HIGH FEED

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