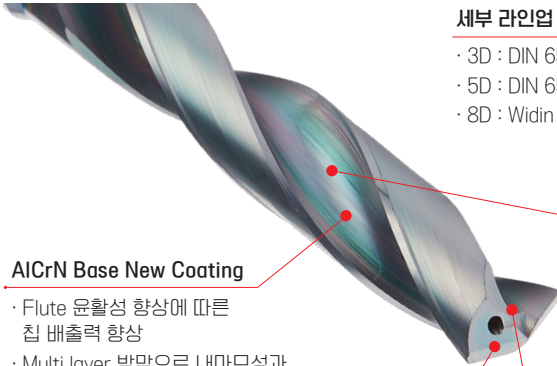


Dolphin Oil-Hole Drill NEW

범용 돌핀 오일홀 드릴

제품특징

- 가공 깊이에 따른 깊은 포켓으로 칩 패킹 최소화
- 절삭날 냉각 효과를 향상시키는 New 선단 그루브 형상
- 시닝 면조도 개선으로 칩 배출 향상 & 절삭부하 감소
- 다양한 피삭재에 대응할 수 있도록 범용 설계



세부 라인업

- 3D : DIN 6537, HB/HE Shank
- 5D : DIN 6537, HB/HE Shank
- 8D : Widin Standard

칩 패킹 최소화

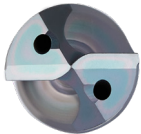
- 3D~8D 가공 깊이에 따른 깊은 칩 포켓
- 칩 패킹 최소화로 Hole 내부 스크래치가 감소되어 가공품질 향상

AICrN Base New Coating

- Flute 윤활성 향상에 따른 칩 배출력 향상
- Multi layer 박막으로 내마모성과 내산화성 향상

개선된 XR 시닝

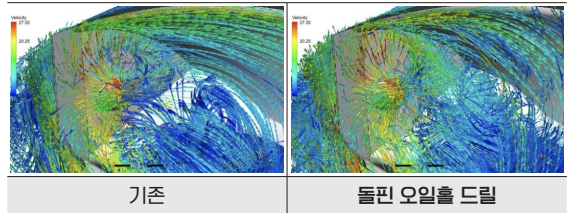
- 시닝면 Finishing으로 칩 배출력 향상
- 인선처리 면조도 향상을 통한 돌발파손 & 내치핑성 개선
- 유선형 시닝적용으로 가공 선단의 절삭력이 분산되어 절삭부하가 감소



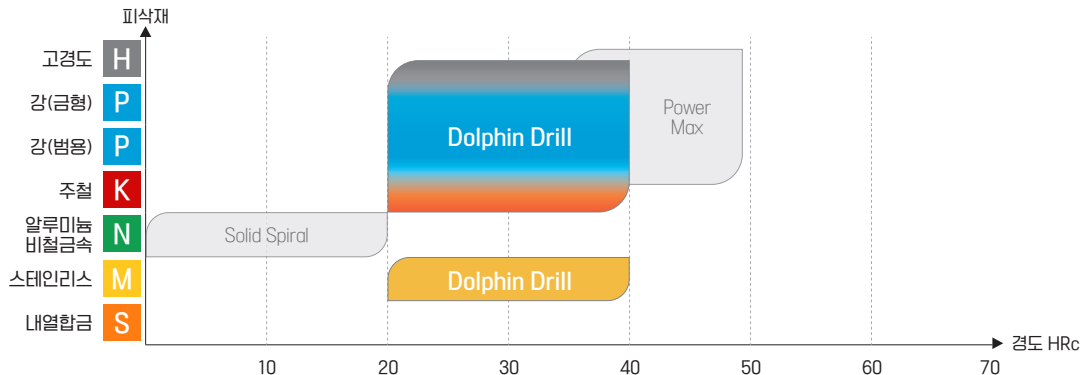
NEW 선단 그루브 형상

- 절삭날 및 외주부 절삭유 유속 및 유량 증가로 인한 냉각효과 향상
- Flute 절삭유 유속 증가로 인한 칩 배출력 향상

Improved Cooling

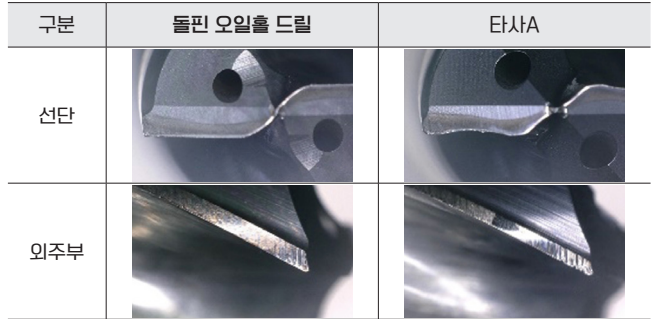
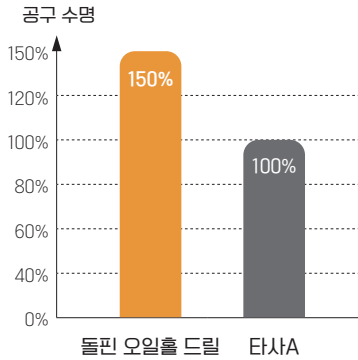


적용영역



성능 평가 결과

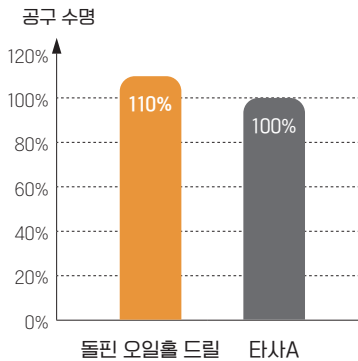
▶ 탄소강(SM45C)



· 테스트 품번 : NDPGH505060D (D6.0-44/82-6)
· 가공조건

Vc	rpm	fn	Feed	Ap	Coolant
100	5,300	0.24	1,272	30	Inner

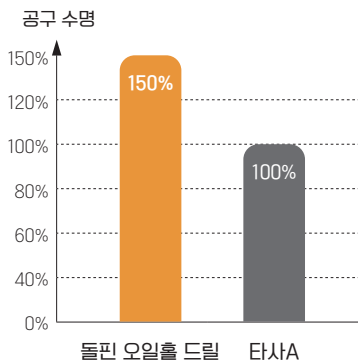
▶ 합금강 (SCM440)



· 테스트 품번 : NDPGH505060D (D6.0-44/82-6)
· 가공조건

Vc	rpm	fn	Feed	Ap	Coolant
80	4,250	0.20	850	30	Inner

▶ 스테인레스강(SUS304)






· 테스트 품번 : NDPGH505060D (D6.0-44/82-6)
· 가공조건

Vc	rpm	fn	Feed	Ap	Coolant
60	3,175	0.14	445	19	Inner

Dolphin Oil-Hole Drill NEW

범용 돌핀 오일홀 드릴

목차

품목코드 단위 (INCH : ■ / METRIC : □)	날수	사진	길이			내부 급유	마진	날부 공차	날경		페이지
			3D	5D	8D				최소	최대	
NDPGH503 ■□	2날		○			○	Single	m7	3	20	433
NDPGH505 ■□				○		○	Single	m7	3	20	439
NDPGH508 ■□					○	○	Single	m7	3	16	445

품번체계

*정수로 표현되는 경우 소수점 이하는 생략합니다.



① 시리즈명	② 용도 (가공영역)	③ 쿨런트 유무	④ 등급	⑤ 가공깊이	⑥ 날경 (∅)	⑦ 규격
NDP : 돌핀	G (General) : 범용 K (ISO K : Cast Iron) : 주철용	- : Non Coolant H : Oil-Hole Coolant	5 : Grade	03 : 3D 04 : 4D 07 : 7D	030 : ∅3.0 060 : ∅6.0 103 : ∅10.3	- : JIS D : DIN

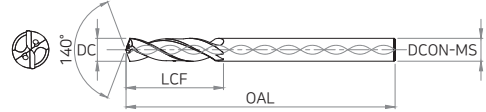
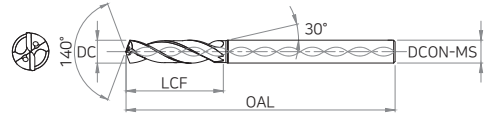
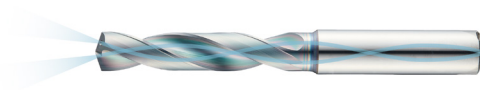


회전공구, 특히 구멍 가공용 공구의 원통형 회전가공 패턴을
돌고래의 곧으면서도 역동적인 이미지로 표현한
위딘 제품의 브랜드 이름입니다.

[상표권 출원완료]

NDPGH503D

범용 돌핀 오일홀 드릴



▶ 제품허용공차

날경(DC)		자루경
~ Ø3	+0.002 ~ +0.012	
Ø3.1 ~ Ø6	+0.004 ~ +0.016	
Ø6.1 ~ Ø10	+0.006 ~ +0.021	
Ø10.1 ~ Ø18	+0.007 ~ +0.025	
Ø18.1 ~ Ø20	+0.008 ~ +0.029	

DIN
6537

CARBIDE

AlCrN

3D

30°
HELIX

140°

절삭조건
P.742

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH503 030D	3.0	20	62	6	-	-
NDPGH503 031D	3.1	20	62	6	-	-
NDPGH503 03175D	3.175	20	62	6	-	-
NDPGH503 032D	3.2	20	62	6	-	-
NDPGH503 033D	3.3	20	62	6	M4x0.7	WH1~4
NDPGH503 034D	3.4	20	62	6	M4x0.7	WH5~6
NDPGH503 035D	3.5	20	62	6	-	-
NDPGH503 03572D	3.572	20	62	6	-	-
NDPGH503 036D	3.6	20	62	6	-	-
NDPGH503 037D	3.7	20	62	6	-	-
NDPGH503 038D	3.8	24	66	6	-	-
NDPGH503 039D	3.9	24	66	6	-	-
NDPGH503 03969D	3.969	24	66	6	-	-
NDPGH503 040D	4.0	24	66	6	-	-
NDPGH503 04039D	4.039	24	66	6	-	-
NDPGH503 041D	4.1	24	66	6	-	-
NDPGH503 042D	4.2	24	66	6	M5x0.8	WH1~4
NDPGH503 043D	4.3	24	66	6	M5x0.8	WH5~6
NDPGH503 04366D	4.366	24	66	6	-	-
NDPGH503 044D	4.4	24	66	6	-	-

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500	○		○	◎	
		◎	◎	○	○	○		○		

NDPGH503D

변용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH503 045D	4.5	24	66	6	-	-
NDPGH503 046D	4.6	24	66	6	-	-
NDPGH503 047D	4.7	24	66	6	-	-
NDPGH503 04763D	4.763	28	66	6	-	-
NDPGH503 048D	4.8	28	66	6	-	-
NDPGH503 049D	4.9	28	66	6	-	-
NDPGH503 050D	5.0	28	66	6	M6x1.0	WH1~4
NDPGH503 051D	5.1	28	66	6	M6x1.0	WH5~6
NDPGH503 05159D	5.159	28	66	6	-	-
NDPGH503 052D	5.2	28	66	6	-	-
NDPGH503 053D	5.3	28	66	6	-	-
NDPGH503 054D	5.4	28	66	6	-	-
NDPGH503 055D	5.5	28	66	6	-	-
NDPGH503 05556D	5.558	28	66	6	-	-
NDPGH503 056D	5.6	28	66	6	-	-
NDPGH503 057D	5.7	28	66	6	-	-
NDPGH503 058D	5.8	28	66	6	-	-
NDPGH503 059D	5.9	28	66	6	-	-
NDPGH503 05953D	5.953	28	66	6	-	-
NDPGH503 060D	6.0	28	66	6	-	-
NDPGH503 061D	6.1	34	79	8	-	-
NDPGH503 062D	6.2	34	79	8	-	-
NDPGH503 063D	6.3	34	79	8	-	-
NDPGH503 0635D	6.35	34	79	8	-	-
NDPGH503 064D	6.4	34	79	8	-	-
NDPGH503 065D	6.5	34	79	8	-	-
NDPGH503 06528D	6.528	34	79	8	-	-
NDPGH503 066D	6.6	34	79	8	-	-
NDPGH503 067D	6.7	34	79	8	-	-
NDPGH503 06747D	6.747	34	79	8	-	-
NDPGH503 068D	6.8	34	79	8	M8x1.25	WH1~4
NDPGH503 069D	6.9	34	79	8	M8x1.25	WH5~6
NDPGH503 070D	7.0	34	79	8	M8x1.0	WH1~4
NDPGH503 071D	7.1	41	79	8	M8x1.0	WH5~6

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		◎	◎	○	○	○		○	◎	

NDPGH503D

범용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 랩	
	날경	날장	전장	자루경	Size	Limit
NDPGH503 07144D	7.144	41	79	8	-	-
NDPGH503 072D	7.2	41	79	8	-	-
NDPGH503 073D	7.3	41	79	8	-	-
NDPGH503 074D	7.4	41	79	8	-	-
NDPGH503 075D	7.5	41	79	8	-	-
NDPGH503 07541D	7.541	41	79	8	-	-
NDPGH503 076D	7.6	41	79	8	-	-
NDPGH503 077D	7.7	41	79	8	-	-
NDPGH503 078D	7.8	41	79	8	-	-
NDPGH503 079D	7.9	41	79	8	-	-
NDPGH503 07938D	7.938	41	79	8	-	-
NDPGH503 080D	8.0	41	79	8	-	-
NDPGH503 081D	8.1	47	89	10	-	-
NDPGH503 082D	8.2	47	89	10	-	-
NDPGH503 083D	8.3	47	89	10	-	-
NDPGH503 08334D	8.334	47	89	10	-	-
NDPGH503 084D	8.4	47	89	10	-	-
NDPGH503 08433D	8.433	47	89	10	-	-
NDPGH503 085D	8.5	47	89	10	M10x1.5	WH1~4
NDPGH503 086D	8.6	47	89	10	M10x1.5	WH5~6
NDPGH503 087D	8.7	47	89	10	-	-
NDPGH503 08731D	8.731	47	89	10	-	-
NDPGH503 088D	8.8	47	89	10	M10x1.25	WH1~4
NDPGH503 089D	8.9	47	89	10	M10x1.25	WH5~6
NDPGH503 090D	9.0	47	89	10	M10x1.0	WH1~4
NDPGH503 091D	9.1	47	89	10	M10x1.0	WH5~6
NDPGH503 09128D	9.128	47	89	10	-	-
NDPGH503 092D	9.2	47	89	10	-	-
NDPGH503 093D	9.3	47	89	10	-	-
NDPGH503 09347D	9.347	47	89	10	-	-
NDPGH503 094D	9.4	47	89	10	-	-
NDPGH503 095D	9.5	47	89	10	-	-
NDPGH503 09525D	9.525	47	89	10	-	-
NDPGH503 096D	9.6	47	89	10	-	-

Dolphin Drill

Dolphin Oil-Hole Drill

Power Max

Solid Spiral

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500	○		○	◎	
		◎	◎	○	○	○		○		

NDPGH503D

변용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH503 097D	9.7	47	89	10	-	-
NDPGH503 098D	9.8	47	89	10	-	-
NDPGH503 099D	9.9	47	89	10	-	-
NDPGH503 09922D	9.922	47	89	10	-	-
NDPGH503 100D	10.0	47	89	10	-	-
NDPGH503 101D	10.1	55	102	12	-	-
NDPGH503 102D	10.2	55	102	12	-	-
NDPGH503 103D	10.3	55	102	12	M12x1.75	WH1~2
NDPGH503 10319D	10.319	55	102	12	M12x1.75	WH3~4
NDPGH503 104D	10.4	55	102	12	M12x1.75	WH5~6
NDPGH503 105D	10.5	55	102	12	M12x1.5	WH1~4
NDPGH503 106D	10.6	55	102	12	M12x1.5	WH5~6
NDPGH503 107D	10.7	55	102	12	-	-
NDPGH503 10716D	10.716	55	102	12	-	-
NDPGH503 108D	10.8	55	102	12	M12x1.25	WH1~4
NDPGH503 109D	10.9	55	102	12	M12x1.25	WH5~6
NDPGH503 110D	11.0	55	102	12	M12x1.0	WH1~4
NDPGH503 111D	11.1	55	102	12	M12x1.0	WH5~6
NDPGH503 11113D	11.113	55	102	12	-	-
NDPGH503 112D	11.2	55	102	12	-	-
NDPGH503 113D	11.3	55	102	12	-	-
NDPGH503 114D	11.4	55	102	12	-	-
NDPGH503 115D	11.5	55	102	12	-	-
NDPGH503 11509D	11.509	55	102	12	-	-
NDPGH503 116D	11.6	55	102	12	-	-
NDPGH503 117D	11.7	55	102	12	-	-
NDPGH503 118D	11.8	55	102	12	-	-
NDPGH503 119D	11.9	55	102	12	-	-
NDPGH503 11906D	11.906	55	102	12	-	-
NDPGH503 120D	12.0	55	102	12	M14x2.0	WH1~4
NDPGH503 121D	12.1	60	107	14	M14x2.0	WH5~6
NDPGH503 122D	12.2	60	107	14	-	-
NDPGH503 123D	12.3	60	107	14	-	-
NDPGH503 12303D	12.303	60	107	14	-	-

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		◎	◎	○	○	○		○	◎	

NDPGH503D 범용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 랩	
	날경	날장	전장	자루경	Size	Limit
NDPGH503 124D	12.4	60	107	14	-	-
NDPGH503 125D	12.5	60	107	14	M14x1.5	WH1~4
NDPGH503 126D	12.6	60	107	14	M14x1.5	WH5~6
NDPGH503 127D	12.7	60	107	14	-	-
NDPGH503 128D	12.8	60	107	14	-	-
NDPGH503 129D	12.9	60	107	14	-	-
NDPGH503 130D	13.0	60	107	14	-	-
NDPGH503 131D	13.1	60	107	14	-	-
NDPGH503 132D	13.2	60	107	14	-	-
NDPGH503 133D	13.3	60	107	14	-	-
NDPGH503 134D	13.4	60	107	14	-	-
NDPGH503 135D	13.5	60	107	14	-	-
NDPGH503 136D	13.6	60	107	14	-	-
NDPGH503 137D	13.7	60	107	14	-	-
NDPGH503 138D	13.8	60	107	14	-	-
NDPGH503 13891D	13.891	60	107	14	-	-
NDPGH503 139D	13.9	60	107	14	-	-
NDPGH503 140D	14.0	60	107	14	M16x20	WH1~4
NDPGH503 141D	14.1	65	115	16	M16x20	WH5~6
NDPGH503 142D	14.2	65	115	16	-	-
NDPGH503 14288D	14.288	65	115	16	-	-
NDPGH503 143D	14.3	65	115	16	-	-
NDPGH503 144D	14.4	65	115	16	-	-
NDPGH503 145D	14.5	65	115	16	M16x1.5	WH1~4
NDPGH503 146D	14.6	65	115	16	M16x1.5	WH5~6
NDPGH503 14684D	14.684	65	115	16	-	-
NDPGH503 147D	14.7	65	115	16	-	-
NDPGH503 148D	14.8	65	115	16	-	-
NDPGH503 149D	14.9	65	115	16	-	-
NDPGH503 150D	15.0	65	115	16	-	-
NDPGH503 15081D	15.081	65	115	16	-	-
NDPGH503 151D	15.1	65	115	16	-	-
NDPGH503 152D	15.2	65	115	16	-	-
NDPGH503 153D	15.3	65	115	16	-	-

Dolphin Drill
Dolphin Oil-Hole Drill
Power Max
Solid Spiral

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~Hrc55	SKD11 Hrc55~	~HB225	HB225 ~325	Hrc30~50	~FCD500	○		○	◎	
		◎	◎	○	○	○		○		

NDPGH503D

변용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH503 154D	15.4	65	115	16	-	-
NDPGH503 15478D	15.478	65	115	16	-	-
NDPGH503 155D	15.5	65	115	16	M18x2.5	WH1~4
NDPGH503 156D	15.6	65	115	16	M18x2.5	WH5~6
NDPGH503 157D	15.7	65	115	16	-	-
NDPGH503 158D	15.8	65	115	16	-	-
NDPGH503 15875D	15.875	65	115	16	-	-
NDPGH503 159D	15.9	65	115	16	-	-
NDPGH503 160D	16.0	65	115	16	-	-
NDPGH503 16272D	16.272	73	123	18	-	-
NDPGH503 165D	16.5	73	123	18	M18x1.5	WH1~6
NDPGH503 16669D	16.669	73	123	18	-	-
NDPGH503 170D	17.0	73	123	18	-	-
NDPGH503 17066D	17.066	73	123	18	-	-
NDPGH503 17463D	17.463	73	123	18	-	-
NDPGH503 175D	17.5	73	123	18	M20x2.5	WH1~6
NDPGH503 17859D	17.859	73	123	18	-	-
NDPGH503 180D	18.0	73	123	18	-	-
NDPGH503 18256D	18.256	79	131	20	-	-
NDPGH503 185D	18.5	79	131	20	M20x1.5	WH1~6
NDPGH503 18654D	18.654	79	131	20	-	-
NDPGH503 190D	19.0	79	131	20	-	-
NDPGH503 1905D	19.050	79	131	20	-	-
NDPGH503 1925D	19.25	79	131	20	-	-
NDPGH503 19447D	19.447	79	131	20	-	-
NDPGH503 195D	19.5	79	131	20	M22x2.5	WH1~6
NDPGH503 19844D	19.844	79	131	20	-	-
NDPGH503 200D	20.0	79	131	20	-	-

Dolphin Drill

Dolphin Oil-Hole Drill

Power Max

Solid Spiral

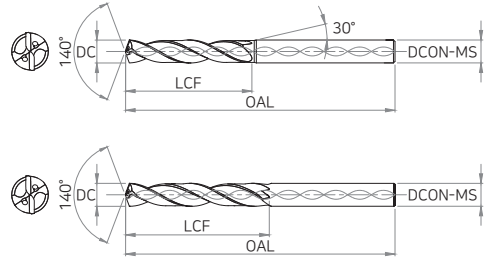
▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		◎	◎	○	○	○		○	◎	

NDPGH505D

범용 돌핀 오일홀 드릴



▶ 제품허용공차

날경(DC)		자루경
~ Ø3	+0.002 ~ +0.012	
Ø3.1 ~ Ø6	+0.004 ~ +0.016	
Ø6.1 ~ Ø10	+0.006 ~ +0.021	
Ø10.1 ~ Ø18	+0.007 ~ +0.025	
Ø18.1 ~ Ø20	+0.008 ~ +0.029	

DIN
6537

CARBIDE

AlCrN

5D

30°
HELIX

140°

절삭조건
P.742

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH505 030D	3.0	28	66	6	-	-
NDPGH505 031D	3.1	28	66	6	-	-
NDPGH505 03175D	3.175	28	66	6	-	-
NDPGH505 032D	3.2	28	66	6	-	-
NDPGH505 033D	3.3	28	66	6	M4x0.7	WH1~4
NDPGH505 034D	3.4	28	66	6	M4x0.7	WH 5~6
NDPGH505 035D	3.5	28	66	6	-	-
NDPGH505 03572D	3.572	28	66	6	-	-
NDPGH505 036D	3.6	28	66	6	-	-
NDPGH505 037D	3.7	28	66	6	-	-
NDPGH505 038D	3.8	36	74	6	-	-
NDPGH505 039D	3.9	36	74	6	-	-
NDPGH505 03969D	3.969	36	74	6	-	-
NDPGH505 040D	4.0	36	74	6	-	-
NDPGH505 04039D	4.039	36	74	6	-	-
NDPGH505 041D	4.1	36	74	6	-	-
NDPGH505 042D	4.2	36	74	6	M5x0.8	WH1~4
NDPGH505 043D	4.3	36	74	6	M5x0.8	WH5~6
NDPGH505 04366D	4.366	36	74	6	-	-
NDPGH505 044D	4.4	36	74	6	-	-

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500	○	○	○	◎	
		◎	◎	○	○	○		○		

NDPGH505D

변용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH505 045D	4.5	36	74	6	-	-
NDPGH505 046D	4.6	36	74	6	-	-
NDPGH505 047D	4.7	36	74	6	-	-
NDPGH505 04763D	4.763	36	74	6	-	-
NDPGH505 048D	4.8	44	82	6	-	-
NDPGH505 049D	4.9	44	82	6	-	-
NDPGH505 050D	5.0	44	82	6	M6x1.0	WH1~4
NDPGH505 051D	5.1	44	82	6	M6x1.0	WH5~6
NDPGH505 05159D	5.159	44	82	6	-	-
NDPGH505 052D	5.2	44	82	6	-	-
NDPGH505 053D	5.3	44	82	6	-	-
NDPGH505 054D	5.4	44	82	6	-	-
NDPGH505 055D	5.5	44	82	6	-	-
NDPGH505 05556D	5.558	44	82	6	-	-
NDPGH505 056D	5.6	44	82	6	-	-
NDPGH505 057D	5.7	44	82	6	-	-
NDPGH505 058D	5.8	44	82	6	-	-
NDPGH505 059D	5.9	44	82	6	-	-
NDPGH505 05953D	5.953	44	82	6	-	-
NDPGH505 060D	6.0	44	82	6	-	-
NDPGH505 061D	6.1	53	91	8	-	-
NDPGH505 062D	6.2	53	91	8	-	-
NDPGH505 063D	6.3	53	91	8	-	-
NDPGH505 0635D	6.35	53	91	8	-	-
NDPGH505 064D	6.4	53	91	8	-	-
NDPGH505 065D	6.5	53	91	8	-	-
NDPGH505 06528D	6.528	53	91	8	-	-
NDPGH505 066D	6.6	53	91	8	-	-
NDPGH505 067D	6.7	53	91	8	-	-
NDPGH505 06747D	6.747	53	91	8	-	-
NDPGH505 068D	6.8	53	91	8	M8x1.25	WH1~4
NDPGH505 069D	6.9	53	91	8	M8x1.25	WH5~6
NDPGH505 070D	7.0	53	91	8	M8x1.0	WH1~4
NDPGH505 071D	7.1	53	91	8	M8x1.0	WH5~6

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		◎	◎	○	○	○		○	◎	

NDPGH505D 범용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 랩	
	날경	날장	전장	자루경	Size	Limit
NDPGH505 07144D	7.144	53	91	8	-	-
NDPGH505 072D	7.2	53	91	8	-	-
NDPGH505 072D	7.2	53	91	8	-	-
NDPGH505 073D	7.3	53	91	8	-	-
NDPGH505 074D	7.4	53	91	8	-	-
NDPGH505 075D	7.5	53	91	8	-	-
NDPGH505 07541D	7.541	53	91	8	-	-
NDPGH505 076D	7.6	53	91	8	-	-
NDPGH505 077D	7.7	53	91	8	-	-
NDPGH505 078D	7.8	53	91	8	-	-
NDPGH5050 79D	7.9	53	91	8	-	-
NDPGH505 07938D	7.938	53	91	8	-	-
NDPGH505 080D	8.0	53	91	8	-	-
NDPGH505 081D	8.1	61	103	10	-	-
NDPGH505 082D	8.2	61	103	10	-	-
NDPGH505 083D	8.3	61	103	10	-	-
NDPGH505 08334D	8.334	61	103	10	-	-
NDPGH505 084D	8.4	61	103	10	-	-
NDPGH505 08433D	8.433	61	103	10	-	-
NDPGH505 085D	8.5	61	103	10	M10x1.5	WH1~4
NDPGH505 086D	8.6	61	103	10	M10x1.5	WH5~6
NDPGH505 087D	8.7	61	103	10	-	-
NDPGH505 08731D	8.731	61	103	10	-	-
NDPGH505 088D	8.8	61	103	10	M10x1.25	WH1~4
NDPGH505 089D	8.9	61	103	10	M10x1.25	WH5~6
NDPGH505 090D	9.0	61	103	10	M10x1.0	WH1~4
NDPGH505 091D	9.1	61	103	10	M10x1.0	WH5~6
NDPGH505 09128D	9.128	61	103	10	-	-
NDPGH505 092D	9.2	61	103	10	-	-
NDPGH505 093D	9.3	61	103	10	-	-
NDPGH505 09347D	9.347	61	103	10	-	-
NDPGH505 094D	9.4	61	103	10	-	-
NDPGH505 095D	9.5	61	103	10	-	-
NDPGH505 09525D	9.525	61	103	10	-	-

Dolphin Drill
Dolphin Oil-Hole Drill
Power Max
Solid Spiral

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500	○		○	◎	
		◎	◎	○	○	○		○		

NDPGH505D

면용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH505 096D	9.6	61	103	10	-	-
NDPGH505 097D	9.7	61	103	10	-	-
NDPGH505 098D	9.8	61	103	10	-	-
NDPGH505 099D	9.9	61	103	10	-	-
NDPGH505 098D	9.8	61	103	10	-	-
NDPGH505 099D	9.9	61	103	10	-	-
NDPGH505 09922D	9.922	61	103	10	-	-
NDPGH505 100D	10.0	61	103	10	-	-
NDPGH505 101D	10.1	71	118	12	-	-
NDPGH505 102D	10.2	71	118	12	-	-
NDPGH505 103D	10.3	71	118	12	M12x1.75	WH1~2
NDPGH505 10319D	10.319	71	118	12	M12x1.75	WH3~4
NDPGH505 104D	10.4	71	118	12	M12x1.75	WH5~6
NDPGH505 105D	10.5	71	118	12	M12x1.5	WH1~4
NDPGH505 106D	10.6	71	118	12	M12x1.5	WH5~6
NDPGH505 107D	10.7	71	118	12	-	-
NDPGH505 10716D	10.716	71	118	12	-	-
NDPGH505 108D	10.8	71	118	12	M12x1.25	WH1~4
NDPGH505 109D	10.9	71	118	12	M12x1.25	WH5~6
NDPGH505 110D	11.0	71	118	12	M12x1.0	WH1~4
NDPGH505 111D	11.1	71	118	12	M12x1.0	WH5~6
NDPGH505 11113D	11.113	71	118	12	-	-
NDPGH505 112D	11.2	71	118	12	-	-
NDPGH505 113D	11.3	71	118	12	-	-
NDPGH505 114D	11.4	71	118	12	-	-
NDPGH505 115D	11.5	71	118	12	-	-
NDPGH505 11509D	11.509	71	118	12	-	-
NDPGH505 116D	11.6	71	118	12	-	-
NDPGH505 117D	11.7	71	118	12	-	-
NDPGH505 118D	11.8	71	118	12	-	-
NDPGH505 119D	11.9	71	118	12	-	-
NDPGH505 11906D	11.906	71	118	12	-	-
NDPGH505 120D	12.0	71	118	12	M14x2.0	WH1~4
NDPGH505 121D	12.1	77	124	14	M14x2.0	WH5~6

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500	○		○	◎	
		◎	◎	○	○	○		○	◎	

NDPGH505D

범용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 랩	
	날경	날장	전장	자루경	Size	Limit
NDPGH505 122D	12.2	77	124	14	-	-
NDPGH505 123D	12.3	77	124	14	-	-
NDPGH505 12303D	12.303	77	124	14	-	-
NDPGH505 124D	12.4	77	124	14	-	-
NDPGH505 125D	12.5	77	124	14	M14x1.5	WH1~4
NDPGH505 126D	12.6	77	124	14	M14x1.5	WH5~6
NDPGH505 127D	12.7	77	124	14	-	-
NDPGH505 128D	12.8	77	124	14	-	-
NDPGH505 129D	12.9	77	124	14	-	-
NDPGH505 130D	13.0	77	124	14	-	-
NDPGH505 131D	13.1	77	124	14	-	-
NDPGH505 132D	13.2	77	124	14	-	-
NDPGH505 133D	13.3	77	124	14	-	-
NDPGH505 134D	13.4	77	124	14	-	-
NDPGH505 135D	13.5	77	124	14	-	-
NDPGH505 136D	13.6	77	124	14	-	-
NDPGH505 137D	13.7	77	124	14	-	-
NDPGH505 138D	13.8	77	124	14	-	-
NDPGH505 13891D	13.891	77	124	14	-	-
NDPGH505 139D	13.9	77	124	14	-	-
NDPGH505 140D	14.0	77	124	14	M16x2.0	WH1~4
NDPGH505 141D	14.1	83	133	16	M16x2.0	WH5~6
NDPGH505 142D	14.2	83	133	16	-	-
NDPGH505 14288D	14.288	83	133	16	-	-
NDPGH505 143D	14.3	83	133	16	-	-
NDPGH505 144D	14.4	83	133	16	-	-
NDPGH505 145D	14.5	83	133	16	M16x1.5	WH1~4
NDPGH505 146D	14.6	83	133	16	M16x1.5	WH5~6
NDPGH505 14684D	14.684	83	133	16	-	-
NDPGH505 147D	14.7	83	133	16	-	-
NDPGH505 148D	14.8	83	133	16	-	-
NDPGH505 149D	14.9	83	133	16	-	-
NDPGH505 150D	15.0	83	133	16	-	-
NDPGH505 15081D	15.081	83	133	16	-	-

Dolphin Drill

Dolphin Oil-Hole Drill

Power Max

Solid Spiral

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500	○		○	◎	
		◎	◎	○	○	○		○		

NDPGH505D

면용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH505 151D	15.1	83	133	16	-	-
NDPGH505 152D	15.2	83	133	16	-	-
NDPGH505 153D	15.3	83	133	16	-	-
NDPGH505 154D	15.4	83	133	16	-	-
NDPGH505 15478D	15.478	83	133	16	-	-
NDPGH505 155D	15.5	83	133	16	M18x2.5	WH1~4
NDPGH505 156D	15.6	83	133	16	M18x2.5	WH5~6
NDPGH505 158D	15.8	83	133	16	-	-
NDPGH505 15875D	15.875	83	133	16	-	-
NDPGH505 159D	15.9	83	133	16	-	-
NDPGH505 160D	16.0	83	133	16	-	-
NDPGH505 16272D	16.272	93	143	18	-	-
NDPGH505 165D	16.5	93	143	18	M18x1.5	WH1~6
NDPGH505 16669D	16.669	93	143	18	-	-
NDPGH505 170D	17.0	93	143	18	-	-
NDPGH505 17066D	17.066	93	143	18	-	-
NDPGH505 17463D	17.463	93	143	18	-	-
NDPGH505 175D	17.5	93	143	18	M20x2.5	WH1~6
NDPGH505 17859D	17.859	93	143	18	-	-
NDPGH505 180D	18.0	93	143	18	-	-
NDPGH505 18256D	18.256	101	153	20	-	-
NDPGH505 185D	18.5	101	153	20	M20x1.5	WH1~6
NDPGH505 18654D	18.654	101	153	20	-	-
NDPGH505 190D	19.0	101	153	20	-	-
NDPGH505 1905D	19.050	101	153	20	-	-
NDPGH505 1925D	19.25	101	153	20	-	-
NDPGH505 19447D	19.447	101	153	20	-	-
NDPGH505 195D	19.5	101	153	20	M22x2.5	WH1~6
NDPGH505 19844D	19.844	101	153	20	-	-
NDPGH505 200D	20.0	101	153	20	-	-

▶ 적용 피삭재

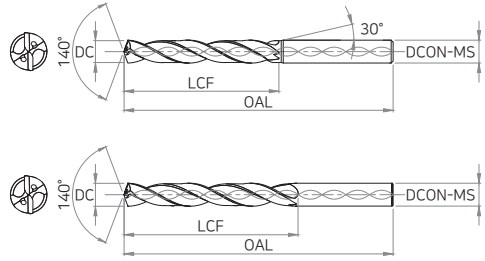
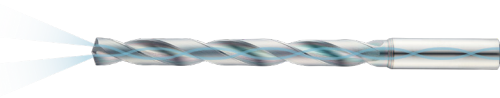
○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD11 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		◎	◎	○	○	○		○	◎	

NDPGH508D

범용 돌핀 오일홀 드릴

Drill



▶ 제품허용공차

날경(DC)		자루경
~ Ø3	+0.002 ~ +0.012	h6
Ø3.1 ~ Ø6	+0.004 ~ +0.016	
Ø6.1 ~ Ø10	+0.006 ~ +0.021	
Ø10.1 ~ Ø16	+0.007 ~ +0.025	

CARBIDE AlCrN 8D
30° HELIX 140° 절삭조건 P.742

Dolphin Drill
Dolphin Oil-Hole Drill
Power Max

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH508 030D	3.0	31	74	6	-	-
NDPGH508 031D	3.1	36	81	6	-	-
NDPGH508 03175D	3.175	36	81	6	-	-
NDPGH508 032D	3.2	36	81	6	-	-
NDPGH508 033D	3.3	36	81	6	M4x0.7	WH1~4
NDPGH508 034D	3.4	36	81	6	M4x0.7	WH 5~6
NDPGH508 035D	3.5	36	81	6	-	-
NDPGH508 03572D	3.572	41	86	6	-	-
NDPGH508 036D	3.6	41	86	6	-	-
NDPGH508 037D	3.7	41	86	6	-	-
NDPGH508 038D	3.8	41	86	6	-	-
NDPGH508 039D	3.9	41	86	6	-	-
NDPGH508 03969D	3.969	41	86	6	-	-
NDPGH508 040D	4.0	41	86	6	-	-
NDPGH508 04039D	4.039	46	91	6	-	-
NDPGH508 041D	4.1	46	91	6	-	-
NDPGH508 042D	4.2	46	91	6	M5x0.8	WH1~4
NDPGH508 043D	4.3	46	91	6	M5x0.8	WH5~6
NDPGH508 04366D	4.366	46	91	6	-	-
NDPGH508 044D	4.4	46	91	6	-	-

Solid Spiral

▶ 적용 표식재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500	○	○	○	◎	
		◎	◎	○	○	○		○		

NDPGH508D

변용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH508 045D	4.5	46	91	6	-	-
NDPGH508 046D	4.6	51	96	6	-	-
NDPGH508 047D	4.7	51	96	6	-	-
NDPGH508 04763D	4.763	51	96	6	-	-
NDPGH508 048D	4.8	51	96	6	-	-
NDPGH508 049D	4.9	51	96	6	-	-
NDPGH508 050D	5.0	51	96	6	M6x1.0	WH1~4
NDPGH508 051D	5.1	57	102	6	M6x1.0	WH5~6
NDPGH508 05159D	5.159	57	102	6	-	-
NDPGH508 052D	5.2	57	102	6	-	-
NDPGH508 053D	5.3	57	102	6	-	-
NDPGH508 054D	5.4	57	102	6	-	-
NDPGH508 055D	5.5	57	102	6	-	-
NDPGH508 05556D	5.556	62	107	6	-	-
NDPGH508 056D	5.6	62	107	6	-	-
NDPGH508 057D	5.7	62	107	6	-	-
NDPGH508 058D	5.8	62	107	6	-	-
NDPGH508 059D	5.9	62	107	6	-	-
NDPGH508 05953D	5.953	62	107	6	-	-
NDPGH508 060D	6.0	62	107	6	-	-
NDPGH508 061D	6.1	71	116	8	-	-
NDPGH508 062D	6.2	71	116	8	-	-
NDPGH508 063D	6.3	71	116	8	-	-
NDPGH508 0635D	6.35	71	116	8	-	-
NDPGH508 064D	6.4	71	116	8	-	-
NDPGH508 065D	6.5	71	116	8	-	-
NDPGH508 06528D	6.528	71	116	8	-	-
NDPGH508 066D	6.6	71	116	8	-	-
NDPGH508 067D	6.7	71	116	8	-	-
NDPGH508 06747D	6.747	71	116	8	-	-
NDPGH508 068D	6.8	71	116	8	M8x1.25	WH1~4
NDPGH508 069D	6.9	71	116	8	M8x1.25	WH5~6
NDPGH508 070D	7.0	71	116	8	M8x1.0	WH1~4
NDPGH508 071D	7.1	81	126	8	M8x1.0	WH5~6

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		◎	◎	○	○	○		○	◎	

NDPGH508D 범용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 랩	
	날경	날장	전장	자루경	Size	Limit
NDPGH508 07144D	7.144	81	126	8	-	-
NDPGH508 072D	7.2	81	126	8	-	-
NDPGH508 073D	7.3	81	126	8	-	-
NDPGH508 074D	7.4	81	126	8	-	-
NDPGH508 075D	7.5	81	126	8	-	-
NDPGH508 07541D	7.541	81	126	8	-	-
NDPGH508 076D	7.6	81	126	8	-	-
NDPGH508 077D	7.7	81	126	8	-	-
NDPGH508 078D	7.8	81	126	8	-	-
NDPGH508 079D	7.9	81	126	8	-	-
NDPGH508 07938D	7.938	81	126	8	-	-
NDPGH508 080D	8.0	81	126	8	-	-
NDPGH508 081D	8.1	92	137	10	-	-
NDPGH508 082D	8.2	92	137	10	-	-
NDPGH508 083D	8.3	92	137	10	-	-
NDPGH508 08334D	8.334	92	137	10	-	-
NDPGH508 084D	8.4	92	137	10	-	-
NDPGH508 08433D	8.433	92	137	10	-	-
NDPGH508 085D	8.5	92	137	10	M10x1.5	WH1~4
NDPGH508 086D	8.6	92	137	10	M10x1.5	WH5~6
NDPGH508 087D	8.7	92	137	10	-	-
NDPGH508 08731D	8.731	92	137	10	-	-
NDPGH508 088D	8.8	92	137	10	M10x1.25	WH1~4
NDPGH508 089D	8.9	92	137	10	M10x1.25	WH5~6
NDPGH508 090D	9.0	92	137	10	M10x1.0	WH1~4
NDPGH508 091D	9.1	102	147	10	M10x1.0	WH5~6
NDPGH508 09128D	9.128	102	147	10	-	-
NDPGH508 092D	9.2	102	147	10	-	-
NDPGH508 093D	9.3	102	147	10	-	-
NDPGH508 09347D	9.347	102	147	10	-	-
NDPGH508 094D	9.4	102	147	10	-	-
NDPGH508 095D	9.5	102	147	10	-	-
NDPGH508 09525D	9.525	102	147	10	-	-
NDPGH508 096D	9.6	102	147	10	-	-

Dolphin Drill

Dolphin Oil-Hole Drill

Power Max

Solid Spiral

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500	○		○	◎	
		◎	◎	○	○	○		○		

NDPGH508D

변용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH508 097D	9.7	102	147	10	-	-
NDPGH508 098D	9.8	102	147	10	-	-
NDPGH508 099D	9.9	102	147	10	-	-
NDPGH508 09922D	9.922	102	147	10	-	-
NDPGH508 100D	10.0	102	147	10	-	-
NDPGH508 101D	10.1	113	158	12	-	-
NDPGH508 102D	10.2	113	158	12	-	-
NDPGH508 103D	10.3	113	158	12	M12x1.75	WH1~2
NDPGH508 10319D	10.319	113	158	12	M12x1.75	WH3~4
NDPGH508 104D	10.4	113	158	12	M12x1.75	WH5~6
NDPGH508 105D	10.5	113	158	12	M12x1.5	WH1~4
NDPGH508 106D	10.6	113	158	12	M12x1.5	WH5~6
NDPGH508 107D	10.7	113	158	12	-	-
NDPGH508 10716D	10.716	113	158	12	-	-
NDPGH508 108D	10.8	113	158	12	M12x1.25	WH1~4
NDPGH508 109D	10.9	113	158	12	M12x1.25	WH5~6
NDPGH508 110D	11.0	113	158	12	M12x1.0	WH1~4
NDPGH508 111D	11.1	123	168	12	M12x1.0	WH5~6
NDPGH508 11113D	11.113	123	168	12	-	-
NDPGH508 112D	11.2	123	168	12	-	-
NDPGH508 113D	11.3	123	168	12	-	-
NDPGH508 114D	11.4	123	168	12	-	-
NDPGH508 115D	11.5	123	168	12	-	-
NDPGH508 11509D	11.509	123	168	12	-	-
NDPGH508 116D	11.6	123	168	12	-	-
NDPGH508 117D	11.7	123	168	12	-	-
NDPGH508 118D	11.8	123	168	12	-	-
NDPGH508 119D	11.9	123	168	12	-	-
NDPGH508 11906D	11.906	123	168	12	-	-
NDPGH508 120D	12.0	123	168	12	M14x2.0	WH1~4
NDPGH508 121D	12.1	134	179	14	M14x2.0	WH5~6
NDPGH508 122D	12.2	134	179	14	-	-
NDPGH508 123D	12.3	134	179	14	-	-
NDPGH508 12303D	12.303	134	179	14	-	-

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		◎	◎	○	○	○		○	◎	

NDPGH508D 범용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 랩	
	날경	날장	전장	자루경	Size	Limit
NDPGH508 124D	12.4	134	179	14	-	-
NDPGH508 125D	12.5	134	179	14	M14x1.5	WH1~4
NDPGH508 126D	12.6	134	179	14	M14x1.5	WH5~6
NDPGH508 127D	12.7	134	179	14	-	-
NDPGH508 128D	12.8	134	179	14	-	-
NDPGH508 129D	12.9	134	179	14	-	-
NDPGH508 130D	13.0	134	179	14	-	-
NDPGH508 131D	13.1	144	189	14	-	-
NDPGH508 132D	13.2	144	189	14	-	-
NDPGH508 133D	13.3	144	189	14	-	-
NDPGH508 134D	13.4	144	189	14	-	-
NDPGH508 135D	13.5	144	189	14	-	-
NDPGH508 136D	13.6	144	189	14	-	-
NDPGH508 137D	13.7	144	189	14	-	-
NDPGH508 138D	13.8	144	189	14	-	-
NDPGH508 13891D	13.891	144	189	14	-	-
NDPGH508 139D	13.9	144	189	14	-	-
NDPGH508 140D	14.0	144	189	14	M16x2.0	WH1~4
NDPGH508 141D	14.1	155	200	16	M16x2.0	WH5~6
NDPGH508 142D	14.2	155	200	16	-	-
NDPGH508 14288D	14.288	155	200	16	-	-
NDPGH508 143D	14.3	155	200	16	-	-
NDPGH508 144D	14.4	155	200	16	-	-
NDPGH508 145D	14.5	155	200	16	M16x1.5	WH1~4
NDPGH508 146D	14.6	155	200	16	M16x1.5	WH5~6
NDPGH508 14684D	14.684	155	200	16	-	-
NDPGH508 147D	14.7	155	200	16	-	-
NDPGH508 148D	14.8	155	200	16	-	-
NDPGH508 149D	14.9	155	200	16	-	-
NDPGH508 150D	15.0	155	200	16	-	-
NDPGH508 15081D	15.081	165	210	16	-	-
NDPGH508 151D	15.1	165	210	16	-	-
NDPGH508 152D	15.2	165	210	16	-	-
NDPGH508 153D	15.3	165	210	16	-	-

Dolphin Drill
Dolphin Oil-Hole Drill
Power Max
Solid Spiral

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500	○		○	◎	
		◎	◎	○	○	○		○		

NDPGH508D

변용 돌핀 오일홀 드릴

Drill

품목코드	DC	LCF	OAL	DCONMS	적용가능 탭	
	날경	날장	전장	자루경	Size	Limit
NDPGH508 154D	15.4	165	210	16	-	-
NDPGH508 15478D	15.478	165	210	16	-	-
NDPGH508 155D	15.5	165	210	16	M18x2.5	WH1~4
NDPGH508 156D	15.6	165	210	16	M18x2.5	WH5~6
NDPGH508 157D	15.7	165	210	16	-	-
NDPGH508 158D	15.8	165	210	16	-	-
NDPGH508 15875D	15.875	165	210	16	-	-
NDPGH508 159D	15.9	165	210	16	-	-
NDPGH508 160D	16.0	165	210	16	-	-

Dolphin Drill

Dolphin Oil-Hole Drill

Power Max

Solid Spiral

▶ 적용 피삭재

○ : 적합 ◎ : 매우 적합

H		P			K	N			M	S
열처리강		탄소강	합금강	프리하든강	주철	동	흑연	알루미늄	스테인리스	내열합금
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		◎	◎	○	○	○		○	◎	