

Implant Innovation

When INNOVATION meets Dental Implant..



SURGICAL KIT

SUB.
HEXAGON
SYSTEM

INNO-SUB. SMART SURGICAL KIT

[KSA002]

- > Sub. Implant system (Ø3.5, Ø4.0, Ø4.5, Ø5.0, Ø6.0)
- > 하나의 Drill 과 Stopper로 모든 임플란트 길이에 적용할 수 있는 간편한 구성의 1차 수술 kit



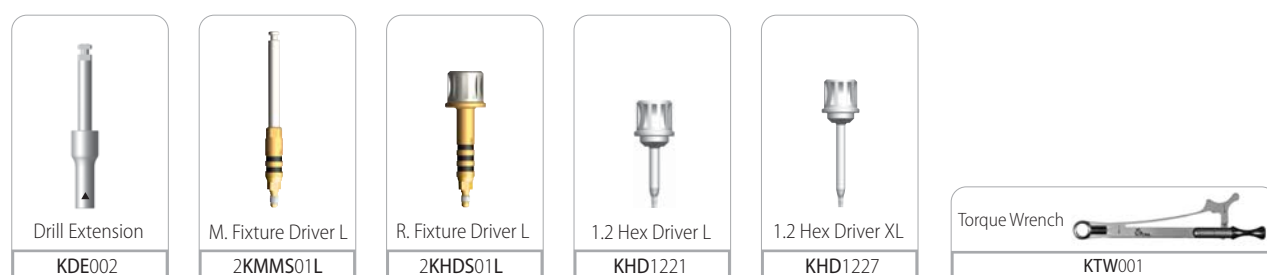
Drill



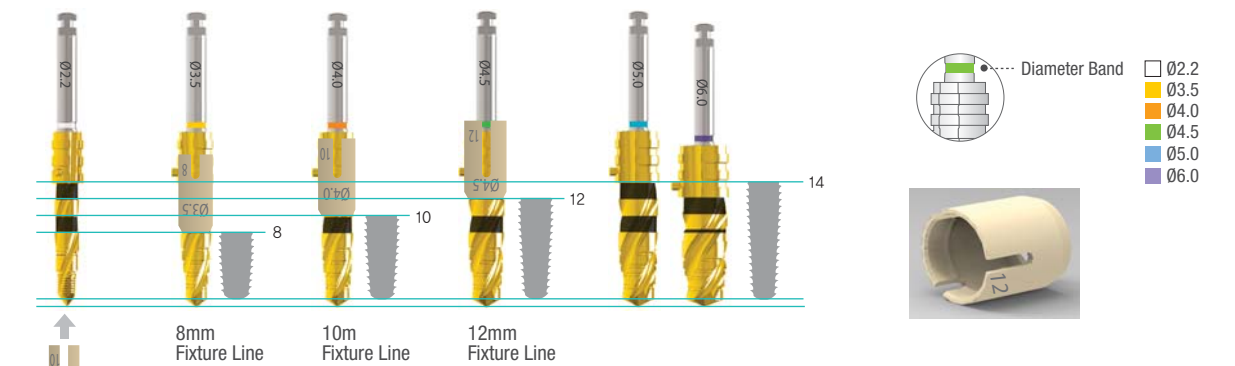
Countersink



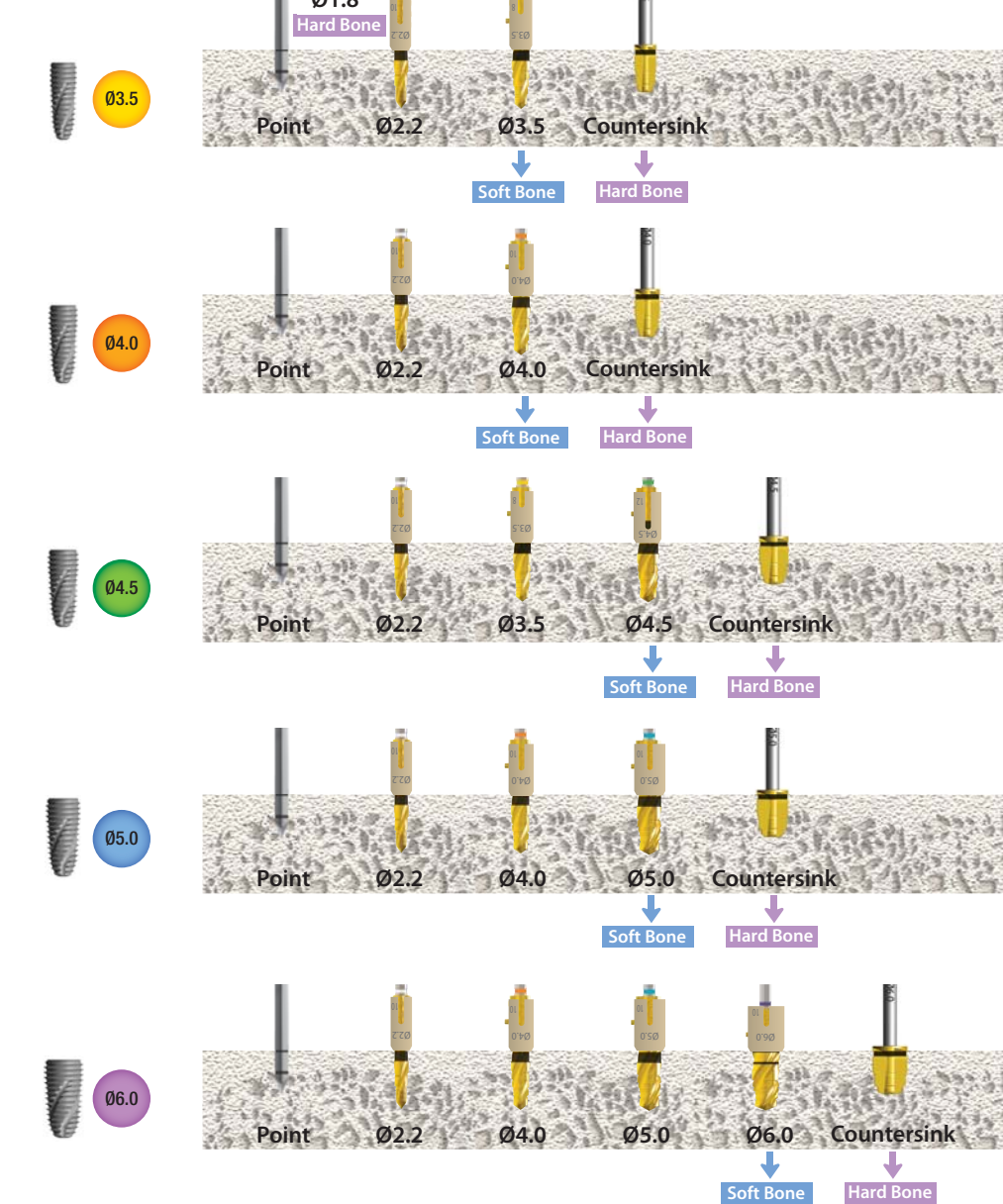
Extension & Driver



Length Marking & Stopper Drill 의 실제 Length : Fixture + 1mm



Drill Sequence





INNO-SUB. FULL SURGICAL KIT

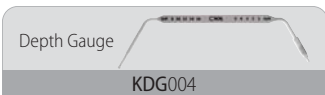
> INNO Sub, Fixture 식립용 Fixture Driver 탑재, 나머지 구성품은 Sub. / Int. / Ext. 공용

[KCA010F]



Ø3.5 Fixture Final Drill Ø4.0 Fixture Final Drill Ø4.5 Fixture Final Drill Ø5.0 Fixture Final Drill Ø6.0 Fixture Final Drill

Path Drill 2KTD18	Point Drill KPD015	Ø2.2 X 7 KPSD2207	Ø3.5 X 7 2KTD3707	Ø4.0 X 7 2KTD4007	Ø4.5 X 7 2KTD4507	Ø5.0 X 7 2KTD5007	Ø6.0 X 7 2KTD6007
Parallel Pin KPP002	Parallel Pin KPP002	Ø2.2 X 8 KPSD2208	Ø3.5 X 8 2KTD3708	Ø4.0 X 8 2KTD4008	Ø4.5 X 8 2KTD4508	Ø5.0 X 8 2KTD5008	Ø6.0 X 8 2KTD6008
1.2 Hex Driver L KHD1221	1.2 Hex Driver XL KHD1227	Ø2.2 X 10 KPSD2210	Ø3.5 X 10 2KTD3710	Ø4.0 X 10 2KTD4010	Ø4.5 X 10 2KTD4510	Ø5.0 X 10 2KTD5010	Ø6.0 X 10 2KTD6010
M. Mount Driver L KMMD06L	R. Mount Driver L KRMD19L	Ø2.2 X 12 KPSD2212	Ø3.5 X 12 2KTD3712	Ø4.0 X 12 2KTD4012	Ø4.5 X 12 2KTD4512	Ø5.0 X 12 2KTD5012	Ø6.0 X 12 2KTD6012
Sub. Fixture Driver		Ø2.2 X 14 KPSD2214	Ø3.5 X 14 2KTD3714	Ø4.0 X 14 2KTD4014	Ø4.5 X 14 2KTD4514	Ø5.0 X 14 2KTD5014	
M. Fixture Driver L 2KMMS01L	R. Fixture Driver XL 2KHDS01X	Drill Extension KDE002	Ø3.5 Countersink 4KCS35	Ø4.0 Countersink 4KCS40	Ø4.5 Countersink 4KCS45	Ø5.0 Countersink 4KCS50	Ø6.0 Countersink 4KCS60

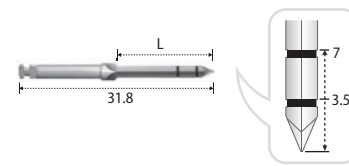


* Sub. / Int. / Ext. 공용 Tool

각 Type별 전용 Tool

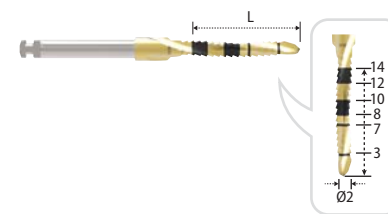
01 Drill / Surgical Tool

Point Drill > Cortical Bone에 천공 위치를 선정하여 초기 Drilling을 용이
> 골재생성 시 치유에 필요한 신생혈관의 성장을 위해 주변 수용부의 단단한 골조직 천공



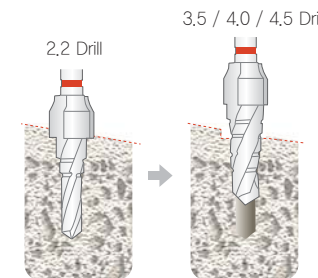
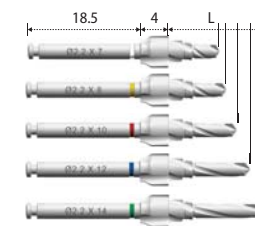
Length	15
KPD015	

Path Drill > Drilling 시 식립 Path를 수정해야할 경우 사용



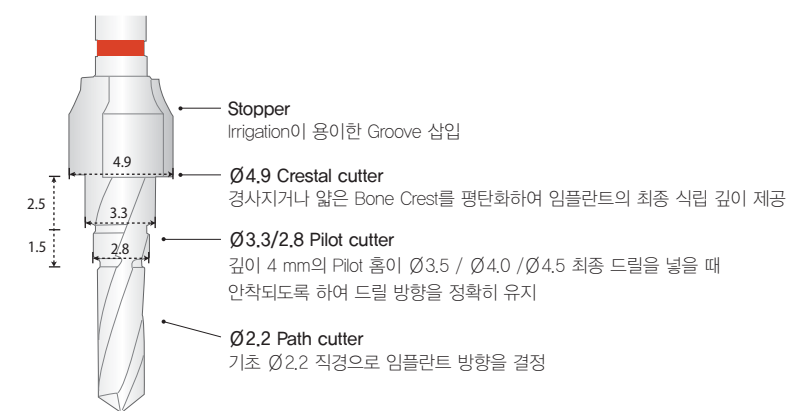
Length	15
2KTD18	

Ø2.2 Initial Drill > Ø1.8 Drill 사용 후 천공된 골홈을 Apex 2.2 / 3.3mm까지 절삭으로 넓혀줌



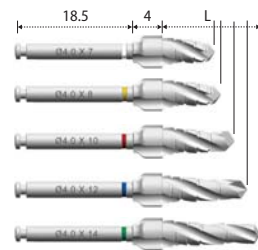
Final Drill 기진입량 확보

Length	8	9	11	13	15
	KPSD2207	KPSD2208	KPSD2210	KPSD2212	KPSD2214



Final Drill

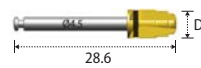
> 7, 8, 10, 12, 14mm Fixture의 각 직경별 Final Drill



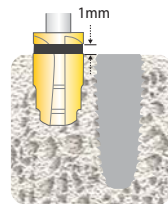
Fixture Dia. Length	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø6.0
8	2KTD3707	2KTD4007	2KTD4507	2KTD5007	2KTD6007
9	2KTD3708	2KTD4008	2KTD4508	2KTD5008	2KTD6008
11	2KTD3710	2KTD4010	2KTD4510	2KTD5010	2KTD6010
13	2KTD3712	2KTD4012	2KTD4512	2KTD5012	2KTD6012
15	2KTD3714	2KTD4014	2KTD4514	2KTD5014	

Countersink

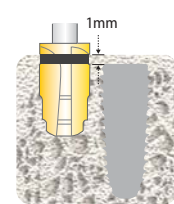
> Fixture의 경사진 상부를 치조골면에 넣기위함



Fixture Dia.	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø6.0
Diameter	Ø3.7	Ø4.2	Ø4.6	Ø5.1	Ø6.0
	4KCS35	4KCS40	4KCS45	4KCS50	4KCS60

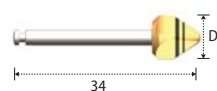


Fixture상부가 치조골면과 일치하게 매식



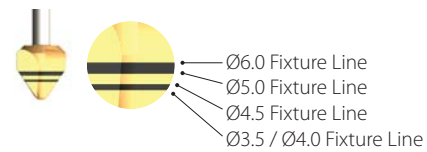
치조골면 아래로 1mm 이상 깊게 매식

Multi Countersink



Diameter	Ø6.5
	4KCS01

> External 전용 Countersink



Tap Drill



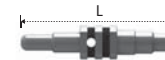
> D10이상의 Hard Bone일 경우 선택적 사용

Fixture Dia.	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø6.0
	*3KMTD35A	*3KMTD40A	*3KMTD45A	*3KMTD50A	*3KMTD60A

*별도판매

Parallel Pin

> Parallel Pin을 꽂은 채로 예상되는 Fixture의 각도와 위치를 예측하고 수정 여부를 체크
> 중간의 작은 관통 구멍에 실을 꿰어 구강안에서 떨어뜨릴 경우 삼키지 않도록 함

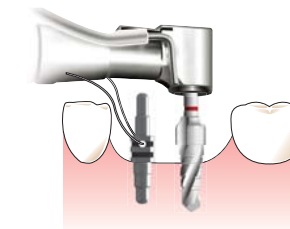


Length	21
	KPP002

Ø2.2 Initial Drilling 후 확인

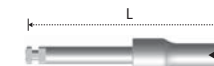


Ø3.5 Final Drilling 후 확인

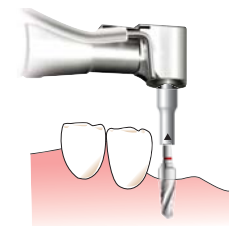


Drill Extension

> Hand Piece 사용 시 Tool의 길이를 연장. 이 때 과도한 Torque가 걸리지 않도록 함



Length	27.5
	KDE002



삼각표시와 자루부 중단 단면의 방향을 일치시켜 삽입

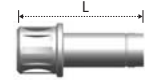
Mount Driver

> Mount가 있는 Pre-Mount Type의 Fixture 식립 시 Mount에 체결하여 사용



Length	Type	Machine
20.5	(Short)	*KMMD06S
26.3	(Long)	KMMD06L
32.3	(X-Long)	*KMMD12X

*별도판매



Length	Type	Ratchet
12	(Short)	*KRMD12S
19	(Long)	KRMD19L

*별도판매

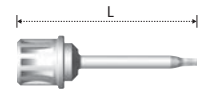
Hex Driver

> Cover Screw 체결 및 제거 등 여러가지 용도로 사용



Type	Machine	
Length	Hex 0.9	Hex 1.2
22	(Short) *KMD09S	*KMD12S
28	(Long) *KMD09L	*KMD12L

*별도판매



Type	Ratchet	
Length	Hex 0.9	Hex 1.2
15	(Short) *KHD0915	*KHD1215
21	(Long) *KHD0921	KHD1221
27	(X-Long) *KHD0927	KHD1227

*별도판매



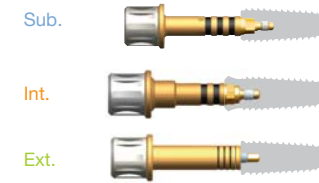
Fixture Driver

> Mount가 없는 No-Mount Type의 Fixture 식립 시 Fixture에 직접 체결하여 사용



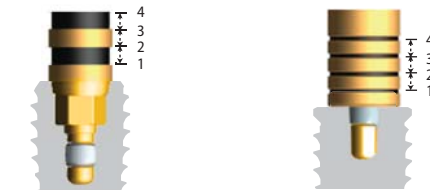
Type	Machine			
Length	Sub.	Int.	Ext.(Hex 2.7)	Ext.(Hex 3.4)
28.1 / 26.3 / 26.4	(Short) 2KMMS01S	KMMI01S	KMME01S	KMME02S
33.3 / 30.5 / 31.4	(Long) 2KMMS01L	KMMI01L	*KMME01L	
40.3 / 35.5 / 36.4	(X-Long) *2KMMS01X	*KMMI01X	*KMME01X	

*별도판매



Type	Ratchet			
Length	Sub.	Int.	Ext.(Hex 2.7)	Ext.(Hex 3.4)
20.7 / 19.5 / 19.9	(Short) *2KHDS01S	KHDI01S	*KHDE01S	
25.7 / 24.5 / 24.9	(Long) 2KHDS01L	KHDI01L	KHDE01L	KHDE02L
30.7 / 29.5 / 29.9	(X-Long) 2KHDS01X	*KHDI01X	*KHDE01X	

*별도판매



Torque Wrench

> Fixture를 식립할 때와 Fixture에 보철 부속을 연결할 때 수동으로 회전력을 제어
> 탄성 손잡이를 이용하여 10 / 25 / 30 / 35 N-cm로 회전력을 제어할 수 있으며, 단단한 일자 손잡이를 잡고 돌리면 최대 120 N-cm



Code KTW001



Depth Gauge

> Drilling된 깊이를 측정, 반대편에 있는 5mm폭의 편평한 면이 인접한 Fixture의 최소 간격을 유지하도록 함



Code KDG001



Code KDG004

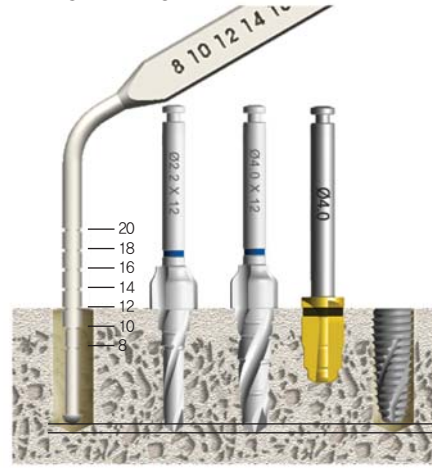
※ Sub. 전용

02 Drill Sequence (Fixture 12mm 기준)

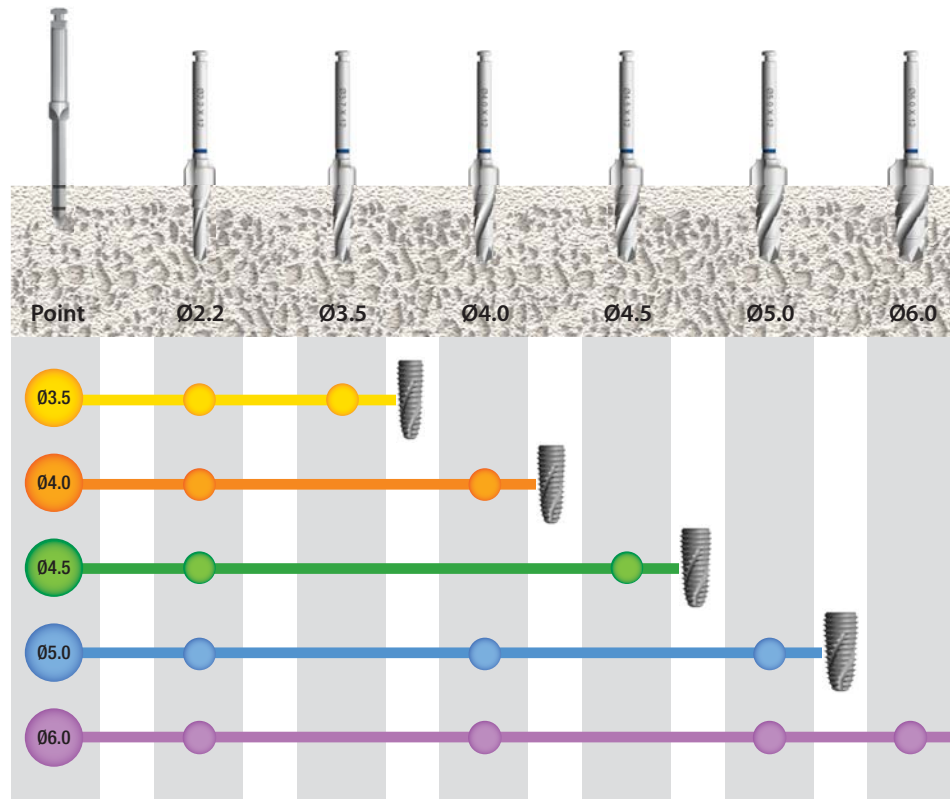
> Ø2.2 Initial Drill과 Final Drill을 이용한 간단한 Drill sequence (Ø3.5 / 4.0 / 4.5 fixture)



> Length Marking

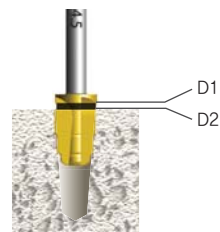


Drill 의 실제 Length : Fixture + 1mm



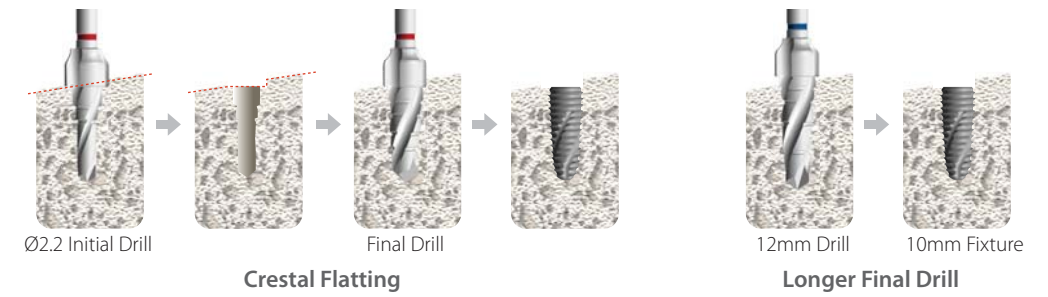
Soft Bone (D4) 1단계 작은 직경의 Final Drill → Fixture 식립

Hard Bone (D1, D2) Final Drill → Countersink → Fixture 식립



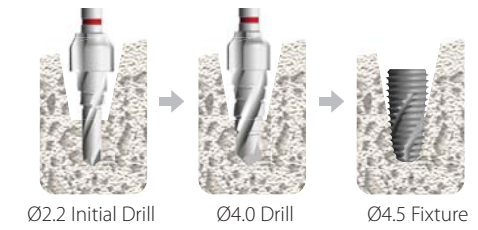
※ 경사진 치조능선에서의 드릴법

> Initial Drill 및 Final Drill의 Crestal Cutter로 평탄
> 임플란트 길이보다 한 치수 더 긴 드릴 사용



※ 넓은 발치와에서의 드릴법

> 해면골에 식립
> 임플란트 직경보다 한 치수 좁은 드릴 사용



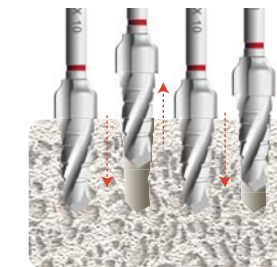
※ 식립 토크 조정법

> 0.5mm 더 깊게 식립하여 최대 토크를 올릴 수 있음



Fixture Placement Level						
Level	Crestal Level			0.5mm Deeper Level		
Density	D1	D2	D3	D1	D2	D3
Torque	34.1	29	15.5	44.4	38.4	19.1

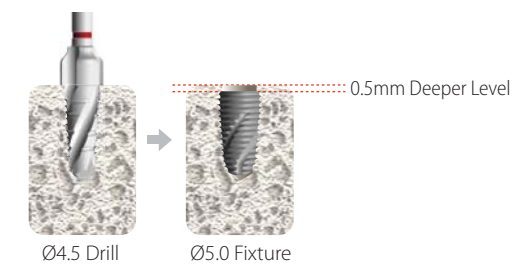
> 드릴 홈에서 펌핑 동작으로 골 분쇄물 제거 효과
> 치밀골에서는 식립 토크를 낮춤



Pumping action of final drill for debris			
Density	D1	D2	D3
Non-Debriment	34.1	29	15.5
Debriment	30	25	19.6

※ Bone Quality 4에서의 토크 조정

> Pumping Action을 하지 않고 한 번에 최종 깊이까지 드릴
> 0.5mm 더 깊게 식립
> 식립 임플란트보다 한 단계 낮은 직경의 최종 드릴 사용



Level	Crestal level		0.5mm Deeper Level	
Debriment	with	without	with	without
Ø4.5 Fixture	4.4	10.2	-	12.9
Ø5.0 Fixture	11.6	19.9	14.1	24.5



INNO-INT. FULL SURGICAL KIT

> INNO Int. Fixture 식립용 Fixture Driver 탑재, 나머지 구성품은 Sub. / Int. / Ext. 공용

[KCA010FI]



Ø3.5 Fixture Final Drill Ø4.0 Fixture Final Drill Ø4.5 Fixture Final Drill Ø5.0 Fixture Final Drill Ø6.0 Fixture Final Drill

Path Drill 2KTD18	Point Drill KPD01S	Ø2.2 X 7 KPSD2207	Ø3.5 X 7 2KTD3707	Ø4.0 X 7 2KTD4007	Ø4.5 X 7 2KTD4507	Ø5.0 X 7 2KTD5007	Ø6.0 X 7 2KTD6007
Parallel Pin KPP002	Parallel Pin KPP002	Ø2.2 X 8 KPSD2208	Ø3.5 X 8 2KTD3708	Ø4.0 X 8 2KTD4008	Ø4.5 X 8 2KTD4508	Ø5.0 X 8 2KTD5008	Ø6.0 X 8 2KTD6008
1.2 Hex Driver L KHD1221	1.2 Hex Driver XL KHD1227	Ø2.2 X 10 KPSD2210	Ø3.5 X 10 2KTD3710	Ø4.0 X 10 2KTD4010	Ø4.5 X 10 2KTD4510	Ø5.0 X 10 2KTD5010	Ø6.0 X 10 2KTD6010
M. Mount Driver. L KMMD06L	R. Mount Driver. L KRMD19L	Ø2.2 X 12 KPSD2212	Ø3.5 X 12 2KTD3712	Ø4.0 X 12 2KTD4012	Ø4.5 X 12 2KTD4512	Ø5.0 X 12 2KTD5012	Ø6.0 X 12 2KTD6012
M. Fixture Driver. S KMME01S	R. Fixture Driver. S KHDI01S	Ø2.2 X 14 KPSD2214	Ø3.5 X 14 2KTD3714	Ø4.0 X 14 2KTD4014	Ø4.5 X 14 2KTD4514	Ø5.0 X 14 2KTD5014	
M. Fixture Driver. L KMME01L	R. Fixture Driver. L KHDI01L	Drill Extension KDE002	Ø3.5 Countersink 4KCS35	Ø4.0 Countersink 4KCS40	Ø4.5 Countersink 4KCS45	Ø5.0 Countersink 4KCS50	Ø6.0 Countersink 4KCS60



* Sub. / Int. / Ext. 공용 Tool 각 Type별 전용 Tool



INNO-EXT. FULL SURGICAL KIT

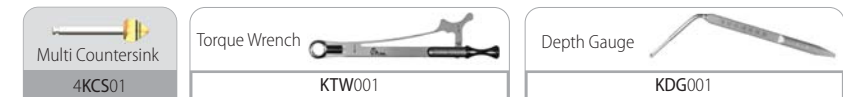
> INNO Ext. Fixture 식립용 Fixture Driver 및 Multi Countersink 탑재, 나머지 구성품은 Sub. / Int. / Ext. 공용

[KCA010FE]



Ø3.5 Fixture Final Drill Ø4.0 Fixture Final Drill Ø4.5 Fixture Final Drill Ø5.0 Fixture Final Drill Ø6.0 Fixture Final Drill

Path Drill 2KTD18	Point Drill KPD01S	Ø2.2 X 7 KPSD2207	Ø3.5 X 7 2KTD3707	Ø4.0 X 7 2KTD4007	Ø4.5 X 7 2KTD4507	Ø5.0 X 7 2KTD5007	Ø6.0 X 7 2KTD6007
Parallel Pin KPP002	Parallel Pin KPP002	Ø2.2 X 8 KPSD2208	Ø3.5 X 8 2KTD3708	Ø4.0 X 8 2KTD4008	Ø4.5 X 8 2KTD4508	Ø5.0 X 8 2KTD5008	Ø6.0 X 8 2KTD6008
1.2 Hex Driver L KHD1221	1.2 Hex Driver XL KHD1227	Ø2.2 X 10 KPSD2210	Ø3.5 X 10 2KTD3710	Ø4.0 X 10 2KTD4010	Ø4.5 X 10 2KTD4510	Ø5.0 X 10 2KTD5010	Ø6.0 X 10 2KTD6010
M. Mount Driver. L KMMD06L	R. Mount Driver. L KRMD19L	Ø2.2 X 12 KPSD2212	Ø3.5 X 12 2KTD3712	Ø4.0 X 12 2KTD4012	Ø4.5 X 12 2KTD4512	Ø5.0 X 12 2KTD5012	Ø6.0 X 12 2KTD6012
M. Fixture Driver. S KMME01S	R. Fixture Driver. L KHDE01L	Ø2.2 X 14 KPSD2214	Ø3.5 X 14 2KTD3714	Ø4.0 X 14 2KTD4014	Ø4.5 X 14 2KTD4514	Ø5.0 X 14 2KTD5014	
M. Fixture Driver. S KMME02S	R. Fixture Driver. L KHDE02L	Drill Extension KDE002	Ø3.5 Countersink 4KCS35	Ø4.0 Countersink 4KCS40	Ø4.5 Countersink 4KCS45	Ø5.0 Countersink 4KCS50	Ø6.0 Countersink 4KCS60



* Sub. / Int. / Ext. 공용 Tool 각 Type별 전용 Tool

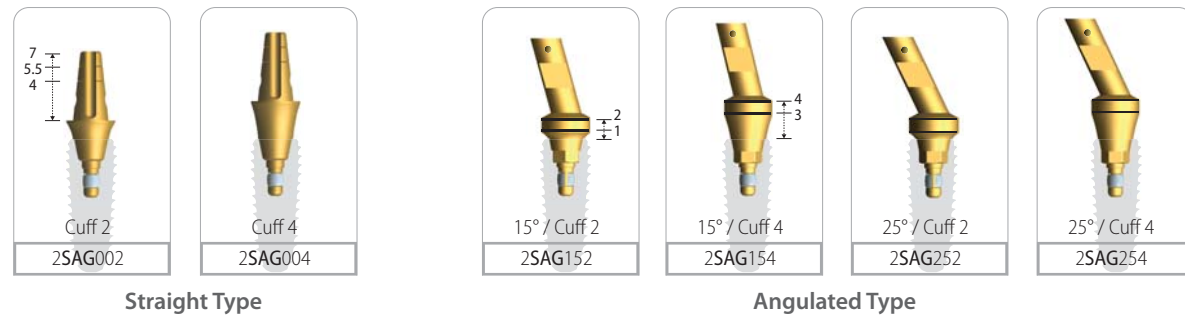
PROSTHETIC KIT

> Sub, Type 사용 시 Abutment 체결 예측을 위한 Gauge와 Abutment 체결 Driver 등을 구비한 2차 수술 kit

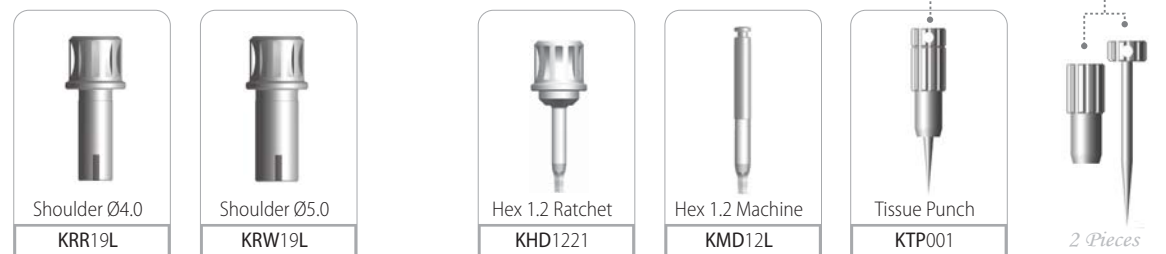
[KPA003]



Abutment Gauge > 시술 시 Abutment Gauge를 먼저 체결하여 사용할 Abutment의 직경 및 Cuff, 방향을 선택



Abutment Driver > Absolute, Shoulder, Solid Abutment 체결 시 사용



Soft tissue에 최소절개를 위한 천공시 사용