

DIO IMPLANT SYSTEM

DIO IMPLANT

DIO Corporation

Headquater(Factory)

1464 Woo-dong, Haeundae-gu, Pusan City, Korea
Tel.+82-51-745-7777

Seoul office

Room 1004, Ssangnim B/D. 151-11 Ssangnim-dong,
Jung-gu, Seoul, 100-400, Korea
Tel.+82-2-2268-2850



DIO IMPLANT SYSTEM

Catalog 2009

Introduction > Vision, Product Distinctions, DIO Fixture Diagram, Implant System Implant System > SM System, Internal System, External System, ProTem/Secure System, Surgical Kits Dental Products > Implant Surgical Devices, Handpiece, Imaging System, Sterilizer, Dental Unit and Chair, Bone Material, Membrane, Suture, Impression Material, Instruments, Toothpaste Dental Clinic Opening > Dental Office Opening, Dental Interior Specialist, Equipment and Supply, Clinic Marketing, Opening Service

DIO IMPLANT

DIO^o IMPLANT SYSTEM

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Introduction > Vision, Product Distinctions, DIO Fixture Diagram, Implant System **Implant System** > SM System, Internal System, External System, ProTem/Secure System, Surgical Kits **Dental Products** > Implant Surgical Devices, Handpiece, Imaging System, Sterilizer, Dental Unit and Chair, Bone Material, Membrane, Suture, Impression Material, Instruments, Toothpaste **Dental Clinic Opening** > Dental Office Opening, Dental Interior Specialist, Equipment and Supply, Clinic Marketing, Opening Service



"The business of the pursuit of human health and happiness," is the principle in which DIO Implants places its highest value.

Utilizing the best in human resources and cutting edge technique, DIO, strives to provide the best products and services to become "The business of the pursuit of human health and happiness."

"Customer centric value added thinking," is the center of DIO Implant's management principle. DIO's development of products and techniques focuses on the customers specialized needs and the customer's ultimate satisfaction.

Through customer centered thinking, DIO regards its customers as partners and through this partnership become a world class organization.

"The world leading global enterprise," is DIO's future. In 1983, with the idea of customer centric thinking and developing the latest technique, DIO has established itself through its implant, dental equipment, dental practices, toothpaste, surgical stent businesses. Through diverse business interests, DIO has not only established itself domestically, but in over 60 countries as well, maintaining a presence in the Korean Stock Exchange. DIO is poised to establish itself as the world leading global enterprise.

Product Distinctions

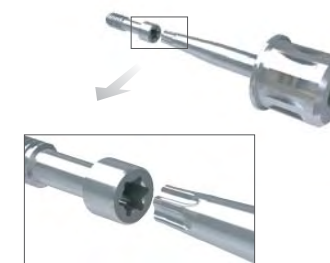
Rotation Stopper



Yellow Narrow Red Regular Green Wide

Rotation stopper provides smooth and simple mounting operation. Rotation stopper increases control during surgery and reduces instrument related bone damage.

Torx Abutment Screw

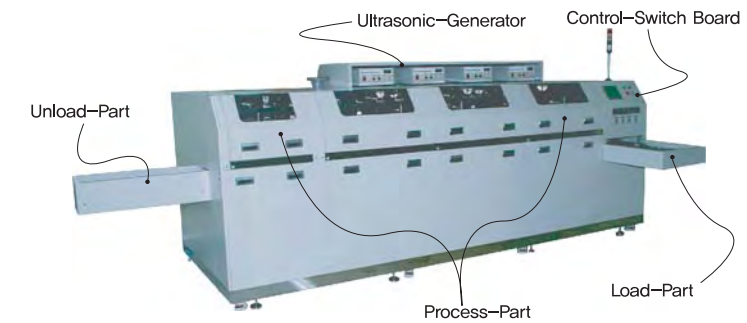


Traditional Hex configuration abutment screws have an average tolerance of 35 Ncm. Additional torque can subject to screw to distortion. DIO Torx Abutment screws have much high maximum tolerances and still remain undistorted after unscrewing.

Torx & Hex Abutment Screw maximum tolerances

	DIO Torx Abutment Screw	Hex Screw
Narrow Dia, 1,3	Max. 60-65 Ncm Screw fracture occurs Screw removal possible	Max. 43-46 Ncm Hex wears and tears Screw removal difficult.
Regular Dia, 1,5	80-85 Ncm Screw fracture occurs Screw removal possible	

Cleansing System



Ultrasonic Vacuum Cleanser, the vacuum drier function coupled with the ultrasonic cleaning function provides residue free surfaces from your products as well as superior safety. Defective implant cleansers in the operating area can result in contamination and infection. DIO Implant is dedicated to maintaining the quality of its ultrasonic cleanser.

Analysis of foreign substances on fixture by company.

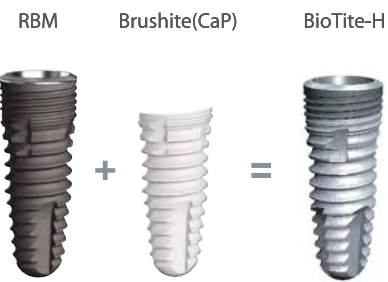
Company	Package Contents	Foreign Contents
DIO	3EA	C, O, Ti
A	3EA	C, O, S, Ca, Ti
B	3EA	C, O, S, Si, Fe, Mg, Cl, Ca, Zn, P, Ca, Al, Ti
C	3EA	C, O, S, Si, Ca, Zn, Na, K, Mo, Al, Ti

Product Distinctions

Brushite (CaP) Coating



Created from a calcium and phosphate solution, the external surface of the implant is treated via electrochemical process which allows the Brushite Coating provides an ultrathin $15 \pm 5\mu\text{m}$ surface that is also highly bio-compatible. Brushite's increased calcium concentration promotes the speed of formation of new tissue. Brushite's organic environment supports melting and fine absorption. 6-12 weeks after implant placement, the coating remains intact and secure. Brushite's regenerative environment is conducive to fine absorption.



- High functionality and controlled environment (from both the regenerative and organic environment)
- $15 \pm 5\mu\text{m}$ thick coating
- Porous implant construction and the intricate form factor application
- None-Line-Sight process

No-mount system



The No-Mount System alleviates the pain and hassle of mount disassembly during surgery. The direct path connection increases accuracy by enacting an exact fit, resulting in an overall reduction in surgical time.

Torx Connection(Internal)



Traditional internal structures capacity has a tendency for torque loss due to fatigue. Our Torx Connection consistently provides resistance fatigue against higher torque provided by its design and structure.

Company	DIO	A	B	C	D	E	F
Maximum Torque (Ncm)	112,8 (Torx)	91,7	107,9	49,1	75,5	58,9	68,7



SM System

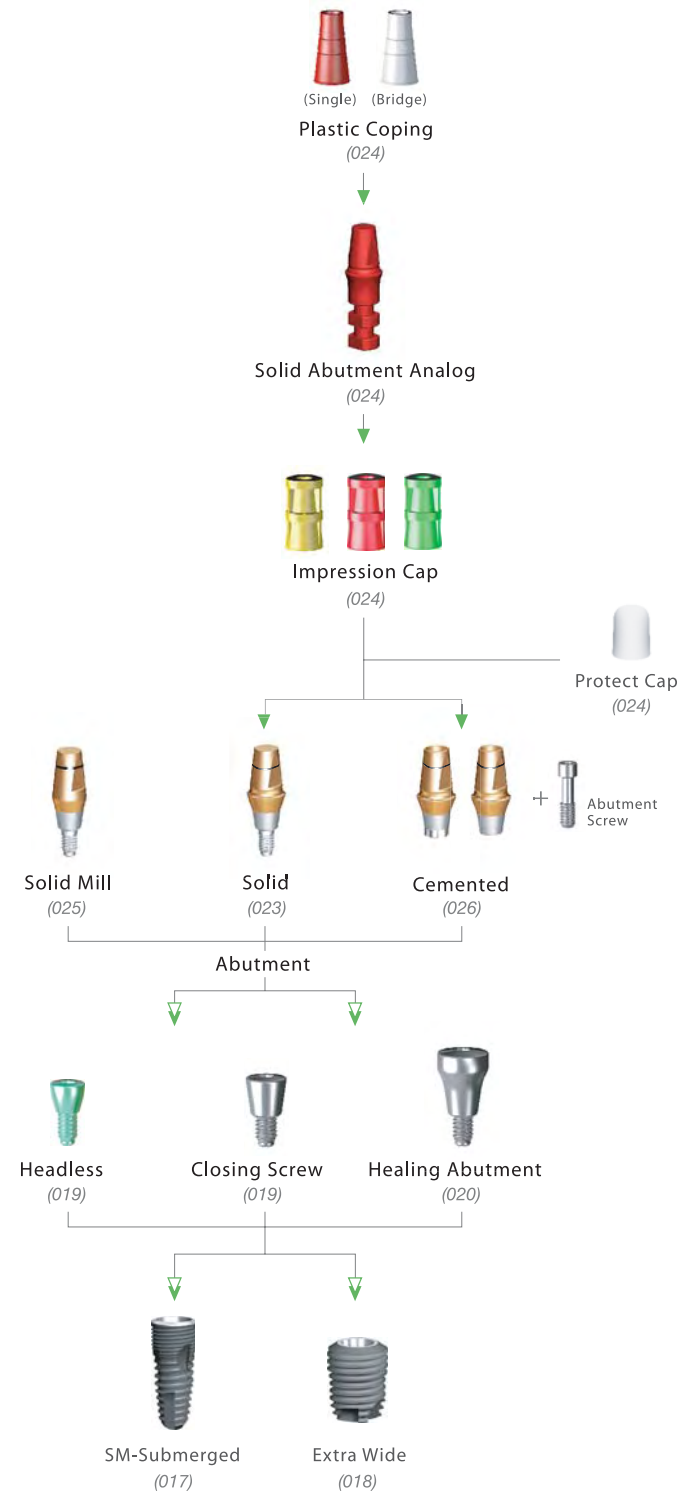
SM-Submerged / Extra Wide

System Flowchart	014
Implants/Healing Abutments	017
(Submerged, Extra Wide)	
BioTite-H, Extra Wide-H	018,019
Restorative Products	023
Surgical Kit	
Master Surgical Kit	033
Site Preparation (SM)	039
SM Extra Wide Surgical Kit	040
Site Preparation (Extra Wide)	041

SM System

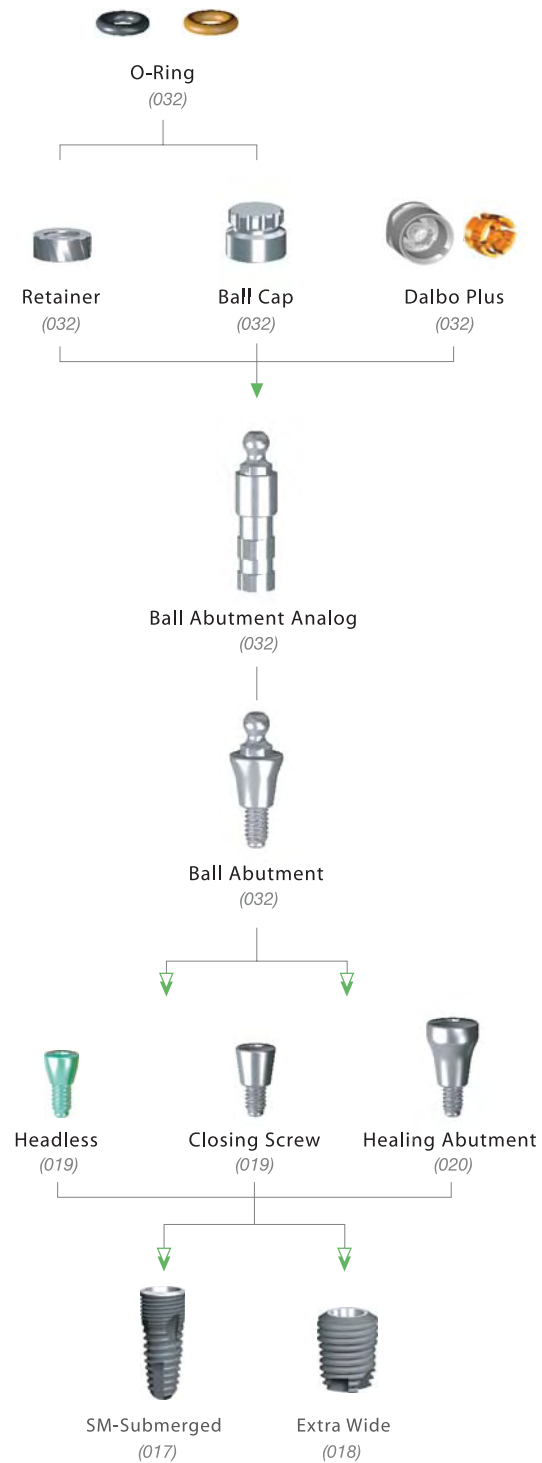
SM-Submerged / Extra Wide

SM System Flowchart
Cement-Retained Restorations - Solid Abutment



SM System Flowchart
Cement-Retained Restorations - Cemented Abutment
Cement-Retained Restorations - Angled Abutment
Screw-Retained Restorations - UCLA Abutment





SM-Submerged Fixture

Internal Torx Connection

Superior to Hex internal connection
More fixture and driver contact
No distortion with high torque

Double Thread

Secure initial seating prevents cortical bone loss

Morse Taper

Abutment is easier to insert along the internal 8° morse tapered surface
Due to the wider fixture and abutment contact, free from screw loosening

Root Form Design

Root form design enables excellent stability
Reduces possibility of touching adjacent teeth root during implant insertion

Self Tapping

Advanced thread and apex design enable easy self tapping and excellent initial stability in extraction sockets

Platform Switching

"Platform Switching" technique is applied to the design of the implants and abutments to reduce cretal bone loss

RBM

L	D	Ø3.8
8		SFN 3808
10		SFN 3810
12		SFN 3812
14		SFN 3814

L	D	Ø4.1
8		SFN 4108
10		SFN 4110
12		SFN 4112
14		SFN 4114

L	D	Ø4.5
8		SFR 4508
10		SFR 4510
12		SFR 4512
14		SFR 4514

L	D	Ø5.0
8		SFR 5008
10		SFR 5010
12		SFR 5012
14		SFR 5014

L	D	Ø5.3
8		SFW 5308
10		SFW 5310
12		SFW 5312
14		SFW 5314

Length: 8 10 12 14

Brushite(CaP)
Coated
"BioTite-H"

Narrow



L	D	Ø3.8
8		SFN 3808H
10		SFN 3810H
12		SFN 3812H
14		SFN 3814H



L	D	Ø4.1
8		SFN 4108H
10		SFN 4110H
12		SFN 4112H
14		SFN 4114H

Regular



L	D	Ø4.5
8		SFR 4508H
10		SFR 4510H
12		SFR 4512H
14		SFR 4514H



L	D	Ø5.0
8		SFR 5008H
10		SFR 5010H
12		SFR 5012H
14		SFR 5014H

Wide



L	D	Ø5.3
8		SFW 5308H
10		SFW 5310H
12		SFW 5312H
14		SFW 5314H

Length: 8 10 12 14

SM-Extra Wide Fixture

Tapered Design

Early loading possible in the initial seating
Minimized bone heating
Screw pitch: 0,8mm, Thread height: 0,5mm

Internal Torx Connection

Superior to Hex internal connection
More fixture and driver contact
No distortion with high torque

No-mount System

Does not require disassembling of mounts during surgical operations
Increases convenience and decreases time of surgical operation

Convenient Compatibility System

Compatible with the SM Submerge Implant

Platform Switching

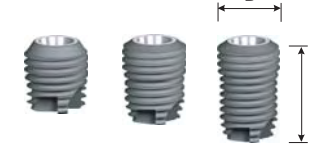
"Platform Switching" technique is applied to the design of the implants and abutments to reduce cretal bone loss

RBM

Brushite(CaP)
Coated
"Extra Wide-H"



L	D	Ø5.9
6		MX 5906
8		MX 5908
10		MX 5910

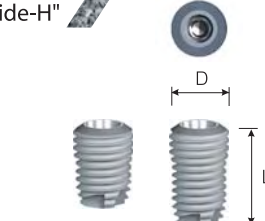


L	D	Ø6.4
6		MX 6406
8		MX 6408
10		MX 6410



L	D	Ø6.9
6		MX 6906
8		MX 6908
10		MX 6910

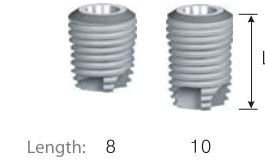
Length: 6 8 10



L	D	Ø5.9
6		-
8		MX 5908B
10		MX 5910B



L	D	Ø6.4
6		-
8		MX 6408B
10		MX 6410B



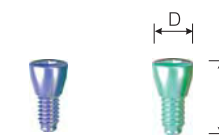
L	D	Ø6.9
6		-
8		MX 6908B
10		MX 6910B

Length: 8 10

Headless / Closing Screw

N R W

Headless



Fixture	Ø3.8	Ø4.5	Ø5.3
Code	SSC 3106	SSC 3506	

-Color coded fixtures for easy identification
3,8: Blue / 4,5, 5,3: Green
-Uses 1,2 Hex Driver
-Package Contents: Headless
-Tightening Torque: 5-8 Ncm

Closing Screw



Cuff: 1 2 1 2

C	Fixture	Ø3.8	Ø4.5	Ø5.3
1		SSC 3110	SSC 3510	
2		SSC 3120	SSC 3520	

-Closing screw used in case of placing implant deeper then bone level
-Uses 1,2 Hex Driver
-Package Contents: Closing Screw
-Tightening Torque: 5-8 Ncm



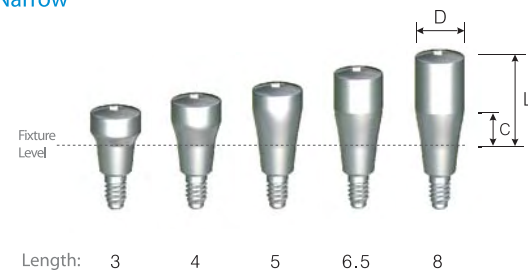
Healing Abutment



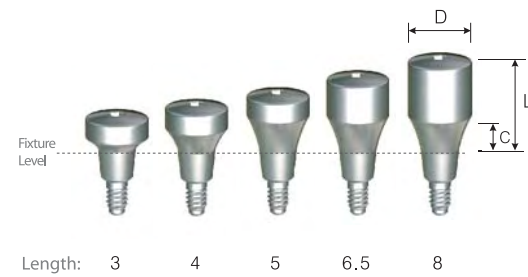
Healing Abutment

- Uses 1,2 Hex Driver
- Package Contents: Healing Abutment
- Tightening Torque: 5-8 Ncm

Narrow

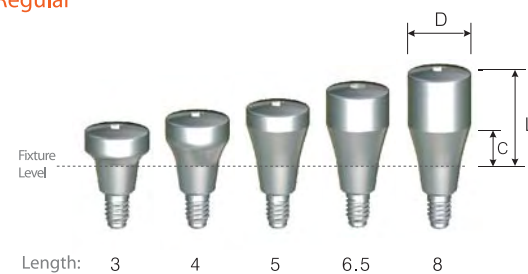


D	Ø4.1		
L \ C	1	2	3
3	SAHN 4113	-	-
4	-	SAHN 4124	-
5	-	-	SAHN 4135
6.5	-	-	SAHN 4136
8	-	-	SAHN 4138



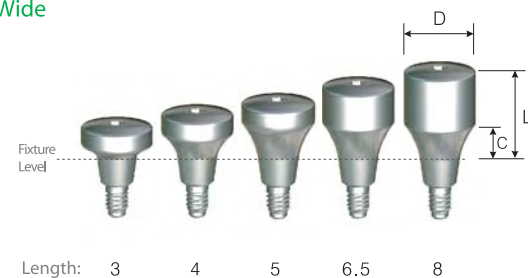
D	Ø5.2		
L \ C	1	2	3
3	SAHN 5213	-	-
4	-	SAHN 5224	-
5	-	-	SAHN 5235
6.5	-	-	SAHN 5236
8	-	-	SAHN 5238

Regular



D	Ø5.2		
L \ C	1	2	3
3	SAH 5213	-	-
4	-	SAH 5224	-
5	-	-	SAH 5235
6.5	-	-	SAH 5236
8	-	-	SAH 5238

Wide



D	Ø6.2		
L \ C	1	2	3
3	SAH 6213	-	-
4	-	SAH 6224	-
5	-	-	SAH 6235
6.5	-	-	SAH 6236
8	-	-	SAH 6238

Abutments for SM Implant System



Ball
(032)



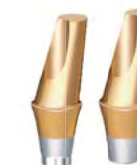
UCLA Cast
(030)



UCLA Gold
(030)



SM Mill
(031)



Angled
(029)



Cemented
(026)



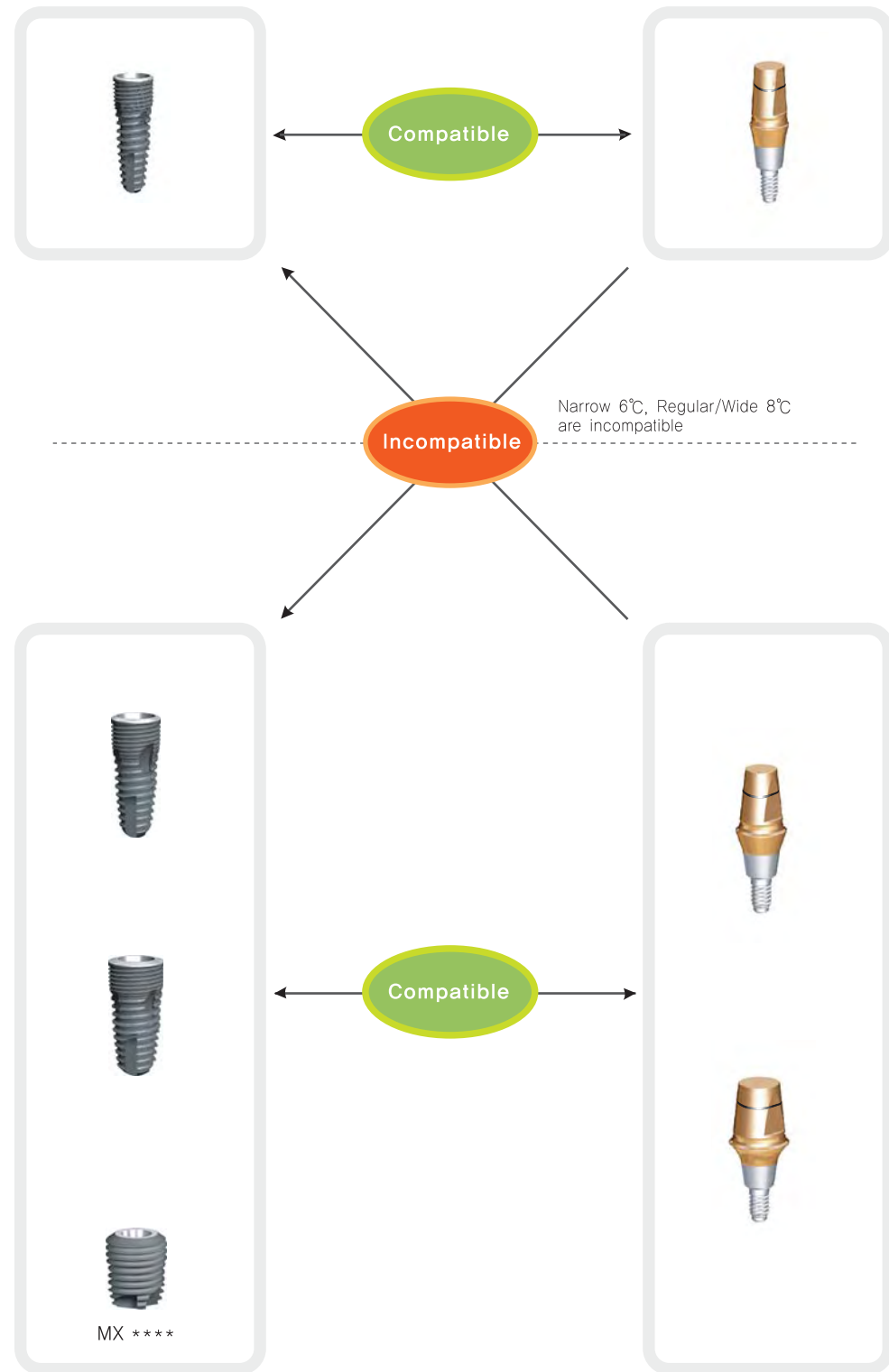
Solid Mill
(025)



Solid
(023)

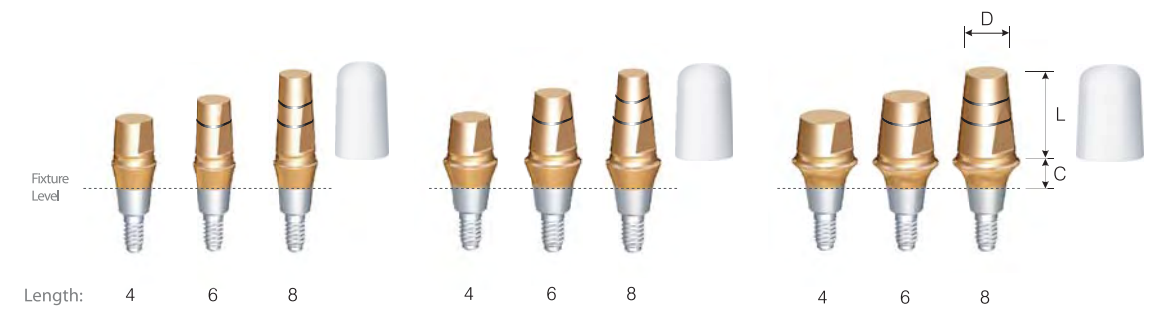


Fixture



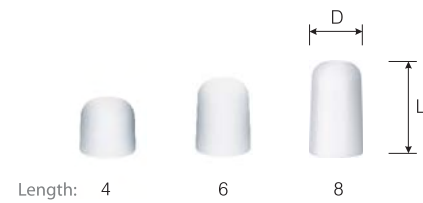
Solid Abutment

- Used for standard cement type prosthetic fabrication
- Single body abutment and screw construction
- Secure tapered connection construction
- Aesthetically designed gold coloring
- Prosthetic rotation prevention
- Uses Ø3.9, Ø4.8, Ø5.8: solid abutment driver
- Package Contents: Solid Abutment + Protect Cap
- Tightening Torque: 30 Ncm



L	D		Ø3.9	Ø4.8	Ø5.8
	C				
4	1		SAS 3914	SAS 4814	SAS 5814
	2		SAS 3924	SAS 4824	SAS 5824
	3		SAS 3934	SAS 4834	SAS 5834
	4.5		SAS 3944	SAS 4844	SAS 5844
	6		SAS 3964	SAS 4864	SAS 5864
6	1		SAS 3916	SAS 4816	SAS 5816
	2		SAS 3926	SAS 4826	SAS 5826
	3		SAS 3936	SAS 4836	SAS 5836
	4.5		SAS 3946	SAS 4846	SAS 5846
	6		SAS 3966	SAS 4866	SAS 5866
8	1		SAS 3918	SAS 4818	SAS 5818
	2		SAS 3928	SAS 4828	SAS 5828
	3		SAS 3938	SAS 4838	SAS 5838
	4.5		SAS 3948	SAS 4848	SAS 5848
	6		SAS 3968	SAS 4868	SAS 5868

Protect Cap



L \ D	Ø3.9	Ø4.8	Ø5.8
4	SASC 3904	SASC 4804	SASC 5804
6	SASC 3906	SASC 4806	SASC 5806
8	SASC 3908	SASC 4808	SASC 5808

- Protects the abutment and keeps foreign particles to a minimum
- Keeps the place of future prosthetic
- Package Contents: Protect Cap

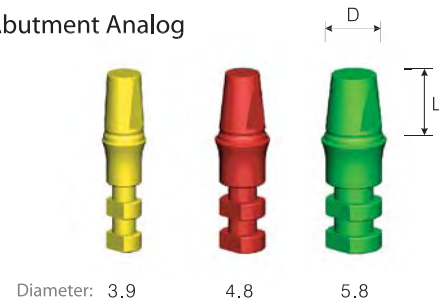
Impression Cap



L \ D	Ø3.9	Ø4.8	Ø5.8
10	SASI 3910	SASI 4810	SASI 5810

- Used for making impression with abutments
- Simple color coding according to abutment diameter
- 3,9mm: Yellow, 4,8mm: Red, 5,8mm: Green
- Convenient locking mechanism
- Package Contents: Impression Cap

Solid Abutment Analog



L \ D	Ø3.9	Ø4.8	Ø5.8
4	SASA 3904	SASA 4804	SASA 5804
6	SASA 3906	SASA 4806	SASA 5806
8	SASA 3908	SASA 4808	SASA 5808

- Provides anchor point for fabricating implant prosthetics on working model
- Simple color coding according to abutment diameter
- 3,9mm: Yellow, 4,8mm: Red, 5,8mm: Green
- Package Contents: Solid Abutment Analog

Plastic Coping



L \ D	Ø3.9	Ø4.8	Ø5.8
10	SASP 3910S	SASP 4810S	SASP 5810S
	SASP 3910B	SASP 4810B	SASP 5810B

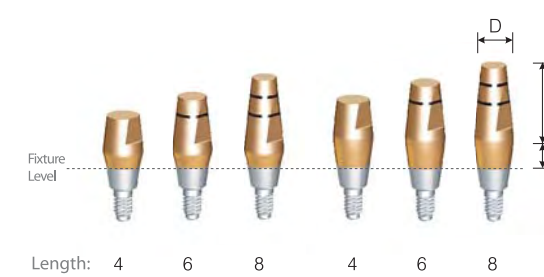
- Provides a framework for prosthetic for use with Solid Abutment Analog
- Simple color coding according to type of prosthetic
- Single: Red, Bridge: White
- Convenient locking mechanism
- Package Contents: Plastic Coping

Solid Mill Abutment

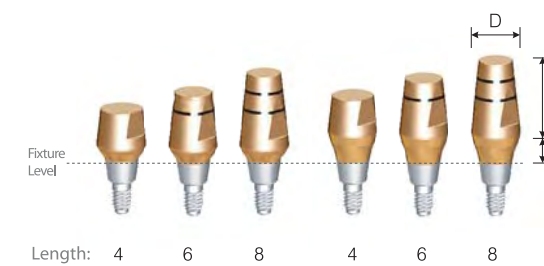
- Used for standard cement type prosthetic fabrication
- Useful in specialized prosthetics and custom abutments
- Single body abutment and screw construction
- Secure tapered connection construction
- Aesthetically designed gold coloring
- Prosthetic rotation prevention
- Uses Ø3,6, Ø4,2, Ø5,2: Solid Abutment Driver
- Package Contents: Abutment
- Tightening Torque: 30 Ncm



C	L \ D	Ø3.6
1.5	4	SAS 3614
	6	SAS 3616
	8	SAS 3618
3	4	SAS 3634
	6	SAS 3636
	8	SAS 3638



C	L \ D	Ø4.2
1.5	4	SAS 4214
	6	SAS 4216
	8	SAS 4218
3	4	SAS 4234
	6	SAS 4236
	8	SAS 4238



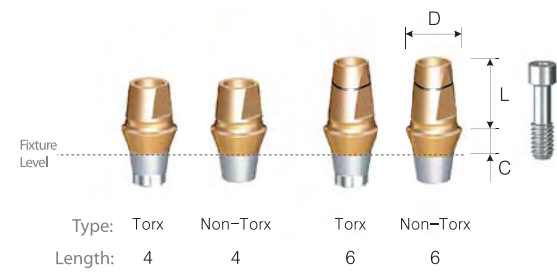
C	L \ D	Ø5.2
1.5	4	SAS 5214
	6	SAS 5216
	8	SAS 5218
3	4	SAS 5234
	6	SAS 5236
	8	SAS 5238

Cemented Abutment

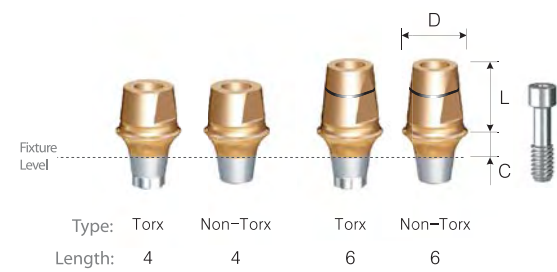
- Used for standard cement type prosthetic fabrication
- Secure tapered connection construction
- Aesthetically designed gold coloring
- Prosthetic rotation prevention
- Uses 1,7 Torx Driver
- Package Contents:
Abutment + Abutment Screw + Impression Cap
- Tightening Torque: 30 Ncm



D		Ø3.9		
L	C	Type		
4		1	SAC 3914T	SAC 3914N
		2	SAC 3924T	SAC 3924N
		3	SAC 3934T	SAC 3934N
		4.5	SAC 3944T	SAC 3944N
		6	SAC 3964T	SAC 3964N
6		1	SAC 3916T	SAC 3916N
		2	SAC 3926T	SAC 3926N
		3	SAC 3936T	SAC 3936N
		4.5	SAC 3946T	SAC 3946N
		6	SAC 3966T	SAC 3966N



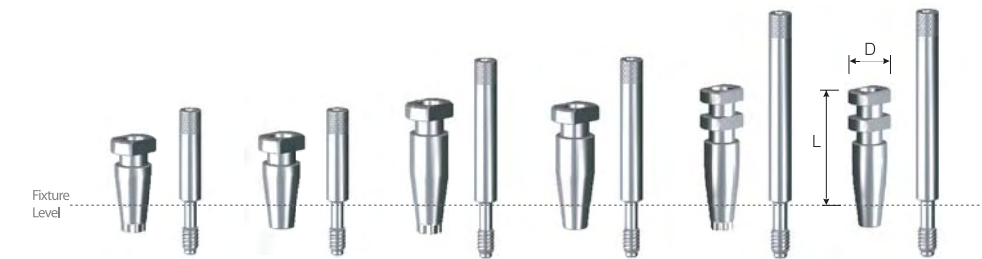
D		Ø4.8		
L	C	Type		
4		1	SAC 4814T	SAC 4814N
		2	SAC 4824T	SAC 4824N
		3	SAC 4834T	SAC 4834N
		4.5	SAC 4844T	SAC 4844N
		6	SAC 4864T	SAC 4864N
6		1	SAC 4816T	SAC 4816N
		2	SAC 4826T	SAC 4826N
		3	SAC 4836T	SAC 4836N
		4.5	SAC 4846T	SAC 4846N
		6	SAC 4866T	SAC 4866N



D		Ø5.8		
L	C	Type		
4		1	SAC 5814T	SAC 5814N
		2	SAC 5824T	SAC 5824N
		3	SAC 5834T	SAC 5834N
		4.5	SAC 5844T	SAC 5844N
		6	SAC 5864T	SAC 5864N
6		1	SAC 5816T	SAC 5816N
		2	SAC 5826T	SAC 5826N
		3	SAC 5836T	SAC 5836N
		4.5	SAC 5846T	SAC 5846N
		6	SAC 5866T	SAC 5866N

Pick-up Impression Coping

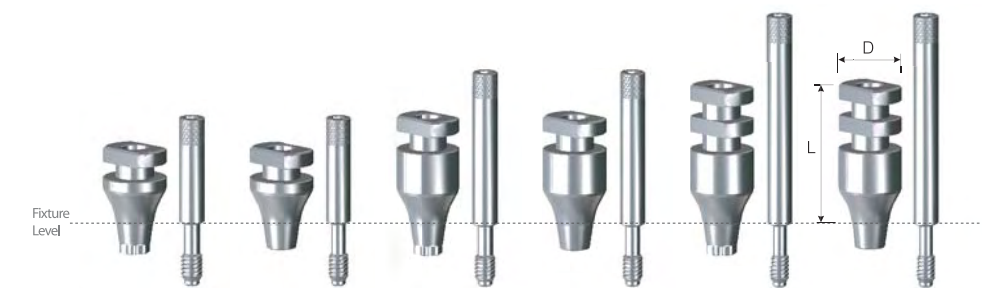
- Used for pick-up impressions with custom trays
- Uses 1,2 Hex Driver
- Package Contents: Impression Coping + Guide Pin



D		Ø3.9					
L		7		10		13	
Type		Torx	Non-Torx	Torx	Non-Torx	Torx	Non-Torx
Code		SIP 3907T	SIP 3907N	SIP 3910T	SIP 3910N	SIP 3913T	SIP 3913N



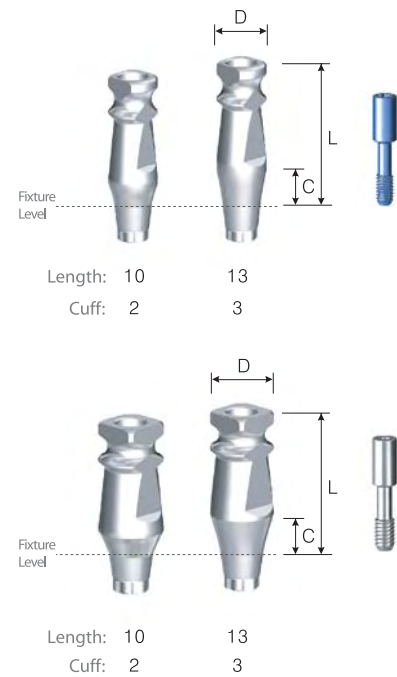
D		Ø4.8					
L		7		10		13	
Type		Torx	Non-Torx	Torx	Non-Torx	Torx	Non-Torx
Code		SIP 4807T	SIP 4807N	SIP 4810T	SIP 4810N	SIP 4813T	SIP 4813N



D		Ø5.8					
L		7		10		13	
Type		Torx	Non-Torx	Torx	Non-Torx	Torx	Non-Torx
Code		SIP 5807T	SIP 5807N	SIP 5810T	SIP 5810N	SIP 5813T	SIP 5813N

Transfer Impression Coping

- Used for Transfer Type impressions with custom trays
- Enhanced customization after impression made possible by its rectangular construction
- Two-Piece Construction
- Uses 1,7 Torx Driver
- Package Contents: Impression Coping + Screw



L	C	D	Ø4.1
10	2		SIT 4102T
13	3		SIT 4103T

L	C	D	Ø5.2	Ø5.2
10	2		SIT 5202T	
13	3		SIT 5203T	

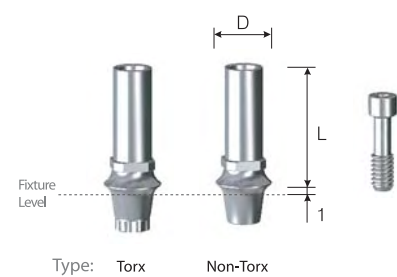
Fixture Analog



L	D	Ø3.8	Ø4.5	Ø4.5
12		SAF 3812	SAF 4512	

- Provides anchor point for fabricating implant prosthetics on working model.
- Package Contents: Analog

Temporary Abutment

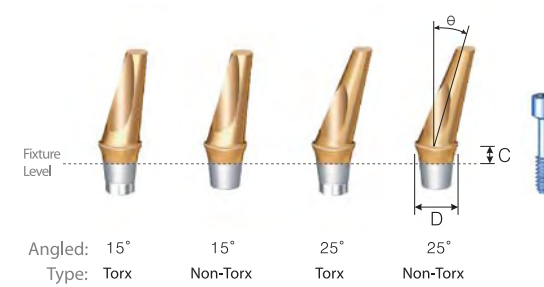
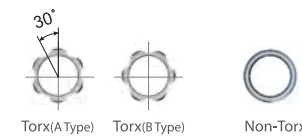


L	Type	D	Ø3.9	Ø4.8	Ø5.8
10	Torx		SAT 3910T	SAT 4810T	SAT 5810T
	Non-Torx		SAT 3910N	SAT 4810N	SAT 5810N

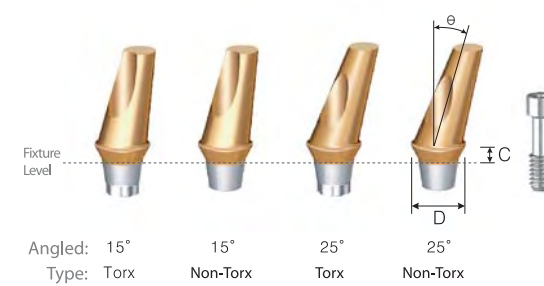
- Used in prosthetic fabrication
- Customizable
- Uses 1,7 Torx Driver
- Package Contents: Abutment + Abutment Screw
- Tightening Torque: 30 Ncm

Angled Abutment

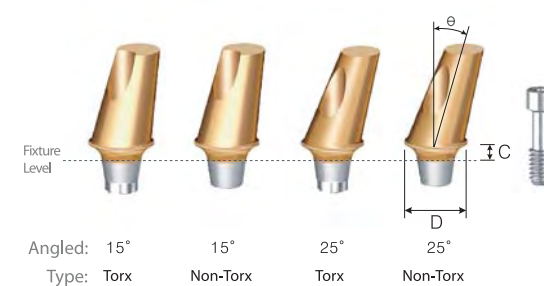
- Secure tapered connection construction
- Aesthetically designed gold coloring
- Uses 1,7 Torx Driver
- Package Contents: Abutment + Abutment Screw
- Tightening Torque: 30 Ncm



D	Ø3.9		
C	Angled Type		
1.5	Torx(A Type)	SAA 39115A	SAA 39125A
	Torx(B Type)	SAA 39115B	SAA 39125B
	Non-Torx	SAA 39115	SAA 39125
3	Torx(A Type)	SAA 39315A	SAA 39325A
	Torx(B Type)	SAA 39315B	SAA 39325B
	Non-Torx	SAA 39315	SAA 39325



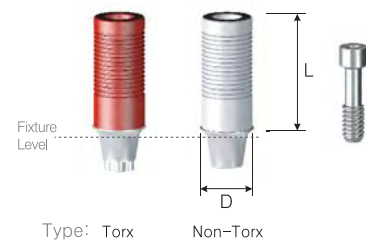
D	Ø4.8		
C	Angled Type		
1.5	Torx(A Type)	SAA 48115A	SAA 48125A
	Torx(B Type)	SAA 48115B	SAA 48125B
	Non-Torx	SAA 48115	SAA 48125
3	Torx(A Type)	SAA 48315A	SAA 48325A
	Torx(B Type)	SAA 48315B	SAA 48325B
	Non-Torx	SAA 48315	SAA 48325



D	Ø5.8		
C	Angled Type		
1.5	Torx(A Type)	SAA 58115A	SAA 58125A
	Torx(B Type)	SAA 58115B	SAA 58125B
	Non-Torx	SAA 58115	SAA 58125
3	Torx(A Type)	SAA 58315A	SAA 58325A
	Torx(B Type)	SAA 58315B	SAA 58325B
	Non-Torx	SAA 58315	SAA 58325

UCLA Gold Abutment

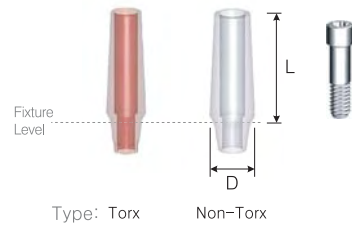
- Used for superior aesthetics and precision
- Secure tapered connection construction
- Gold casting for ultimate customization
- Uses 1,7 Torx Driver
- Package Contents: Abutment + Abutment Screw
- Tightening Torque: 30 Ncm



L	Type	D	Ø3.9	Ø4.8	Ø4.8
10	Torx		SAG 3910T	SAG 4810T	
	Non-Torx		SAG 3910N	SAG 4810N	

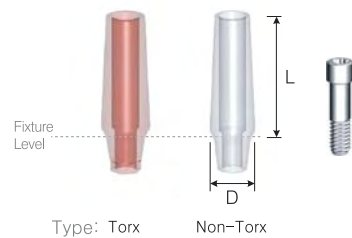
UCLA Cast Abutment

- Used for superior aesthetics and customization
- Gold casting for ultimate customization
- Less precise than the UCLA Gold Abutment
- Uses 1,7 Torx Driver
- Package Contents: Abutment + Abutment Screw
- Tightening Torque: 30 Ncm



L	Type	D	Ø4.0
11.7	Torx		SCA 4014T
	Non-Torx		SCA 4014N

*Screw: SSC 1808C



L	Type	D	Ø4.5	Ø4.5
11.7	Torx		SCA 4514T	
	Non-Torx		SCA 4514N	

*Screw: SSC 2008C

SM Mill Abutment

- Used for when high customization in abutment path and prosthetic margins are needed
- Secure tapered connection construction
- Aesthetically designed gold coloring
- Uses 1,7 Torx Driver
- Package Contents: Abutment + Abutment Screw
- Tightening Torque: 30 Ncm

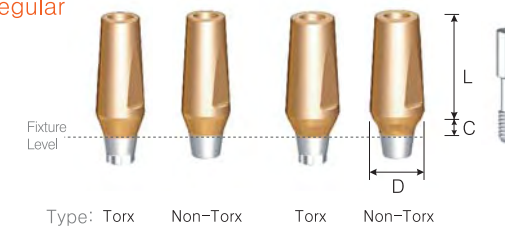


Narrow



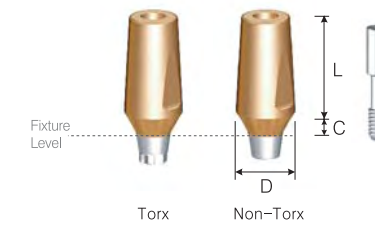
C	L	Type	D	Ø4.0	Ø4.5
1.2	10.5	Torx		SMA 4014T	SMA 4514T
		Non-Torx		SMA 4014N	SMA 4514N

Regular

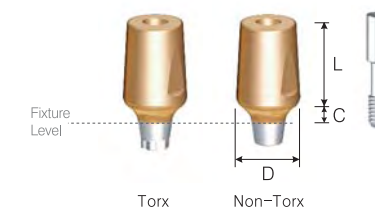


C	L	Type	D	Ø5.0	Ø5.5
2.3	10	Torx		SMA 5015T	SMA 5515T
		Non-Torx		SMA 5015N	SMA 5515N

Wide

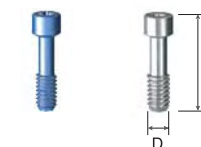


C	L	Type	D	Ø6.0
2.3	10	Torx		SMA 6015T
		Non-Torx		SMA 6015N



C	L	Type	D	Ø6.5
2.3	8	Torx		SMA 6513T
		Non-Torx		SMA 6513N

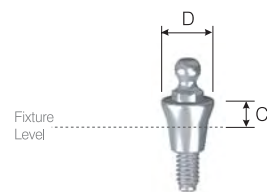
Abutment Screw



L	D	Ø1.8	Ø2.0	Ø2.0
8.5		SSC 1808	SSC 2008	
11.5		SSC 1812	SSC 2012	



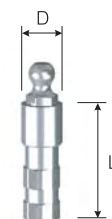
Ball Abutment



C \ D	Ø3.9	Ø4.5	Ø4.5
2	SAB 3902	SAB 4502	
4	SAB 3904	SAB 4504	

- Used in conjunction with ball type overdenture prosthetic fabrication
- O-Ring Types
- Black: Laboratory type
- Orange: Clinical type
- Uses O-Ring for ball retention
- Up to a 20° compensation
- Uses ball abutment driver
- Package Contents: Abutment + O-Ring
- Tightening Torque: 30 Ncm

Ball Abutment Analog



L \ D	Ø3.5	Ø3.5	Ø3.5
10	SABA 3510		

- Provides anchor point for ball abutment on working model
- Package Contents: Analog

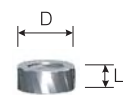
Dalbo Plus



	Narrow	Regular	Wide
Code	DBPM 201		

- Titanium housing with 2 stage construction
- Rated for up to 10,000 uses with minimum abrasion to the ball abutment and to the insert
- Simple and convenient retention
- Up to 20° in insertion angle flexibility
- Compatible with all DIO Implant systems

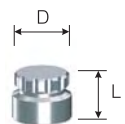
Retainer



L \ D	Ø5.0	Ø5.0	Ø5.0
2	RT 0502		

- Packing Contents: Retainer + O-Ring

Ball Cap



L \ D	Ø5.0	Ø5.0	Ø5.0
4	BC 5004		

- Superior retention and removability
- Package Contents: Ball Cap + O-Ring

O-Ring



Type \ D	Ø4.5	Ø4.5	Ø4.5
Black	OR 0450B		
Orange	OR 0450O		

- Black: Laboratory used for fabrications with high retention
- Orange: For clinical use(over 6 Ncm)
- Package Contents: O-Ring (1 piece)

SM Implant System(SM-Submerged)

Guide Drill GD 2029
Initial Drill DHI 2014S, ST 2008I, ST 2010I, ST 2012I, ST 2014I
Parallel Pin PP 2015, PP 2022, PP 2023
Pilot Drill PS 3512, PS 4812
Tapered Drill DTI 3508S, DTI 3510S, DTI 3512S, DTI 3514S, DTI 4008S, DTI 4010S, DTI 4012S, DTI 4014S, DTI 4808S, DTI 4810S, DTI 4812S, DTI 4814S
Fixture Driver for Contra Angle (Short) HGC 4830, HGCS 3127, (Long) HGC 4835, HGCS 3132
Fixture Driver for Ratchet Wrench (Short) HGW 4821, HGWS 3121, (Long) HGW 4827, HGWS 3127
SM Solid Abutment Driver HDS 3906, HDS 3912, HDS 4806, HDS 4812, HDS 5806, HDS 5812 (Short/Long)
Drill Extension DE 5529
Profile Drill PFD 3810S, PFD 4510S, PFD 5310S
Machine Screw Driver MD 1230, MD 1730
Ratchet Screw Driver HD 1215, HD 1715
Depth Gauge DPP 2050
Open Wrench OW 001
Torque Wrench DTW 0060
SM Abutment Removing Driver HARD 1820, HARD 2020

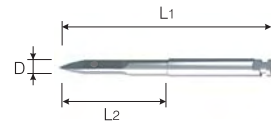
Master KIT Option

Option Kit A	Fixture Driver for Contra Angle HGC 3524 HGC 4024 HGC 5024 HGC 3530 HGC 4030 HGC 5030	Fixture Driver for Ratchet Wrench HGW 3513 HGW 4013 HGW 5013 HGW 3521 HGW 4021 HGW 5021	Option Kit C
Option Kit B *Choose No.1 (PSI) or No.2(FSN)	Straight Drill 1. For PSI Implant(Internal) SDS 3010A SDS 3310A SDS 3510A SDS 4310A SDS 4810A SDS 3014A SDS 3314A SDS 3514A SDS 4314A SDS 4814A Straight Drill 2. For FSN Implant(External) SDS 3010B SDS 3310B SDS 3510B SDS 4310B SDS 4810B SDS 3015B SDS 3315B SDS 3515B SDS 4315B SDS 4815B		Option Kit A + Option Kit B

Surgical Instruments

SM Implant System(SM-Submerged)

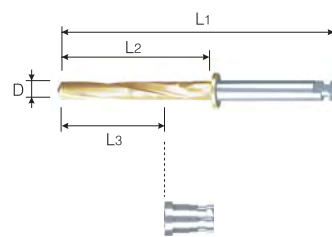
Guide Drill



L1/L2	D	
25/11	Ø2.0	GD 2025
29/15	Ø2.0	GD 2029

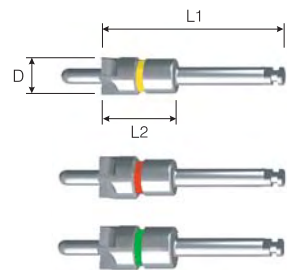
–Used for drilling initial hole in bone tissue
–Bone density ascertainable during drilling

Initial Drill



D	Ø2.0
L1	33
L2	18
Code	DHI 2014S
L3	Stopper
8	ST 2008P
10	ST 2010P
12	ST 2012P
14	ST 2014P

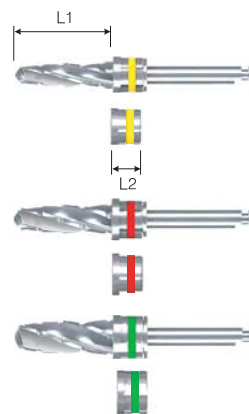
Bone Planer



L1/L2	D	Ø4.95	Ø5.65	Ø5.9
24.5/10		BP 5010	BP 5710	BP 5910

–Creates a flat surface on bone
–Extracts desired bone with bone planer after initial drilling
–Handpiece speed: 400–600 rpm

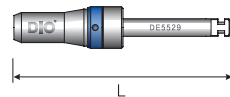
Tapered Drill



L1	D	Ø3.5	Ø4.0	Ø4.8
8		DTI 3508S	DTI 4008S	DTI 4808S
10		DTI 3510S	DTI 4010S	DTI 4810S
12		DTI 3512S	DTI 4012S	DTI 4812S
14		DTI 3514S	DTI 4014S	DTI 4814S
L2		Stopper		
4		ST 3500I	ST 4000I	ST 4800I
3		ST 3501I	ST 4001I	ST 4801I

–D: Fixture Diameter

Drill Extension



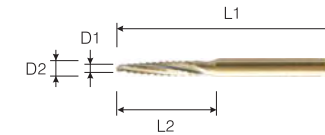
L	Code
29.7	DE 5529

–Provides extra length for drills used with handpieces
–Connects to the flat surface of the drill shank

Surgical Instruments

SM Implant System(SM-Submerged)

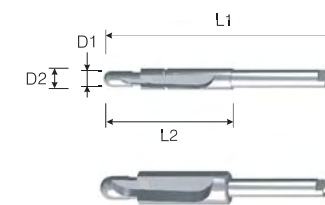
Lindemann Drill



L1/L2	D1/D2	Ø1.4/Ø2.0
30/14		RMH 2014S

–Provides drill direction adjustment
–Useful in site preparation and ridge reduction in extractions

Pilot Drill

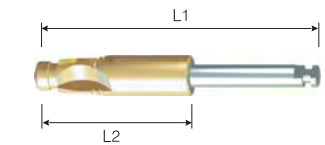


L1/L2	D1/D2	Ø2.0/Ø2.7
31/17		PS 3512

L1/L2	D1/D2	Ø3.0/Ø4.3
31/17		PS 4812

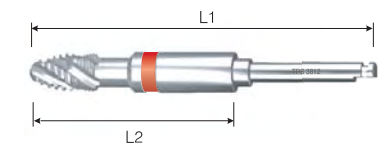
–Creates a path for drilling hole
–Creates accurate guide holes for the next step in surgical extraction

Profile Drill



L1/L2	Fixture Dia.	Ø3.8	Ø4.5	Ø5.3
26.3/12.3		PFD 3805S	PFD 4505S	PFD 5305S
31.3/17.3		PFD 3810S	PFD 4510S	PFD 5310S
36.3/22.3		PFD 3815S	PFD 4515S	PFD 5315S

Tap Drill



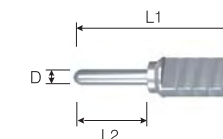
L1/L2	Fixture Dia.	Ø3.8	Ø4.5	Ø5.3
36.2/20.2		TPS 3812	TPS 4512	TPS 5312
41.2/25.2		TPS 3817	TPS 4517	TPS 5317

Tap Adapter



L	5	TAPA 3011
	9.5	TAPA 3016

Positioning Guide

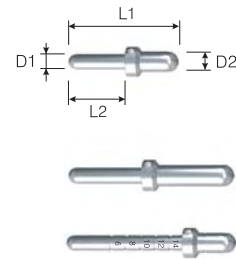


L1/L2	D	Ø2.0
22/10		PG 0050

–Marks space between fixtures
–Used after initial drilling

SM Implant System(SM-Submerged)

Parallel Pin



L1/L2	D1/D2	Ø2.0/Ø2.7
15/8		PP 2015
22/10		PP 2022
23/16		PP 2023

- Provides location and direction of site preparation
- Drill site depth survey
- Package Contents: Available as a part of a set or individual packaging

Depth Gauge



D	Ø2.0
Code	DPP 2050

Torque Wrench



Code	DTW 0060
------	----------

- Used in fixture implantation or screw repair
- Torque values (0, 15, 35, 50 Ncm) laser etched into the handle
- Convenient disassembly for easy cleaning

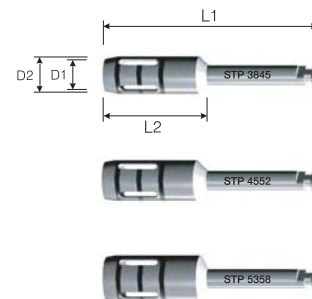
Open Wrench



Code	OW 001
------	--------

- Used in removing mounts from weak bone tissue
- 30° neck angle for maximum comfort and ease of use

Tissue Punch



L1/L2	D1/D2	Ø3.8(Inner)/Ø4.5(Outer)
27/13		STP 3845

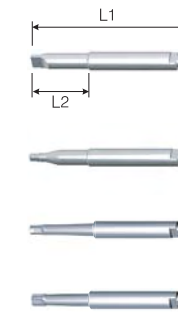
L1/L2	D1/D2	Ø4.5(Inner)/Ø5.2(Outer)
27/13		STP 4552

L1/L2	D1/D2	Ø5.3(Inner)/Ø5.8(Outer)
27/13		STP 5358

Surgical Instruments

SM Implant System(SM-Submerged)

Machine Screw Driver



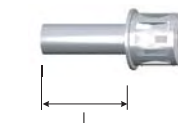
Type	L1/L2	Code
0.5 Slot	22/8	MD 0522
	30/16	MD 0530
0.9 Hex	22/8	MD 0922
	30/16	MD 0930
1.2 Hex	22/8	MD 1222
	30/16	MD 1230
1.7 Torx	22/8	MD 1722
	30/16	MD 1730

Ratchet Screw Driver



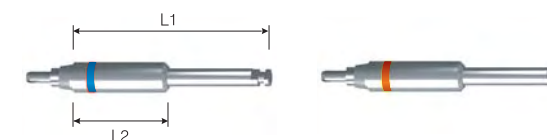
Type	L	Code
0.5 Slot	10	HD 0510
	15	HD 0515
0.9 Hex	10	HD 0910
	15	HD 0915
1.2 Hex	5	HD 1205
	10	HD 1210
	15	HD 1215
	20	HD 1220
1.7 Torx	10	HD 1710
	15	HD 1715
	20	HD 1720

Ball Abutment Driver



L	Code
6	HD 2406
12	HD 2412

Fixture Driver for Contra Angle



L1/L2	D	Ø3.8	Ø4.5 / Ø5.3
21/6.9		HGCS 3121	HGC 4824
27/12.9		HGCS 3127	HGC 4830
32/17.9		HGCS 3132	HGC 4835

Surgical Instruments

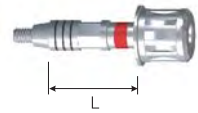
SM Implant System(SM-Submerged)

Fixture Driver for Ratchet Wrench



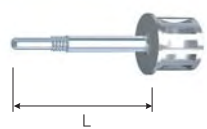
L \ D	Ø3.8	Ø4.5 / Ø5.3
6	HGWS 3113	HGW 4813
14	HGWS 3121	HGW 4821
20	HGWS 3127	HGW 4827

Fixture Mount Driver



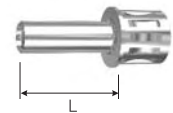
L \ Type	M1.8	M2.0
18	HMDI 1818	HMDI 2018
23	HMDI 1823	HMDI 2023

Abutment Removing Driver



L \ Type	M1.8	M2.0
15	HARD 1815	HARD 2015
20	HARD 1820	HARD 2020

Solid Abutment Driver



L \ D	Ø3.9	Ø4.8	Ø5.8
6	HDS 3906	HDS 4806	HDS 5806
12	HDS 3912	HDS 4812	HDS 5812

Reamer Set



Reamer Cutter



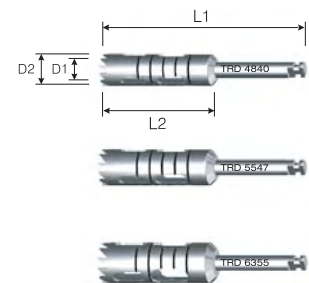
Code	SRC 39	SRC 48	SRC 58

Reamer Pin



D	Ø3.5	Ø4	Ø5
Code	SRP 39	SRP 48	SRP 58

Trephine Drill

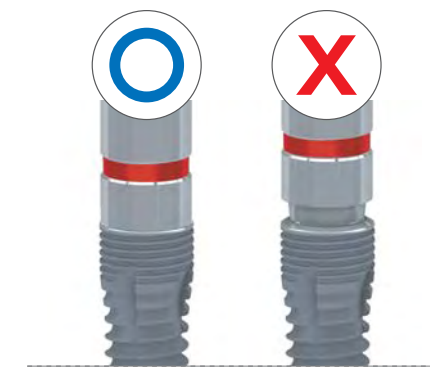


L1/L2 \ D1/D2	Ø4.0(Inner)/Ø4.8(Outer)
32/18	TRD 4840
L1/L2 \ D1/D2	Ø4.7(Inner)/Ø5.5(Outer)
32/18	TRD 5547
L1/L2 \ D1/D2	Ø5.5(Inner)/Ø6.3(Outer)
32/18	TRD 6355

Site Preparation

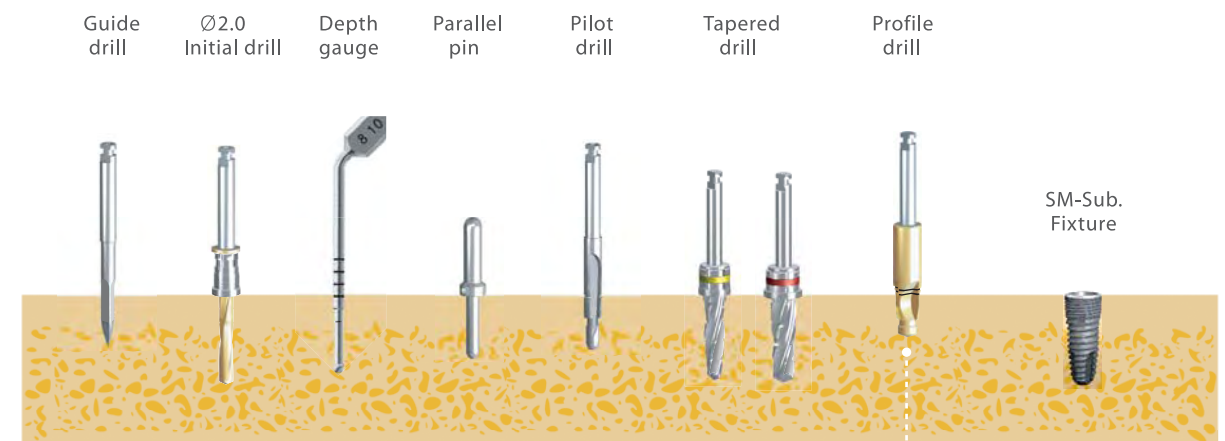
Fixture Driver

Instructions for proper fixture driver use
Remove driver from fixture only after adhesion



Site Preparation

SM-Submerged Fixture / Ø4.5mm(Length: 10mm)

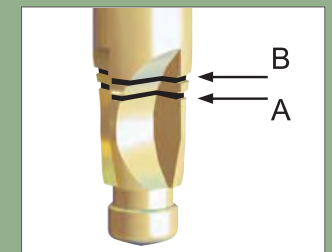


Profile drill

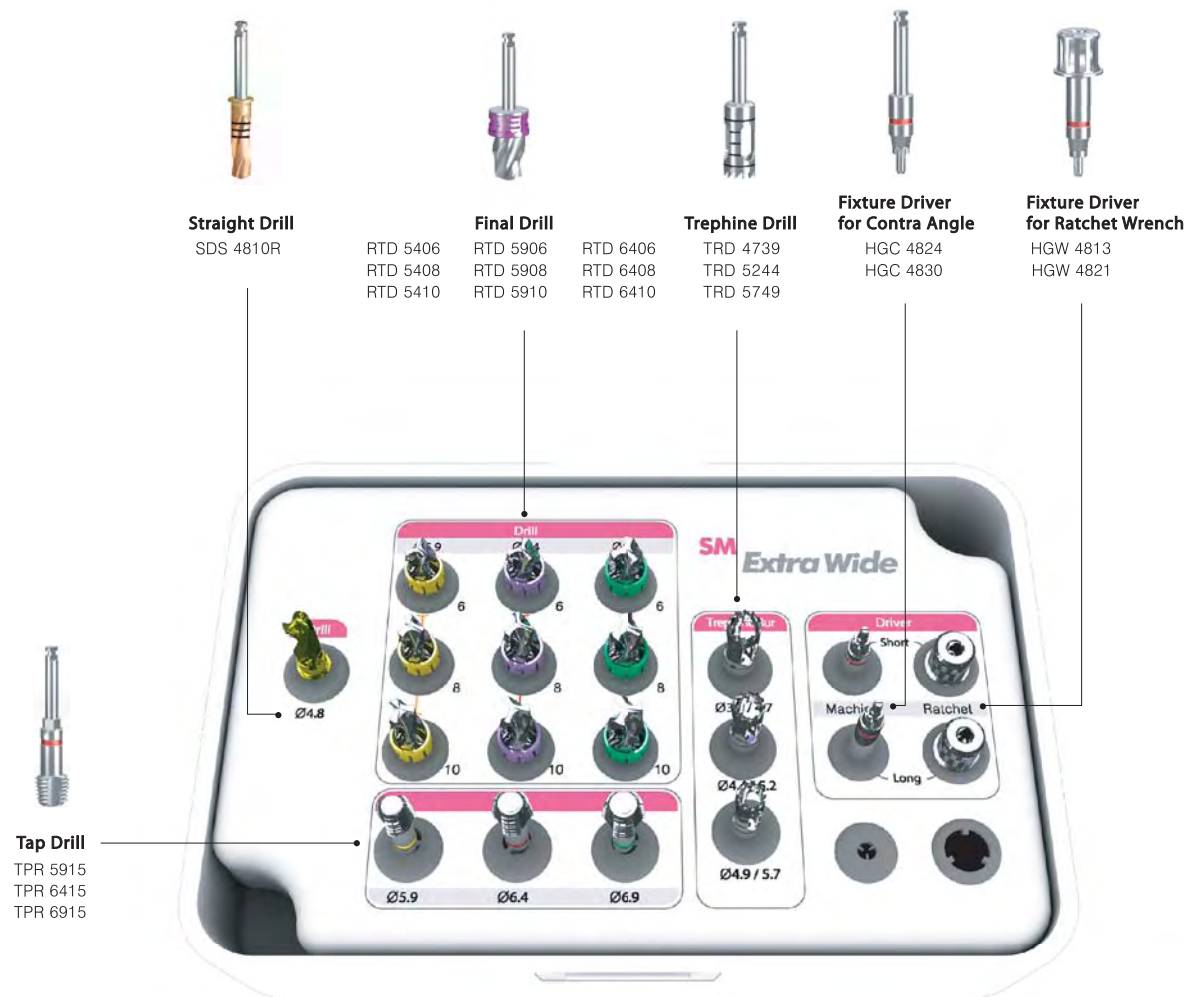
Used to shape top of fixture (Straight & Taper shape)

Insertion depth: Drilling depth is determined by bone tissue
Drills up to B depth in case of D1/D2 bone.
Tap drill is recommended in cases where the D1 bone tissue is resistant.
Drills up to A depth in case of D2/D3 bone.
Profile drill is not recommended in cases where the D4 bone tissue is weak.

This drill is designed to prevent excess torque.
Implant depth is adjustable.



SM Implant System(Extra-Wide)



Straight Drill
SDS 4810R

RTD 5406
RTD 5408
RTD 5410

Final Drill

RTD 5906
RTD 5908
RTD 5910

Trepine Drill

TRD 4739
TRD 5244
TRD 5749

Fixture Driver for Contra Angle

HGC 4824
HGC 4830

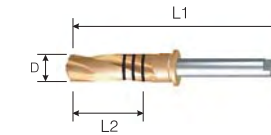
Fixture Driver for Ratchet Wrench

HGW 4813
HGW 4821

Tap Drill
TPR 5915
TPR 6415
TPR 6915

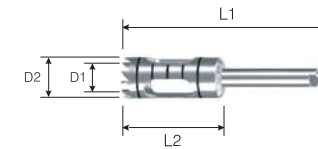
SM Extra-Wide Surgical Kit
SM Implant System(Extra-Wide)

Straight Drill



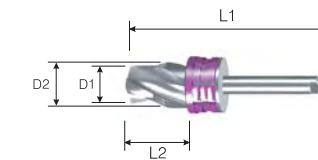
L1/L2	D	Ø4.8	
29/10		SDS 4810R	

Trepine Drill



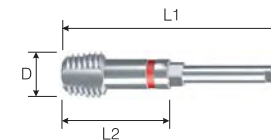
L1/L2	D1/D2	Inner Diameter/Outer Diameter		
27/13		Ø3.9/Ø4.7	Ø4.4/Ø5.2	Ø4.9/Ø5.7
		TRD 4739	TRD 5244	TRD 5749

Final Drill



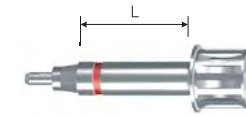
L1/L2	D1/D2	Ø4.5/Ø5.4	Ø5/Ø5.9	Ø5.5/Ø6.4
25/6		RTD 5406	RTD 5906	RTD 6406
27/8		RTD 5408	RTD 5908	RTD 6408
29/10		RTD 5410	RTD 5910	RTD 6410

Tap Drill



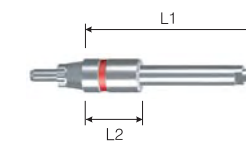
L1/L2	D	5.9	6.4	6.9
31.1/15		TPR 5915	TPR 6415	TPR 6915

Fixture Driver for Ratchet Wrench



L	6	HGW 4813
	14	HGW 4821
	20	HGW 4827

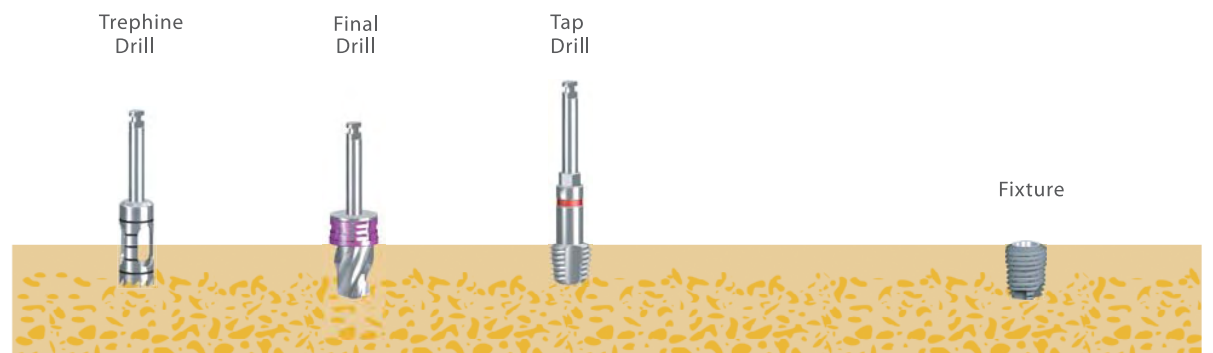
Fixture Driver for Contra Angle



L1/L2	21/6.9	HGC 4824
	27/12.9	HGC 4830
	32/17.9	HGC 4835

Site Preparation

SM-Extra-Wide Fixture / Ø6.4mm(Length: 8mm)



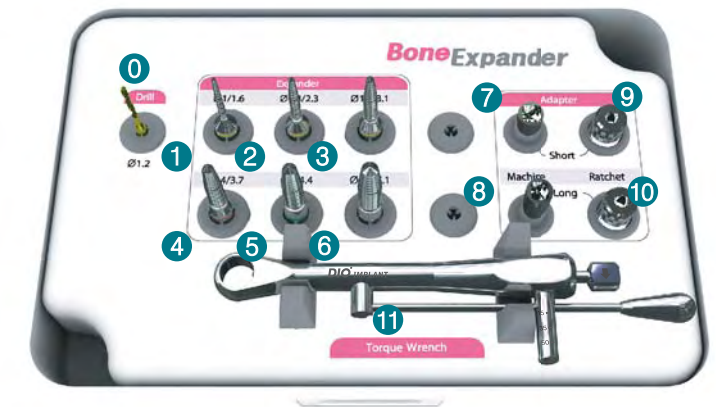
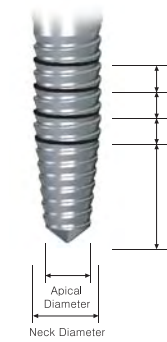
Surgical Kits

Bone Expander Kit	135
Sinus Lift Kit	136
Osteotome Kit	137
Prosthetic Kit	138



























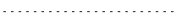


Surgical Kits

Bone Expander Kit

The bone expander kit gradually and gently expands bone tissue to access osteotomy site without bone loss, the kit increase initial safety by keeping the bone density stable.

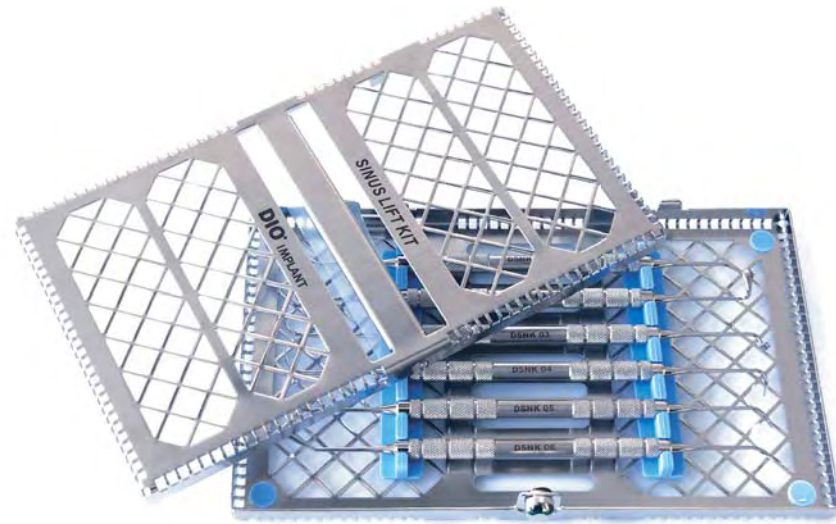


(mm)

Description	Code	Diameter Apical / Neck	Length	Color Code
  1.2mm Initial Drill	MSD 1218	1.2	16	
  1.0/1.6mm Bone Expander	BEP 1716	1.0 / 1.6	17	
  1.3/2.3mm Bone Expander	BEP 1723	1.3 / 2.3	17	
  1.7/3.1mm Bone Expander	BEP 1731	1.7 / 3.1	17	
  2.4/3.7mm Bone Expander	BEP 1737	2.4 / 3.7	17	
  3.0/4.4mm Bone Expander	BEP 1744	3.0 / 4.4	17	
  3.5/5.1mm Bone Expander	BEP 1751	3.5 / 5.1	17	
  Adapter(short) For Contra Angle	BEA 4008			
  Adapter(long)	BEA 4012			
  Adapter(short) For Ratchet Wrench	BEA 4005			
  Adapter(long)	BEA 4010			
  Ratchet Wrench	DTW 0060			

Sinus Lift Kit

Custom designed kit comprised of 6 tools used in sinus procedures



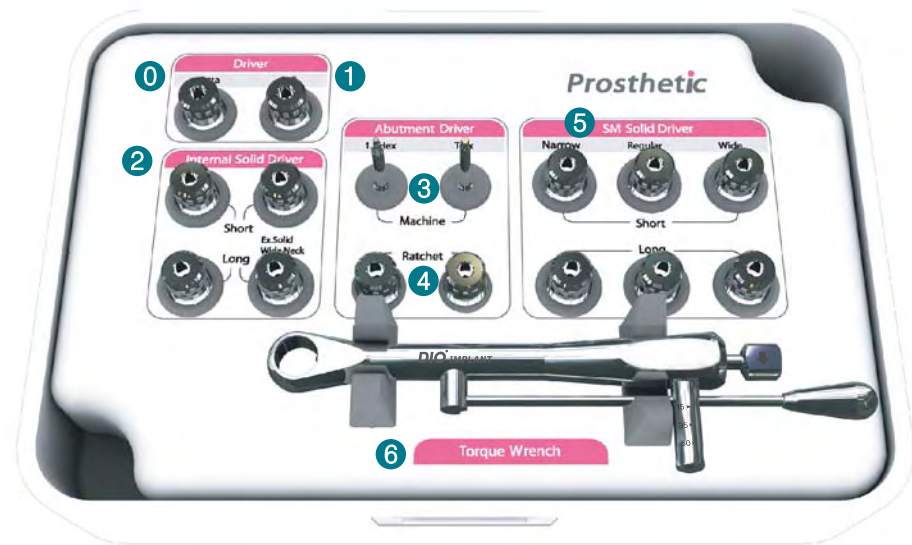
Sinus Elevator & Membrane Lift Tips		Code	Description
		DSNK 01	Membrane Detach Elevator
		DSNK 02	Membrane Elevator
		DSNK 03	Membrane Elevator
		DSNK 04	Membrane Elevator
		DSNK 05	Membrane Elevator
		DSNK 06	Bone Graft Packer

Osteotome Kit

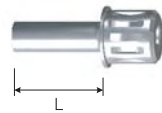


Diameter(L)	Image	Code	Application
		OSL 2028	SM/ IFI/ FTN Initial Drill
		OSE 2228	Sinus Elevation
		OSL 2130	FTN 33xxB Compaction
		OSL 2133	SFN 38xx/ IFI 35xxPM Compaction
		OSL 3039	SFR 45xx/ IFI 40xxM Compaction
		OSL 3546	SFW 53xx/ IFI 48xxM/ FTN 50xxB Compaction

Prosthetic Kit

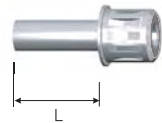


0 Octa Abutment Driver



Type	L	Code
3.0 Octa	12	HD 3012

1 Ball Abutment Driver



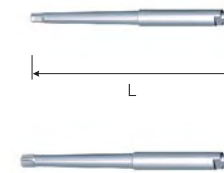
L	Code
12	HD 2412

2 Internal Solid Abutment Driver



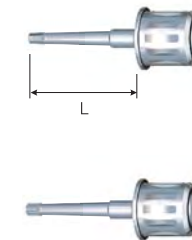
L	Abutment Dia.	
	Ø3.5	Ø4.3
6	HD 3506	HD 4306
12	HD 3512	HD 4312

3 Machine Screw Driver



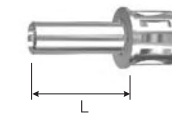
Type	L	Code
1.2 Hex	30	MD 1230
1.7 Torx	30	MD 1730

4 Ratchet Screw Driver



Type	L	Code
1.2 Hex	15	HD 1215
1.7 Torx	15	HD 1715

5 SM Solid Abutment Driver



L	Abutment Dia.		
	Ø3.9	Ø4.8	Ø5.8
6	HDS 3906	HDS 4806	HDS 5806
12	HDS 3912	HDS 4812	HDS 5812

6 Torque Wrench



Code	DTW 0060

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