

SM Extra Wide

Implant System

DIO SM Extra Wide Implant System

"Standard for the most advanced wide implant"

Immediate loading after extraction

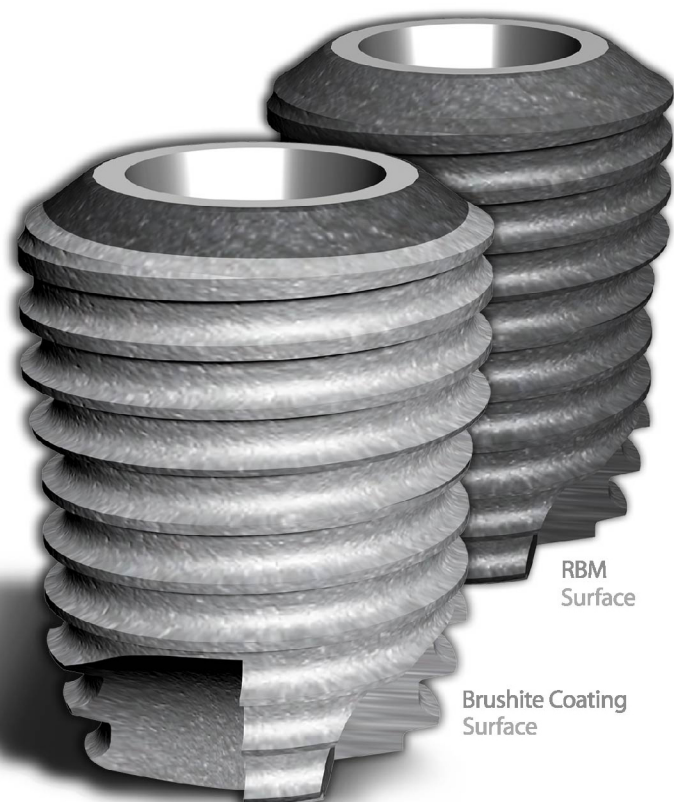
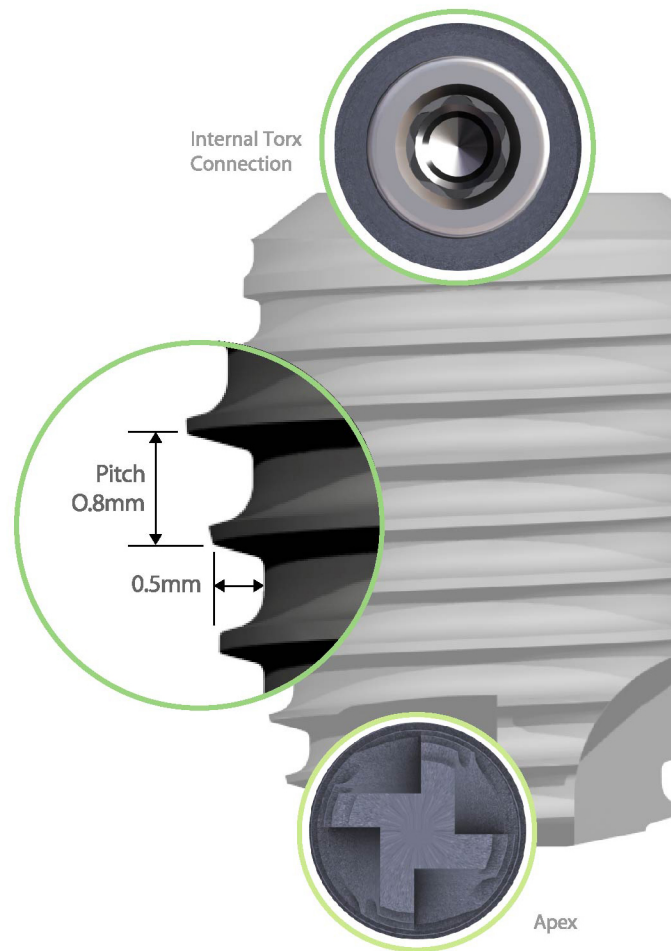
Immediate replacement for failed implants

Faster osseointegration by Brushite coating



SM Extra Wide Product Design

- **Tapered design**
Tapered body structure to improve osseointegration and initial stability.
Threads consist of 0.8mm pitch and 0.5mm height.
- **Internal Torx Connection**
Torx connection is applied for abutment connection to prevent deformation against strong torque.
- **Apex**
Quadruple cutting edges improve self-tapping
- **Depth Guide**
Body threads don't end up incomplete, but the threads go to the end for a better insertion. Insertion depth adjustment is easy.
- **No-mount System**
Mount is unnecessary. Convenient surgery by using fixture driver.
- **Restorations Comparability**
Restorations are compatible with SM implant system.

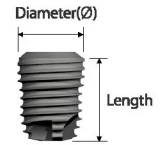


Dual Surface treatment



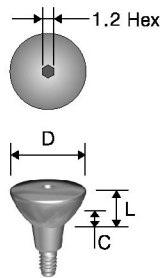
- * Coated layer is replaced by new bone, prevents from exfoliating problem.
- * In case of faster osseointegration needs for early / immediate loading.
- * More than 10 years of proven clinical data (coating treatment).
- * Excellent absorption with higher solubility in a biological environment.

SM Extra Wide Fixture



Diameter(Ø)	Ø5.9			Ø6.4			Ø6.9		
Length(mm)	6	8	10	6	8	10	6	8	10
RBM	 MX 5906	 MX 5908	 MX 5910	 MX 6406	 MX 6408	 MX 6410	 MX 6906	 MX 6908	 MX 6910
Brushite (CaP)		 MX 5908B	 MX 5910B		 MX 6408B	 MX 6410B		 MX 6908B	 MX 6910B

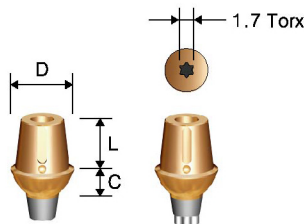
SM Extra Wide Abutment



Healing Abutment

Diameter		Ø8.2				Ø9.2			
Length	Cuff	1	2	3	4	1	2	3	4
2		SAH 8212				SAH 9212			
3			SAH 8223				SAH 9223		
4				SAH 8234				SAH 9234	
5					SAH 8245				SAH 9245

(mm)

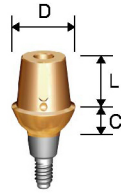


Cemented Abutment

Diameter			Ø6.8		Ø7.8	
Length	Cuff	Type	Torx	Non-Torx	Torx	Non-Torx
4	1		SAC 6814T(II)	SAC 6814N(II)	SAC 7814T(II)	SAC 7814N(II)
	2		SAC 6824T(II)	SAC 6824N(II)	SAC 7824T(II)	SAC 7824N(II)
	3		SAC 6834T(II)	SAC 6834N(II)	SAC 7834T(II)	SAC 7834N(II)
	4.5		SAC 6844T(II)	SAC 6844N(II)	SAC 7844T(II)	SAC 7844N(II)
5	6		SAC 6864T(II)	SAC 6864N(II)	SAC 7864T(II)	SAC 7864N(II)
	1		SAC 6815T(II)	SAC 6815N(II)	SAC 7815T(II)	SAC 7815N(II)
	2		SAC 6825T(II)	SAC 6825N(II)	SAC 7825T(II)	SAC 7825N(II)
	3		SAC 6835T(II)	SAC 6835N(II)	SAC 7835T(II)	SAC 7835N(II)
	4.5		SAC 6845T(II)	SAC 6845N(II)	SAC 7845T(II)	SAC 7845N(II)
	6		SAC 6865T(II)	SAC 6865N(II)	SAC 7865T(II)	SAC 7865N(II)

*Impression Coping, Fixture Analog is compatible with SM system.

(mm)



Solid Abutment

Length	Diameter		Ø6.8	Ø7.8
	Cuff			
4	1		SAS 6814(II)	SAS 7814(II)
	2		SAS 6824(II)	SAS 7824(II)
	3		SAS 6834(II)	SAS 7834(II)
	4.5		SAS 6844(II)	SAS 7844(II)
	6		SAS 6864(II)	SAS 7864(II)
5.5	1		SAS 6815(II)	SAS 7815(II)
	2		SAS 6825(II)	SAS 7825(II)
	3		SAS 6835(II)	SAS 7835(II)
	4.5		SAS 6845(II)	SAS 7845(II)
	6		SAS 6865(II)	SAS 7865(II)
7	1		SAS 6817(II)	SAS 7817(II)
	2		SAS 6827(II)	SAS 7827(II)
	3		SAS 6837(II)	SAS 7837(II)
	4.5		SAS 6847(II)	SAS 7847(II)
	6		SAS 6867(II)	SAS 7867(II)

(mm)



Protect Cap

Length	Diameter		Ø6.8	Ø7.8
	4	SASC 6804(II)		SASC 7804(II)
5.5	SASC 6805(II)		SASC 7805(II)	
7	SASC 6807(II)		SASC 7807(II)	

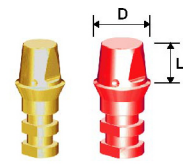
(mm)



Impression Cap

Length	Diameter		Ø6.8	Ø7.8
	10	SASI 6810(II)		SASI 7810(II)

(mm)



Solid Analog

Length	Diameter		Ø6.8	Ø7.8
	4	SASA 6804(II)		SASA 7804(II)
5.5	SASA 6805(II)		SASA 7805(II)	
7	SASA 6807(II)		SASA 7807(II)	

(mm)

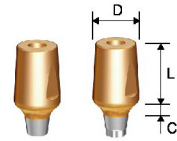


Bridge Single

Plastic Coping

Length	Diameter		Ø6.8	Ø7.8
	10	SASP 6810B(II)		SASP 7810B(II)
	SASP 6810S(II)		SASP 7810S(II)	

(mm)



SM Mill Abutment

Length	Diameter		Ø6.5	Ø7.5
	Type	Cuff	2.3	2.3
13	Torx		SMA 6513T	SMA 7513T
	Non-Torx		SMA 6513N	SMA 7513N

(mm)

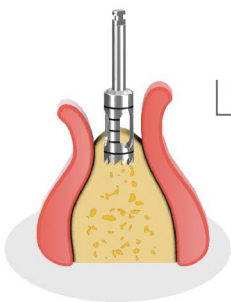
SM Extra Wide Surgical Kit Set



Straight Drill		Diameter	Ø4.8			
		Laser Marking	6 / 8 / 10			
Trepine Drill		Inner Diameter / Outer Diameter	Ø3.9 / Ø4.7	Ø4.4 / Ø5.2	Ø4.9 / Ø5.7	
		Laser Marking	2 / 4 / 6 / 8 / 10	TRD 4739	TRD 5244	TRD 5749
Final Drill		Diameter(D1/D2)	Ø4.5 / Ø5.4	Ø5.0 / Ø5.9	Ø5.5 / Ø6.4	
		Length	6	RTD 5406	RTD 5906	RTD 6406
			8	RTD 5408	RTD 5908	RTD 6408
10	RTD 5410	RTD 5910	RTD 6410			
Tap Drill		Diameter	Ø5.9	Ø6.4	Ø6.9	
		Length	15	TPR 5915	TPR 6415	TPR 6915
Fixture Driver for Ratchet Wrench		Length	13	21		
		Type		Short	Long	
			HGW4813	HGW4821		
Fixture Driver for Contra Angle		Length	21	27		
		Type		Short	Long	
			HGC4824	HGC4830		

(mm)

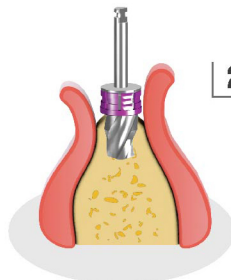
Surgical Procedure SM Extra Wide



1 Trephine Drill

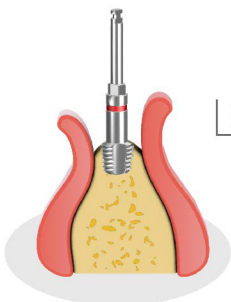
Drilling a hole in advance with a trephine drill makes surgery more convenient. Collected bone by trephine drill can be used for extraction site cover. Specific trephine drills are available for each implant diameters. Drilling speed at 600~800rpm

※Tips for using a trephine drill.
After forming a guide line by counterclockwise low speed drilling, drill clockwise to the proper depth for more convenient use.



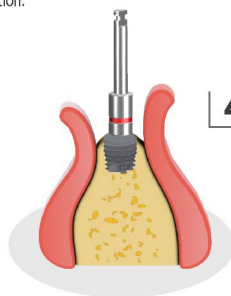
2 Final Drill

Additional final drilling is needed to expand hole depending on implant sizes.
 Ø5.4 final drill for Ø5.9 Implant
 Ø5.4 - Ø5.9 final drill for Ø6.4 Implant
 Ø5.4 - Ø5.9 - Ø6.4 final drill for Ø6.9 Implant
 Drilling speed at 600~800rpm



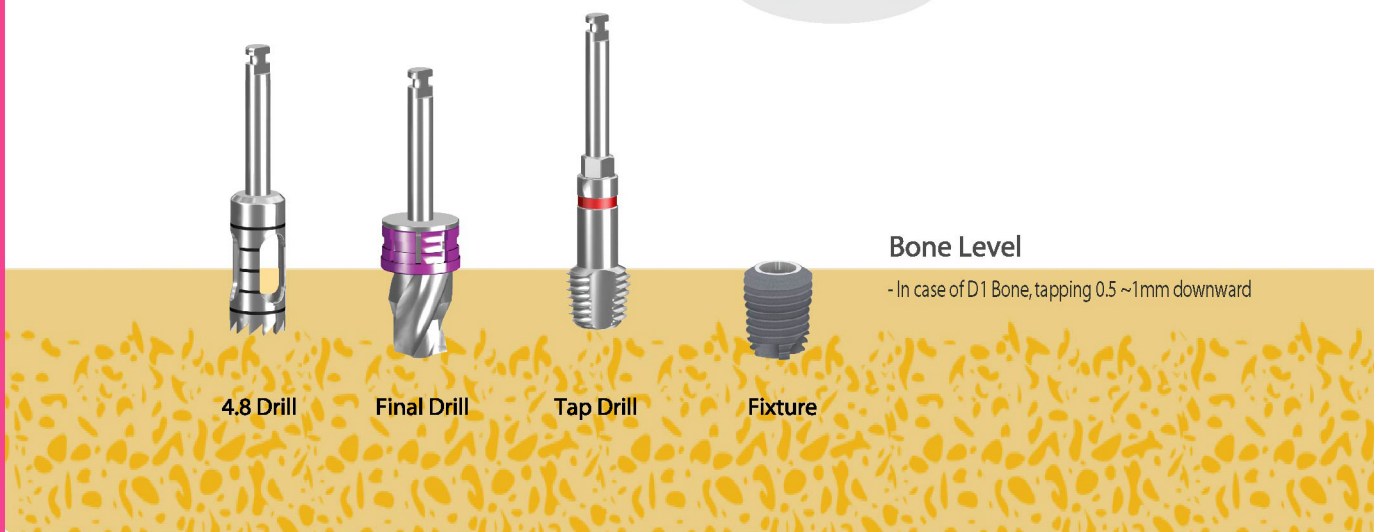
3 Tap Drill

D1 or D2 bone quality can create excessive torque against implant insertion. An extra wide tap drill should be used for tapping.
 Ø5.9 tap drill for Ø5.9 Implant
 Ø6.4 tap drill for Ø6.4 Implant
 Ø6.9 tap drill for Ø6.9 Implant



4 Implant Insertion

Pick up an implant with a fixture driver and proceed with implantation.
 (Use a ratchet wrench if hand insertion is preferred)



Surgical Tip

Bone Density	D1 Density	D2 Density	D3 Density	D4 Density
Procedure	Final Drill + Tap Drill	Final Drill + Tap Drill	Final Drill	Final Drill
	Tapping 0.5~1mm downward	Tapping to the bone level	Final Drilling to the bone level	Insert the fixture 0.5mm downward
Insertion Torque	45~50 Ncm	40~45 Ncm	35~40 Ncm	30~35 Ncm

Clinical Cases SM Extra Wide

Case 1.



1. Pre - op Panorama radiograph



2. # 26,27



3. SM-Extra Wide(Brushite coated)
6.4 x 8 mm



4. Insert the Implants



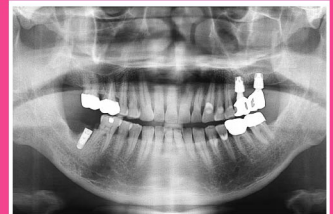
5. Connect the Healing abutments after
insertion of the implants



6. Stable bone level without
bone resorption



7. Connect the Impression Coping



8. Final Prosthesis

Case 2.



1. Pre - op Panorama radiograph



2. # 36,37



3. Insert the Implants
(6.4 x 8mm, 6.4 x 6mm)



4. Connect the Healing Abutments



5. Panorama radiograph after insertion
of the implants



6. Stable bone level after final prosthesis



7. Cement-retained final prosthesis

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