

IS-II active

Fantastic surface, Bioseal, and Perfect achievement of CMI fixation.

Osteoconductive S.L.A. Surface
No residual acid and cytotoxicity were observed in the surface examination.



IS-II active
Product Catalog



Contents

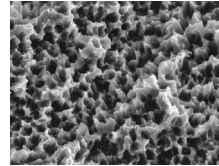
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S.L.A. Surface of IS-II active

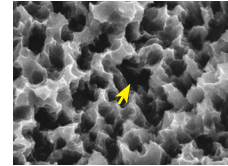
S.L.A. (Sandblasting with Large grit and Acid etching)



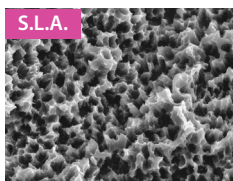
IS-II active Surface



Macropore & Micropore



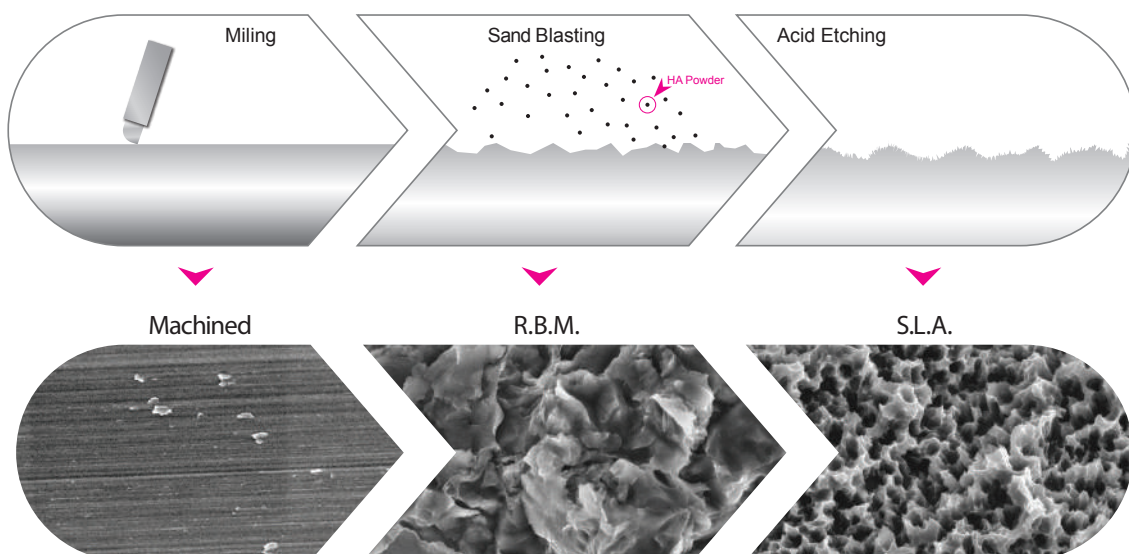
Macropores and micropores formed by S.L.A. surface treatment increase B.I.C.(Bone-Implant Contact) and allow better blood flow on the implant surface.



S.L.A. Surface

S.L.A. surface is formed by undergoing the process of sandblasting with smaller than $50\mu\text{m}$ HA (Hydroxy Apatite) particles to roughen the machined surface and to form many macropores. After sandblasting and acid etching is done to increase B.I.C. and promote cell's activity. With this process, the typical treatment period can be shortened and the patients will be more satisfied with the result.

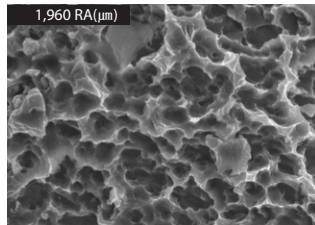
S.L.A. Surface Treatment Process



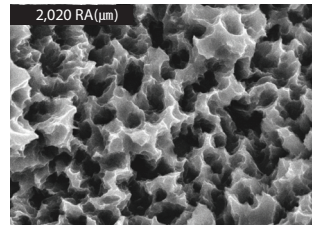
S.L.A. Surface of IS-II active

Roughness of IS-II active

Regular roughness / R.A. 2.0 (Roughness Average)



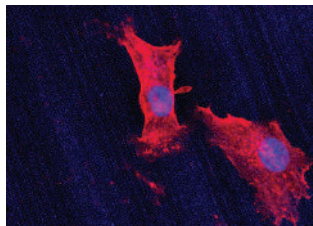
Other company's S.L.A. Surface



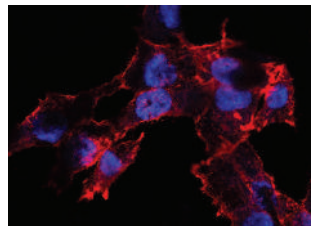
Neobiotech's S.L.A. Surface

Cell adhesion capability of S.L.A. Surface

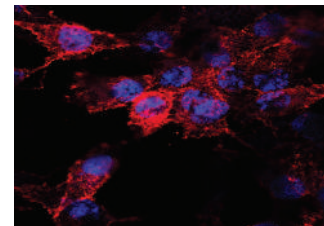
It is observed that S.L.A. surface has the capability of attaching more cells on the titanium surface than the machined or R.B.M. surfaces.



Machined



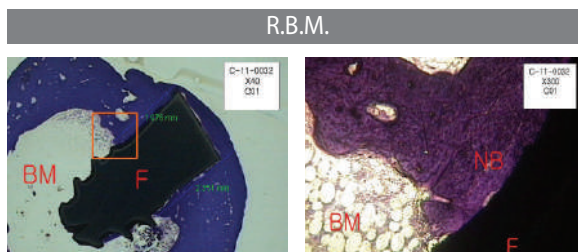
R.B.M.



S.L.A.

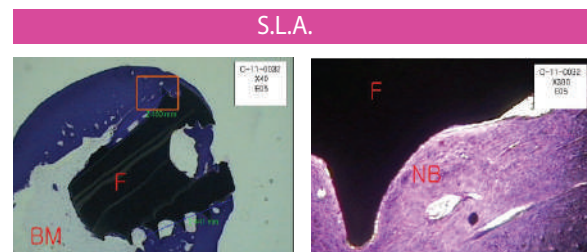
Measured distance of newly formed bone

Measured distance of newly formed bone is approved to be longer in S.L.A. surface compared to R.B.M. surface.



Distance of newly formed bone Left : 1.976mm/ Right : 2.35mm

F : Fixture / BM : Bone Marrow / NB : New Bone



Distance of newly formed bone Left : 2.460mm Right : 2.41mm

F : Fixture / BM : Bone Marrow / NB : New Bone

Features of IS-II active

Based on the accumulated clinical cases and studies over 10 years, IS-II active has been continuously developed for the improvement. IS-II active has an internal submerged type design with S.L.A. surface that allows faster and stronger osseointegration.

BioSeal(0.5mm)

BioSeal is a curved S shape placed at the top of the fixture broadens the surface and increases the attachment of the soft tissue, therefore minimizes the bone loss.

Coronal Macro Thread (Thread pitch 0.8mm)

Coronal Macro thread gains better primary stability at the cortical bone that helps to achieve better fixation in immediate placement.

Straight-Taper Body

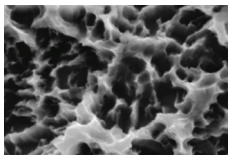
helps implant to be drilled and inserted smoothly and also self-compaction is easily achieved in the soft bone.

Magic Thread

Magic Thread helps to achieve strong and stable initial fixation and also the inverted triangular threads enables to endure vertical and lateral forces.

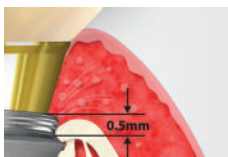
Apex

Apex is powerful in drilling and due to this self-compactable and tapered apex design, initial fixation is easily achieved. It works great in both immediate placement and immediate loading.



■ S.L.A. Surface

S.L.A. Surface has no impurities on the implant surface (No residual acid or cell toxicity is observed in the material examination). Also it has an appropriate rough average that can have the excellent osteoconductivity.



■ BioSeal

BioSeal has a curved S shape with the application of 0.5mm micro grooves on the machined surface. This design is invented to minimize the bone loss by maximizing soft tissue sealing.



■ Coronal Macro Thread

Coronal macro threads helps to achieve excellent primary stability at the cortical bone and initial fixation at the apex is excellent, therefore IS-II active works great in both immediate placement and immediate loading.

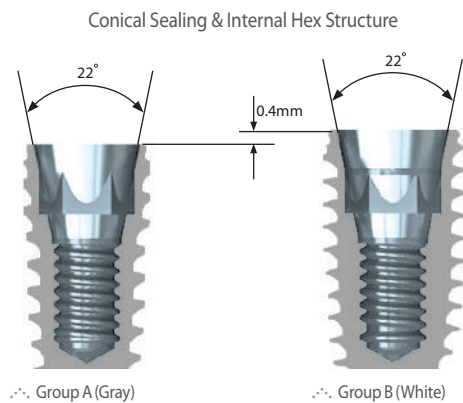


■ Magic Thread

Magic Thread with the inverted triangular shaped powerful deep thread helps to achieve strong and stable initial fixation and also this special design allows to endure vertical and lateral forces effectively.

Features of IS-II active

Connection of IS-II active



- Group A : IS-II active all Narrow, Regular, Wide 7.3mm Fixture
- Group B : IS-II active Regular, Wide 8.5, 10.0, 11.5, 13.0mm Fixture

IS-II active Fixture is compatible with all abutments of IS system.

* In order to increase the strength of fixture body, Internal hex of Group A is designed 0.4mm higher than Group B.

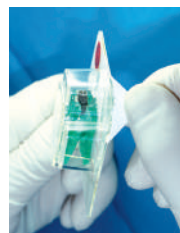
Fixture Placement Procedure



Take the fixture out from the box



Remove the package surrounding the fixture



Take of the back seal



Take out the holder carefully



Connect the fixture to the driver



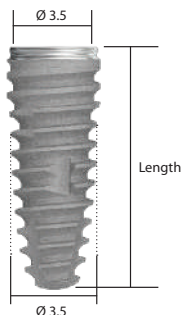
Take the fixture out from the holder



IS-II active Fixture Line Up

Narrow Ø 3.5

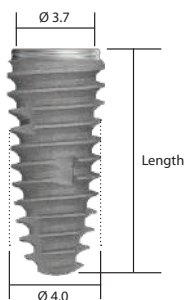
Actual Size



Length (mm)	Product Code
8.5	BIS3508A
10.0	BIS3510A
11.5	BIS3511A
13.0	BIS3513A

Regular Ø 4.0

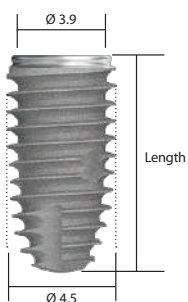
Actual Size



Length (mm)	Product Code
7.3	BIS4007A
8.5	BIS4008A
10.0	BIS4010A
11.5	BIS4011A
13.0	BIS4013A

Regular Ø 4.5

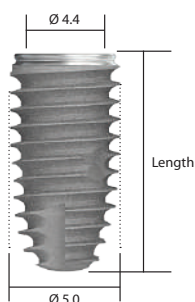
Actual Size



Length (mm)	Product Code
7.3	BIS4507A
8.5	BIS4508A
10.0	BIS4510A
11.5	BIS4511A
13.0	BIS4513A

Wide Ø 5.0

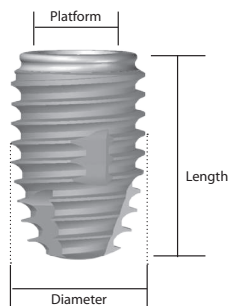
Actual Size



Length (mm)	Product Code
7.3	BIS5007A
8.5	BIS5008A
10.0	BIS5010A
11.5	BIS5011A
13.0	BIS5013A

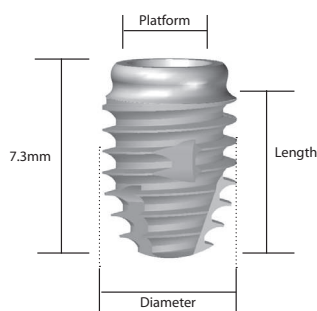
IS-II active Fixture Line Up

S-wide



Diameter (Ø)	Platform (Ø)	Length (mm)	Code
5.5	4.4	7.3	BIS5507A
		8.5	BIS5508A
		10.0	BIS5510A
		11.5	BIS5511A
		13.0	BIS5513A
6.0	4.9	7.3	BIS6007A*
		8.5	BIS6008A*
		10.0	BIS6010A*
		11.5	BIS6011A*
		13.0	BIS6013A*
7.0	5.8	7.3	BIS7007A*
		8.5	BIS7008A*
		10.0	BIS7010A*
		11.5	BIS7011A*
		13.0	BIS7013A*

Short



Diameter (Ø)	Platform (Ø)	Length (mm)	Product Code
5.0	4.4	5.0	BIS5005A
		6.0	BIS5006A
5.5	4.5	5.0	BIS5505A*
		6.0	BIS5506A*

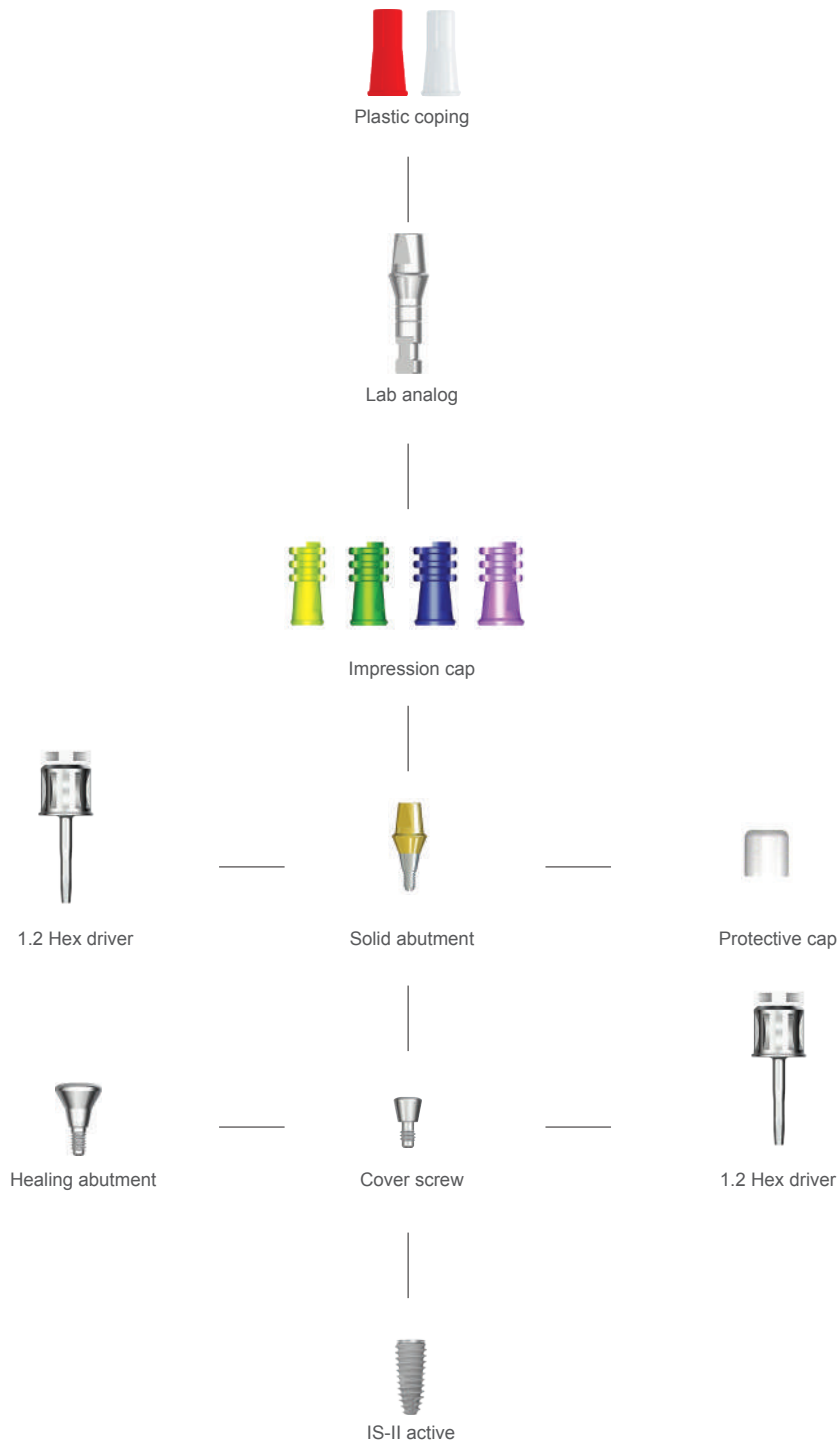
S-wide Kit



* S-Wide Kit is necessary to place S-wide Fixture and Ø 5.5 Short Fixture

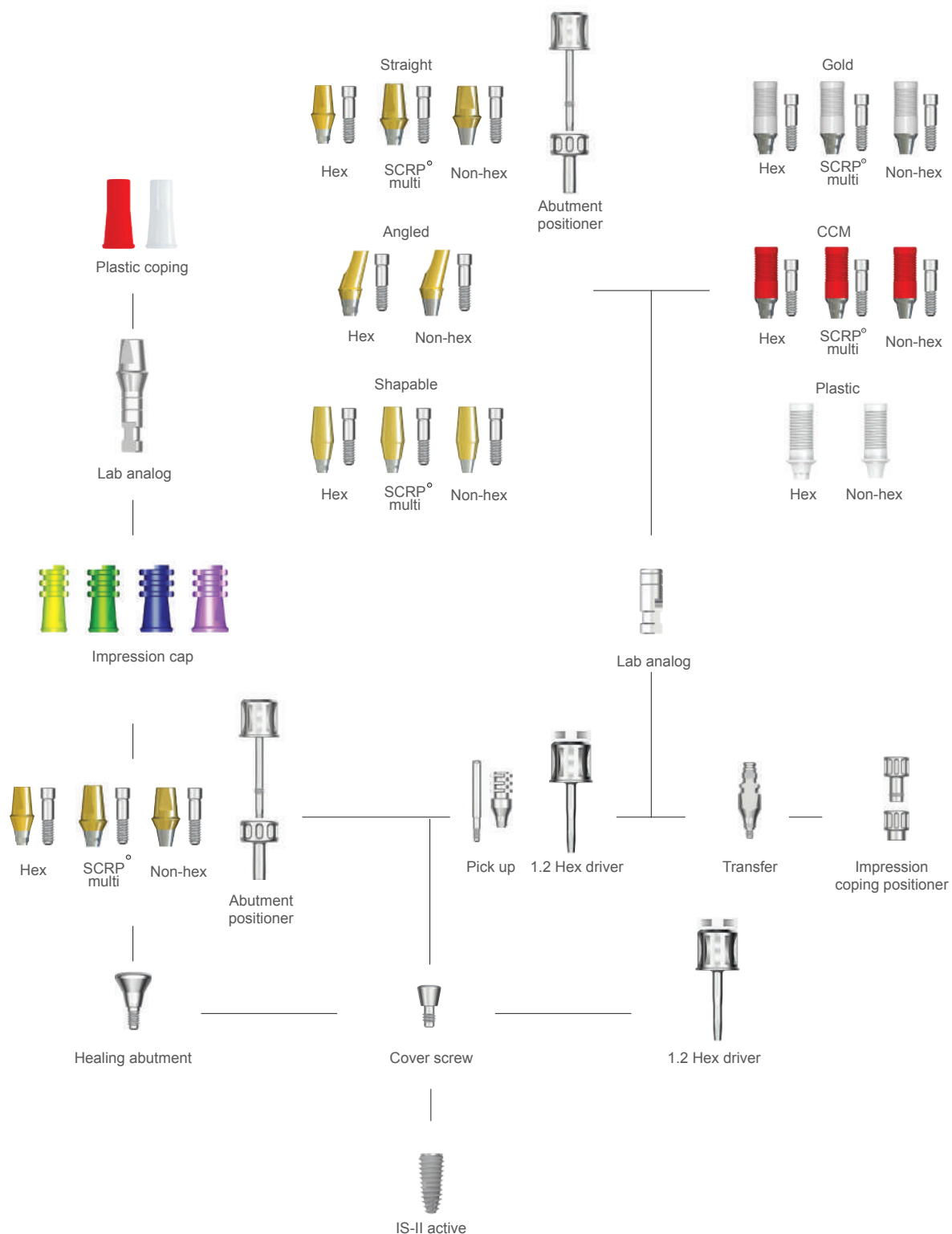
Prosthetic Flow Chart

Solid Abutment



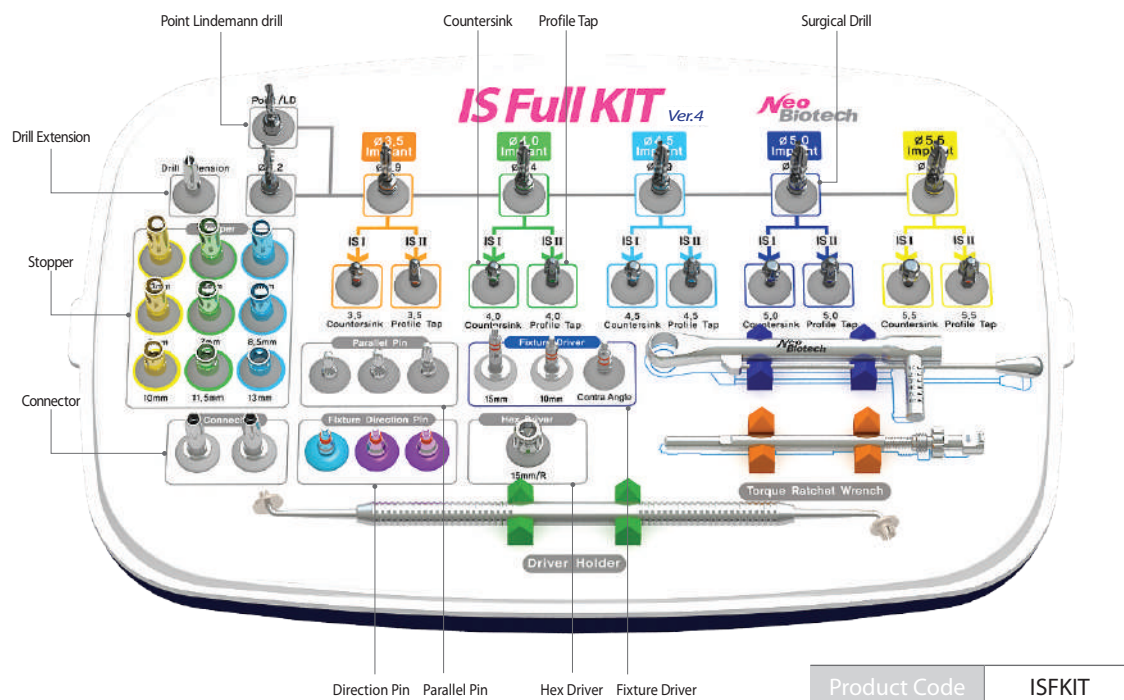
Prosthetic Flow Chart

Cement & Screw Abutment



IS Full Kit

This kit can be used to perform implant surgery for IS-II active, IS-II and IS (Ø3.5 ~ 5.5).
For S-wide (Ø6.0 ~ 7.0) implant surgery, S-wide kit is additionally required.



IS Full Kit User Manual

1. Follow the guidelines marked in different colors on the kit tray when placing the fixture. Drill sequentially in order to place the implant properly.

Ex) When placing Ø4.5 Implant

Ø2.3/LD Drill >> Ø2.2 Drill >> Ø2.9 Drill >> Ø3.4 Drill >> Ø3.9 Drill

2. Counter sinking for IS or profile tapping for IS-II Fixture in the D1 / D2 dense bone is recommended selectively but the operator may skip the procedure when it is determined not necessary.

Ex) When placing IS Ø4.5 Implant

Ø2.3/LD Drill >> Ø2.2 Drill >> Ø2.9 Drill >> Ø3.4 Drill >> Ø3.9 Drill >> Ø4.5 Counter Sink

IS Full kit is used for placing IS, IS-II and IS-II active fixtures.

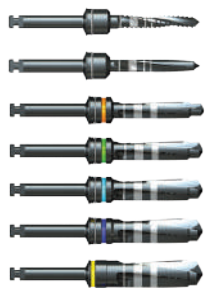


*S-wide kit is necessary when placing IS S-wide or IS-II S-wide fixtures.



IS Full Kit Components

Surgical Drill



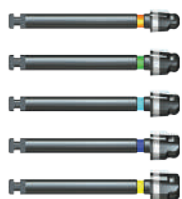
Diameter	Code
Point Lindemann	LDS23
Initial Drill Ø2.2	TSD22F
Twist Drill Ø2.9	TSD29F
Twist Drill Ø3.4	TSD34F
Twist Drill Ø3.9	TSD39F
Twist Drill Ø4.4	TSD44F
Twist Drill Ø4.9	TSD49F

Stopper



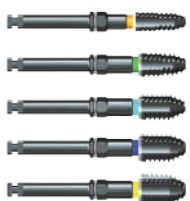
Length	Code
3.0 mm	DS030F
4.0 mm	DS040F
5.0 mm	DS050F
6.0 mm	DS060F
7.0 mm	DS070F
8.5 mm	DS085F
10.0 mm	DS100F
11.5 mm	DS115F
13.0 mm	DS130F

Counter sink



Diameter	Code
Ø3.5	ISCS35F
Ø4.0	ISCS40F
Ø4.5	ISCS45F
Ø5.0	ISCS50F
Ø5.5	ISCS55F

Profile Tap



Diameter	Code
Ø3.5	PTAP35F
Ø4.0	PTAP40F
Ø4.5	PTAP45F
Ø5.0	PTAP50F
Ø5.5	PTAP55F

Direction Pin



Diameter	Code
Ø5.0	DPI50
Ø6.0	DPI60

Ratchet Connector



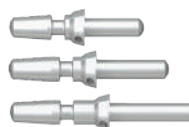
Type	Code
Short (10mm)	RC10
Long (15mm)	RC15

IS Fixture Driver



Type	Code
Contra Angle	ISFD05C
Ratchet (Short)	ISFD10R
Ratchet (Long)	ISFD15R

Parallel Pin



Length	Code
7.0 mm	PP07F
8.5 mm	PP08F
10.0 mm	PP10F

Hex Driver



Code	HD1215
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Drill Extension



Code	DE01
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Torque Ratchet



Code	TW60
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Depth Gauge



Code	MG00
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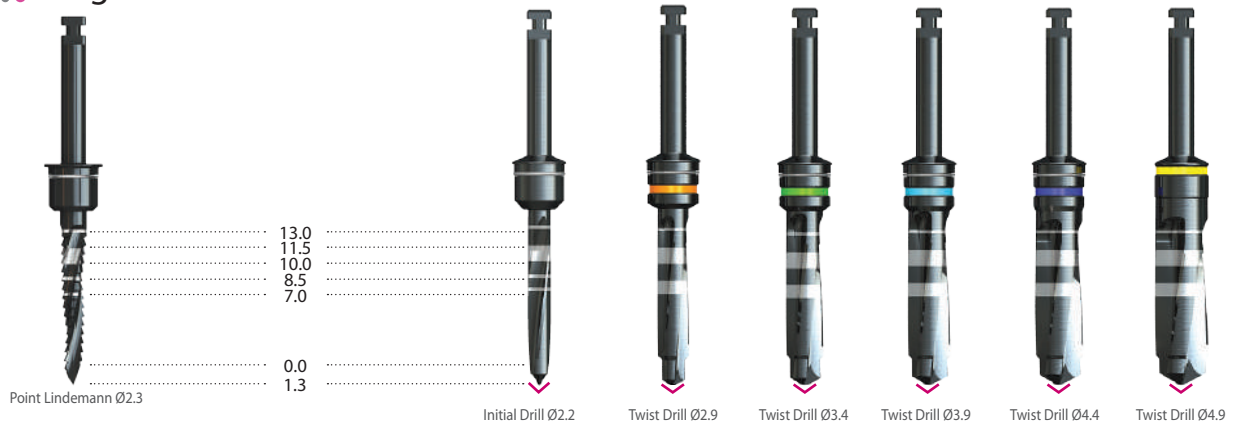
Driver Holder



Code	DH01
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IS Full Kit Components

Surgical Drill



>> * Function of Point Lindemann Drill

1. Point Drilling - Marking drilling position (Drill 4~5mm)
2. Cutting Side – Controlling path while drilling the extraction site

All drills are coated with black color in order to make operator easy when checking the drilling depth.

Twist drills have specially designed round tip.

* The actual drilling depth of Point Lindemann Drill and Ø 2.2 Initial Drill are 1.3mm longer than the marked length.

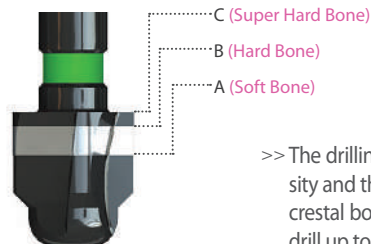
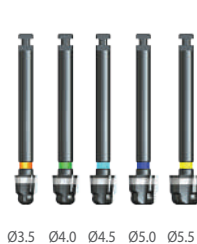
Stopper

Stopper Length	3.0mm	4.0mm	5.0mm	6.0mm	7.0mm	8.5mm	10.0mm	11.5mm	13.0mm	
Drilling Length	3.0mm	4.0mm	5.0mm	6.0mm	8.1mm	9.3mm	10.8mm	12.3mm	13.8mm	

The actual length of drill is longer than the indicated length.

(Tip length of Lindemann, Initial drill : 1.3mm, Ø2.9 drill : 1.0mm, Ø3.4~Ø4.9 : 0.8mm)

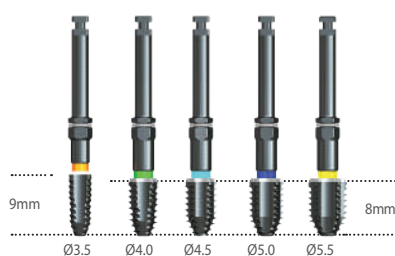
Countersink



Countersink is usually used for IS fixtures when the cortical bone density is high, however it also can be used for IS-II in some clinical cases when it is necessary.

>> The drilling depth for the countersink drill depends on the patient's bone density and the line A B C are divided according to the bone density. If the patient's crestal bone is super hard with high density, drill up to C, for hard crestal bone drill up to B and lastly, for the soft bone drill only up to A line.

Profile Tap



>> Profile tap is usually used for IS-II and IS-II active fixtures and it helps to achieve initial stability and to be inserted smoothly since the thick and hard cortical bone is pre tapped.

>> Used with contra angle and with four blades, tapping is done easily

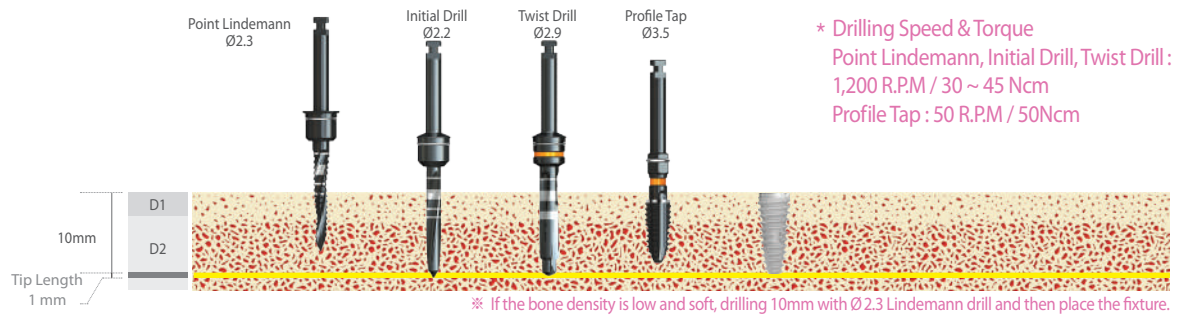
Pretap the cortical bone located around the top of the fixture, drill up to the marked line on the profile tap drill.

Profile Tap : 50 R.P.M / 50Ncm

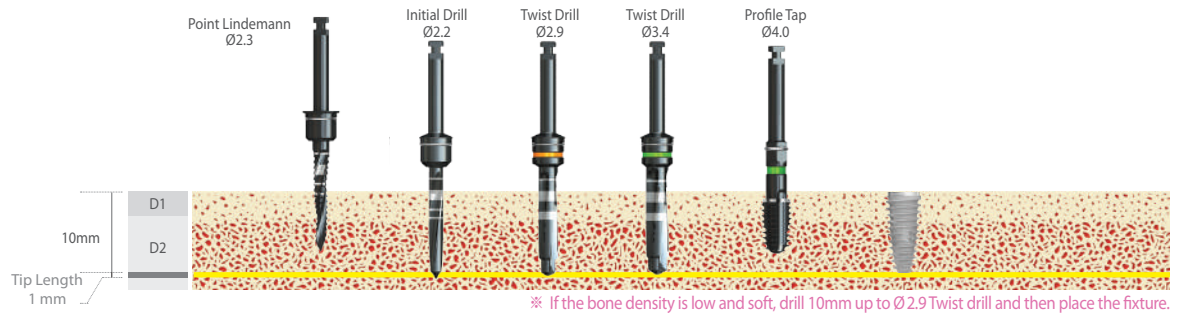


IS-II active Drilling Sequence

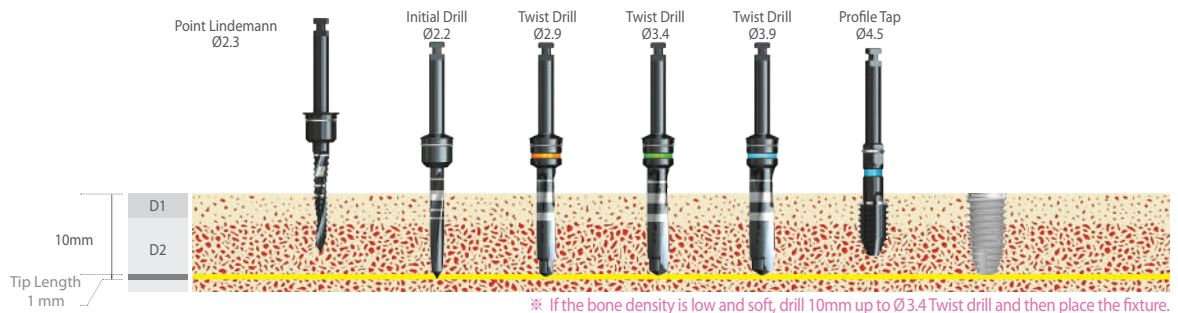
IS-II active Fixture Ø3.5 X 10mm (D1/D2 bone)



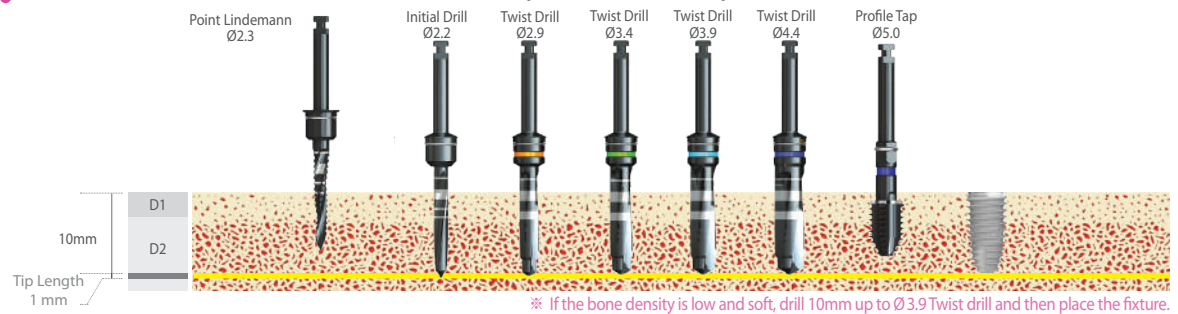
IS-II active Fixture Ø4.0 X 10mm (D1/D2 bone)



IS-II active Fixture Ø4.5 X 10mm (D1/D2 bone)



IS-II active Fixture Ø5.0 X 10mm (D1/D2 bone)



IS-II active Fixture Ø5.5 X 10mm (D1/D2 bone)

