Osstem Implant 2014-15 Comprehensive Catalog

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SS SYSTEM CATALOG

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CEO'S Message

"Osstem - Future Technology and Superior Quality"

Products that dentists can trust. That is the mission of **Osstem Implant.**

We deeply appreciate all of our customers who use our products. We deeply appreciate all of our customers who use our products. With population aging, rising incomes, and increased interest in health and aesthetics, implants have become an essential treatment in dentistry around the world.

Today, implants are well-known as a safe and effective treatment option, and the leading treatment option for patients with no teeth. To satisfy this global trend, Osstem has invested heavily in R&D and continuously promotes innovative products, resulting in it becoming a global leader in technology and product quality.

Osstem is releasing new products including TSIII CA, TSIII BA, SSIII HA, and MS SA, and is strengthening its product line-up in order to enable application in a variety of clinical cases. Other products to be released that will enable safe, easy implant procedures include SMARTbuilder, AutoBone collector, 123 KIT, and ESSET KIT.

TSIII CA in particular is expected to become a leading product in the global implant market after launching as a groundbreaking product with superior hydrophilic properties capable of at least 30% greater fusion than ordinary SA products due to its calcium ion solution encapsulation. Also, to improve our customers' convenience and foster reasonable purchasing, we have opened an online store, DenALL (www.denall.com), where dentistry materials can be purchased affordably and conveniently. Osstem leads the way in superior product quality and exports to over 50 countries including the USA, China, Japan, Germany, and India, and is the first company in Korea to record implant sales of over 30 million products and overseas subsidiary sales of over 100 billion won.



Osstem Implant CEO Gyu-ok Choi (DDS, Ph.D)

Choilying



1997

- 01 OSSTEM Co., Ltd. Founded
- 12 Launched "Doobunae" (health insurance claiming software)

2000

- 06 Launched "Hanaro" (dentistry management software)
- **10** Acquired Korean company Sumin Comprehensive Dental Materials

2001

2002

01 Obtained CE-0434 certification 03 Established AIC Training Center

01 Established Osstem

08 Obtained US FDA

certification

Implant Research Center

Launched USII implant

10 Launched SSII implant

2006

countries

03 Changed company name to 02 Listed on KOSDAQ Osstem Implant Co., Ltd. 04 Obtained GOST-R certification in Russia **12** Established the first incorporation stage of

2007

stock exchange and began trading 06 Obtained GOST-R certification in Russia

Administration

12 Selected nextoverseas subsidiaries in 12 generation products Obtained certification from Australia's Therapeutic Goods

01 Established Osstem's osteology research

2008

center 12 Selected as a National Strategic Leading Technology Company

2009

10 Obtained permission from Japan's Ministry of Health, Labor, and Welfare to produce and sell medical devices

2010

- 03 Launched TSIII SA implant
- 06 Launched TSIII HA implant
- **08** Selected as WPM **Biomedical National Policy** Company
 - 12 Exceeded 10,000 dentistry software members

Headquarters • Overseas Subsidiary Distributor

EMEA

Albania Azerbaijan Bulgaria Croatia Czech Denmark Estonia Finland Germany Greece Italy Latvia Lithuania Norway Poland Portugal

Romania Serbia Slovakia Spain Ukraine United Kindom Iran Iraq Jordan Kuwait Lebanon Pakistan Saudi Arabia Syria Sudan

ASIA / OCEANIA

Myanmar Papua New Guinea

N/S. AMERICA

Peru

2011

- 06 Selected Osstem Implant Research Center as an ATC (Superior Technology **Research Center**)
- 07 Selected as a world champion business
- **10** Obtained Health Canada certification
- 12 Launched K2 unit chair Selected as "Global First-Class Product"

2013

- **01** Launched Osstem's xenograft "A-Oss"
- 09 Launched K3 unit chair
- 10 Selected as a hidden champion business

2014

05 Selected as a WorldClass 300 business

2012

- 06 Launched TSIII CA implant
- 07 Established Osstem Medical Equipment Research Center

OSSTEM[®] Implant Design feature

Osstem Implant,

the leader in popularizing implants in Korea! We stand out with our passion for strategic R&D and best products, creating globally trend-setting implants.





Submerged type implant with an Internal hex 11° taper connection structure

• Connection type and color - Mini/Regular

- Highest initial stability in soft bone by using uppersection small thread
- Corkscrew thread & cutting edge
- Easy path adjustment through a superior self-threading effect
- Acquires insertion torque with an increase in soft bone initial stability and without deviation according to the drill diameters
- The various body shape options are available according to the bone and patient's clinical condition
- TSII (straight body): Easily adjustable insertion depth
- TSIII (1.5° taper body): Able to acquire the initial stability needed for immediate loading even in soft bone
- TSIV (6° taper body): Able to acquire superior initial stability only in maxillary sinus and soft bone

• Applied Surface - SA/CA/BA/HA

Non-submerged type implant with an Internal octa 8° taper connection structure based on one-time procedures

- Connection type and color Regular/Wide
- Corkscrew thread & cutting edge
 Easy path adjustment through a superior self-threading
- effect - Acquires insertion torque with an increase in soft bone initial stability and without deviation according to the drill diameters
- The various body shape options are available according to the bone and patient's clinical condition
- SSII (straight body): Easily adjustable insertion depth SSIII (1.5° taper body): Able to acquire the initial stability
- needed for immediate loading even in soft bone
- Applied Surface SA/CA/HA



External hex

Corkscrew thread & cutting edge

- Submerged type implant with an external hex connection structure
- Connection type and color
 Mini/Regular/Wide/Wide PS
- Corkscrew thread & cutting edge
 Easy path adjustment through a superior self-threading
 effect
- Acquires insertion torque with an increase in soft bone initial stability and without deviation according to the drill diameters
- The various body shape options are available according to the bone and patient's clinical condition
- USII (straight body): Easily adjustable insertion depth USIII (1.5 $^\circ$ taper body): Able to acquire the initial stability
- OSIII (1.5° taper body): Able to acquire the initial stability needed for immediate loading even in soft bone
- USIV (6° taper body): Able to acquire superior initial stability only in maxillary sinus and soft bone
- Applied Surface SA

OSSTEM[®] Implant Surface feature

Osstem Implant provides world-class surface technologies in surface treatment, the core implant technology for fast and safe procedures

- Provides optimum surface through acid treatment
- Provides Ra $2.5 \sim 3.0 \mu m$ surface roughness However, upper section 0.5mm area is Ra $0.5 \sim 0.6 \mu m$
- Achieved uniform micro-pit $1.3 \mu m$ in size
- 46% greater surface area compared to RBM

Bone reaction performance (in-vitro and in-vivo)

- 20% improvement in osteoblast separation and ossification compared to RBM
- Initial bone reaction performance in animal model (mini-pig)
- 48% improvement in initial stability (RT, 4 weeks) compared to RBM
- 20% improvement in ossification (BIC, 4 weeks) compared to RBM

Superhydrophilic SA surface encapsulated in calcium solution

- Maintains optimum surface identical to SA surface - Surface activity maximized after encapsulated in
- calcium (CaClz) solution - Increased ossification surface area through excellent
- blood wettability
- Improved bone reaction performance in the early osseointegration stage compared to SA surface

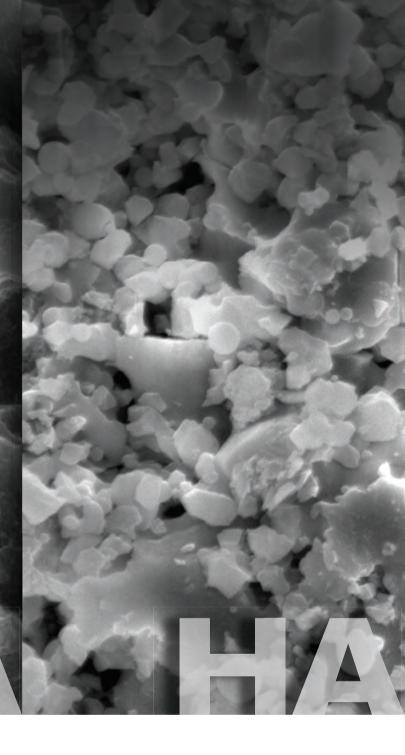
Bone reaction performance (in-vitro and in-vivo)

- 3x increase in protein, cell adhesion compared to SA - 19% increase in initial cell separation (7 days)
- compared to SA 34% improvement in initial stability (RT, 2 weeks)
- compared to SA
- 26% improvement in ossification (BIC, 2 weeks) compared to SA

- Surface coated with low crystalline Nano-HA in SA
- Ultra-thin film with HA coating and 10nm or lower thickness
 - IICKNESS
- HA coating on SA surface (Ra 2.5~3.0 μm)
- Dual function of titanium and HA
- HA is naturally removed during ossification process

Bone reaction performance (in-vitro and in-vivo)

- Fused surface having advantages of both SA and HA
- Maintains advantage of SA optimum surface formation - Superior early ossification of the HA in soft bone
- condition
- 30% improvement in ossification (BIC) compared to SA



- Premium surface coated with high crystalline HA
- High crystalline HA coating $30 \sim 60 \mu m$ in thickness
- HA coating on RBM surface (Ra $3.0 \sim 3.5 \mu m$)
- Achieved at least 98% HA high crystallization
- Solves problem of interbody fusion in low crystalline HA

Bone reaction performance (in-vitro and in-vivo)

- Excellent biocompatibility in HA that is similar to bone
- 2x improvement in osteoblast ossification (5 days) compared to SA
- 40% improvement in initial stability (RT, 4 weeks) in animal models compared to SA
- Suitable for weak bone tissue, or tooth extraction or implant insertion

SS SYSTEM Contents









Set







볋





Transfer Impression Coping







Octa Transfer Impression Coping



O-ring Set







Locator ® Extended Replacement Male









FIXTURE

016	SSII SA Fixture
018	SSIII SA Fixture
020	SSIII CA Fixture
022	SSIII HA Fixture
024	Simple Mount
025	Cover Screw
025	Headless Cover Screw
025	Closing Screw
026	Healing Abutment

COMPONENTS

028	PROSTHETIC FLOW DIAGRAM 1
030	Solid Abutment
033	Excellent Solid Abutment
038	PROSTHETIC FLOW DIAGRAM 2
039	ComOcta Abutment
040	ComOcta Plus Abutment
041	ComOcta Milling Abutment
042	ComOcta Gold Abutment
043	ComOcta NP-Cast Abutment
044	ComOcta Temporary Abutment
045	SmartFit Abutment
046	ComOcta Angled Abutment
049	Hanaro Abutment
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051	Octa Abutment
056	PROSTHETIC FLOW DIAGRAM 4
057	O-ring Abutment
059	Locator [®] Abutment

SSII SA Fixture

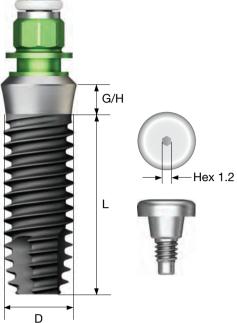
- Non-submerged implants based on one-stage surgery with internal octa and 8° taper connections Optimum screw thread design for optimum SA surface Straight body design for easy adjustment of insertion depth
- Powerful self-threading effect using corkscrew thread
- Recommended insertion torque : 40Ncm or lower
- % In single implant cases for posterior region, use of fixture at least 4.5mm in diameter is recommended

NoMount fixture order code

: fixture product code (ex : SS2R4011S18)

Pre-Mounted fixture order code (fixture + simple mount + cover screw)

: **A** + fixture product code (ex : **A**SS2R4011S18)





D Ø4.0 P Ø4.8 R	G/H L	7	8.5	10	11.5	13
	1.8	SS2R4007S18	SS2R4008S18	SS2R4010S18	SS2R4011S18	SS2R4013S18
	2.8		SS2R 4008S28	SS2R4010S28	SS2R4011S28	SS2R 4013S28
DØ4.5	G/H L	7	8.5	10	11.5	13
P Ø4.8						
	1.8	SS2R4507S18	SS2R4508S18	SS2R4510S18	SS2R4511S18	SS2R4513S18
	2.8		SS2R 4508S28	SS2R 4510S28	SS2R4511S28	SS2R 4513S28
D Ø4.5	G/H L	7	8.5	10	11.5	13
P Ø6.0						
	2.0	SS2W4507S20	SS2W 4508S20	SS2W 4510S20	SS2W4511S20	SS2W4513S20



SS2W5006S20 SS2W5007S20 SS2W5008S20 SS2W5010S20 SS2W5011S20 SS2W5013S20



SSIII SA Fixture

- \bullet Non-submerged implants based on one-stage surgery with internal octa and $8^{\,\circ}$ taper connections
- Optimum screw thread design for optimum SA surface
- Taper body design with superior initial stability
- Powerful self-threading effect using corkscrew thread
- Acquires the initial stability needed in immediate loading even in soft bone

Ultra-wide

018

SS SYSTEM

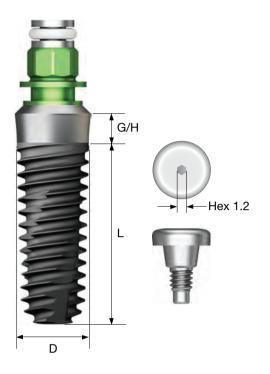
- Immediate placement in tooth extraction case and useful in exchanging a failed implant
- With its optimized apex design, capable to obtain stable initial stability in the cases of tooth extraction and at the bottom 3mm
- Recommended insertion torque : 40Ncm or lower
- % In single implant cases for posterior region, use of fixture at least 4.5mm in diameter is recommended

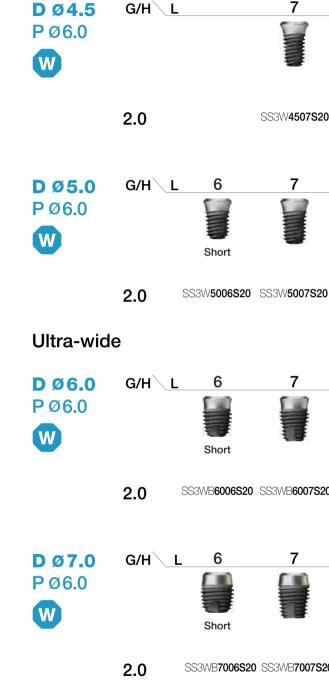
NoMount fixture order code

: fixture product code (ex : SS3R4011S18)

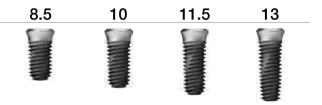
- **Pre-Mounted fixture order code** (fixture + simple mount + cover screw)
- : **A** + fixture product code (ex : **A**SS3R4011S18)

3	D Ø3.5 P Ø4.8 R	G/H L		8.5	10	11.5	13
		1.8		SS3R 3508S18	SS3R 3510S18	SS3R 3511S18	SS3R 3513S18
		2.8		SS3R 3508S28	SS3R 3510S28	SS3R 3511S28	SS3R 3513S28
	DØ4.0	G/H L	7	8.5	10	11.5	13
	P Ø 4.8 R						
		1.8	SS3R4007S18	SS3R4008S18	SS3R4010S18	SS3R4011S18	SS3R4013S18
		2.8		SS3R4008S28	SS3R 4010S28	SS3R4011S28	SS3R4013S28
	D Ø4.5	G/H L	7	8.5	10	11.5	13
	P Ø 4.8 R						
		1.8	SS3R4507S18	SS3R4508S18	SS3R4510S18	SS3R4511S18	SS3R4513S18
		2.8		SS3R 4508S28	SS3R 4510S28	SS3R 4511S28	SS3R 4513S28











019

SS3WB6006S20 SS3WB6007S20 SS3WB6008S20 SS3WB6010S20 SS3WB6011S20 SS3WB6013S20



SS3WB7006S20 SS3WB7007S20 SS3WB7008S20 SS3WB7010S20 SS3WB7011S20 SS3WB7013S20

SSIII CA Fixture

- \bullet Non-submerged implants based on one-stage surgery with internal octa and 8° taper connections
- Superior hydrophilic SA surface encapsulated in calcium solution
- Taper body design with superior initial stability
- Powerful self-threading effect using corkscrew thread
- Acquires the initial stability needed in immediate loading even in soft bone

Ultra-wide

020

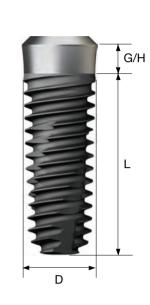
SS SYSTEM

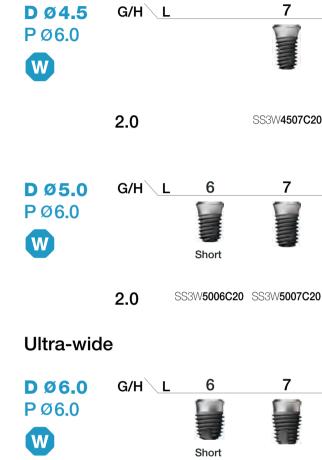
- Immediate placement in tooth extraction case and useful in exchanging a failed implant
- With its optimized apex design, capable to obtain stable initial stability in the cases of tooth extraction and at the bottom 3mm
- Recommended insertion torque: 40Ncm or lower
- % In single implant cases for posterior region, use of fixture at least 4.5mm in diameter is recommended

NoMoun fixture order code

: fixture product code (ex : SS3R4011C18)

D Ø3.5	G/H L		8.5	10	11.5	13
P Ø 4.8 R						
	1.8		SS3R 3508C18	SS3R3510C18	SS3R3511C18	SS3R3513C18
	2.8		SS3R 3508C28	SS3R 3510C28	SS3R 3511C28	SS3R 3513C28
DØ4.0	G/H L	7	8.5	10	11.5	13
P Ø 4.8 R						
	1.8	SS3R4007C18	SS3R4008C18	SS3R4010C18	SS3R4011C18	SS3R4013C18
	2.8		SS3R4008C28	SS3R4010C28	SS3R4011C28	SS3R4013C28
DØ4.5	G/H L	7	8.5	10	11.5	13
P Ø 4.8						
	1.8	SS3R4507C18	SS3R4508C18	SS3R4510C18	SS3R4511C18	SS3R4513C18
	2.8		SS3R 4508C28	SS3R 4510C28	SS3R4511C28	SS3R 4513C28











 $\verb+SS3W4507C20 \ \verb+SS3W4508C20 \ \verb+SS3W4510C20 \ \verb+SS3W4511C20 \ \verb+SS3W4513C20 \ \verb+SS3W4511C20 \ \verb+SS3W4513C20 \ \verb+SS3W4510C20 \ \verb+SS3W4510C2$





SS3WB6006C20 SS3WB6007C20 SS3WB6008C20 SS3WB6010C20 SS3WB6011C20 SS3WB6013C20

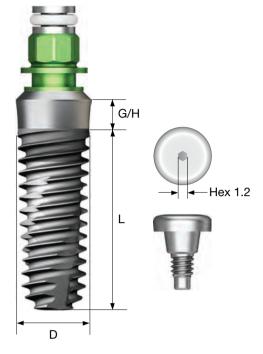


SS3WB7006C20 SS3WB7007C20 SS3WB7008C20 SS3WB7010C20 SS3WB7011C20 SS3WB7013C20

SSIII HA Fixture

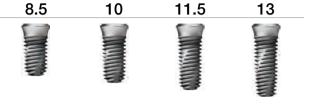
- \bullet Non-submerged implants based on one-stage surgery with internal octa and 8° taper connections
- Premium surface coated with high crystalline HA
- Taper body design with superior initial stability
- Powerful self-threading effect using corkscrew thread
- Acquires the initial stability needed in immediate loading even in soft bone
- Recommended insertion torque: 35Ncm or lower
- ※ In single implant cases for posterior region, use of fixture at least 4.5mm in diameter is recommended
- * HA fixture is not recommended in hard bone due to possibility of coating layer cracks and desquamation

Pre-Mounted fixture order code (fixture + simple mount + cover screw) : **A** + fixture product code (ex : **A**SS3R4011H18)





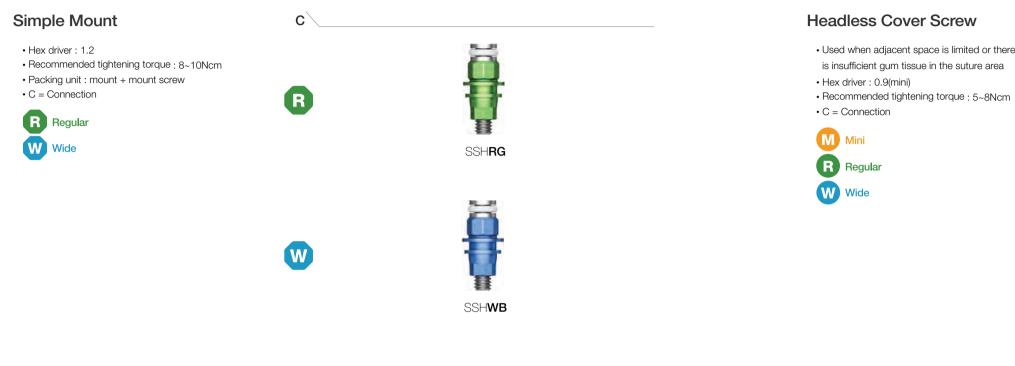
DØ4.0	G/H L	7	8.5	10	11.5	13
P Ø 4.8 R						
	1.8	SS3R4007H18	SS3R4008H18	SS3R4010H18	SS3R4011H18	SS3R4013H18
	2.8		SS3R 4008H28	SS3R4010H28	SS3R4011H28	SS3R4013H28
DØ4.5	G/H L	7	8.5	10	11.5	13
P Ø 4.8 R						
	1.8	SS3R4507H18	SS3R4508H18	SS3R4510H18	SS3R4511H18	SS3R4513H18
	2.8		SS3R 4508H28	SS3R4510H28	SS3R4511H28	SS3R 4513H28
D Ø4.5	G/H L	7	8.5	10	11.5	13
P Ø 6.0						
	2.0	SS3W4507H20	SS3W4508H20	SS3W4510H20	SS3W4511H20	SS3W4513H20



SS3W5006H20 SS3W5007H20 SS3W5008H20 SS3W5010H20 SS3W5011H20 SS2W5013H20



Mount & Screw



Cover Screw

• Hex driver : 0.9(mini), 1.2(regular/wide) • Recommended tightening torque : 5~8Ncm C = Connection



T M SGCM100

C

R

W





Headless Cover Screw

• Used when adjacent space is limited or there is insufficient gum tissue in the suture area

R

С

C

M



• Used when adjacent space is limited or there

- is insufficient gum tissue in the suture area Hex driver : 1.2
- Recommended tightening torque : 5~8Ncm • C = Connection















Healing Abutment



Н







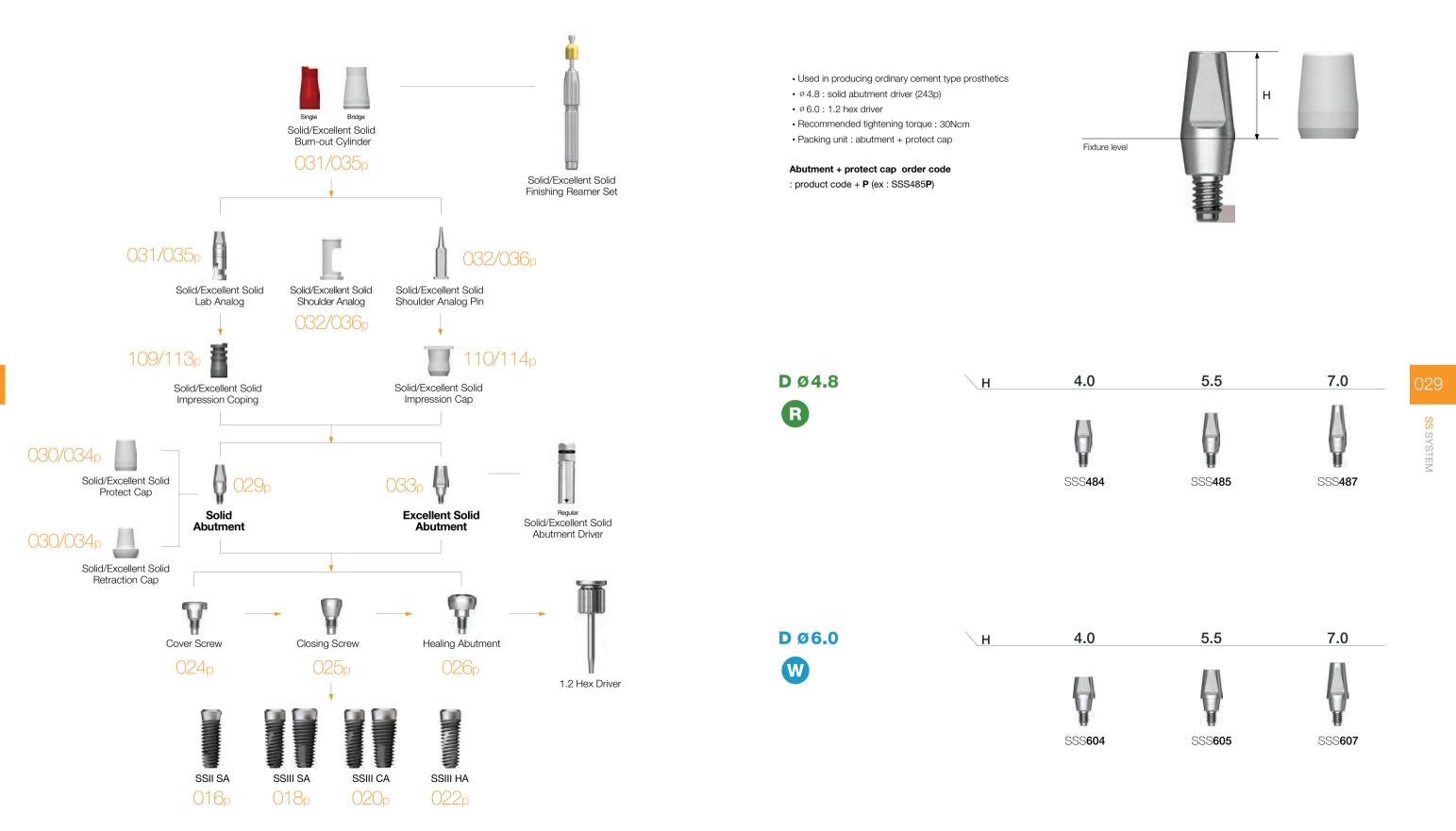


PROSTHETIC FLOW DIAGRAM 1

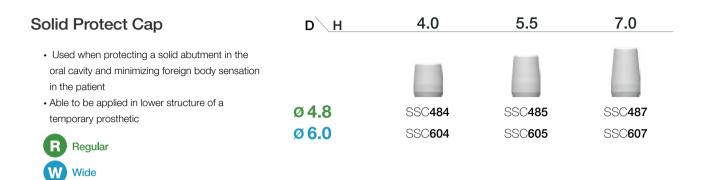
Solid / Excellent Solid

Abutment Level Impression

Solid Abutment



Solid Abutment Components



Solid Impression Coping	D
Used in taking impressionsUnification of existing positioning cylinder and impression cap	
Regular	ø4.8
W Wide	Ø6.0



Solid Lab Analog	D H
 Achieves solid abutment of the oral cavity on a working model Achieves small groove for G/H identification 	
R Regular	Ø4.8
Wide	Ø 6.0



Solid Burn-out Cylinder	D\H
 Used as a prosthetic framework when solid lab analog is attached After casting a prosthetic, margin area is 	
adjusted using specialized reamer	ø 4.8
R Regular W Wide	Ø 6.0



SSIC604





SSIC485 SSIC605













SSSA**485** SSSA605



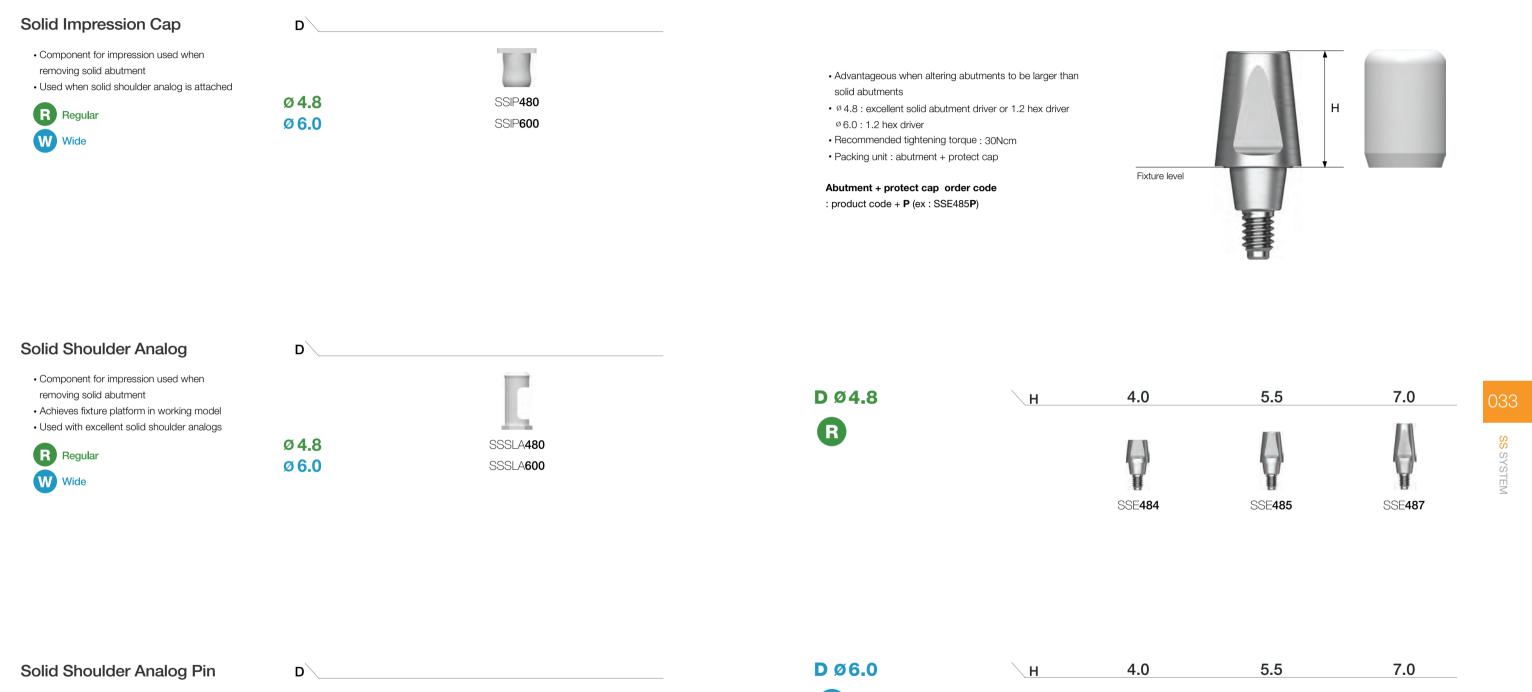






Solid Abutment Components

Excellent Solid Abutment



- Component for impression used when removing solid abutment
- Used when solid shoulder analog is attached

SS SYSTEM

- Prosthetic component for preventing fractures in working models
- Used with excellent solid shoulder analog pins

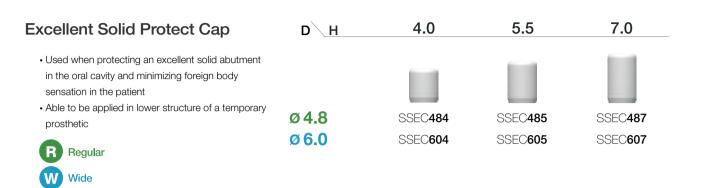




W



Excellent Solid Abutment Components



Excellent Solid Impression Coping	D\H
 Used in taking impressions Unification of existing positioning cylinder	Ø 4.8
and impression cap Regular Wide	Ø 6.0

Excellent Solid Retraction Cap	D	4.0	5.5	7.0
 Able to take an impression with an accurate margin when taking a direct impression from an excellent solid abutment 				
R Regular	ø 4.8	SSERC484	SSERC 485	SSERC487
Wide	Ø6.0	SSERC604	SSERC605	SSERC607

Excellent Solid Lab Analog	D
 Achieves an excellent solid abutment of the oral cavity on a working model Achieves small groove for G/H identification 	
R Regular	
Wide	Ø 4.8
	Ø 6.0

Excellent Solid Positioning	D\H	4.0	5.5	7.0
• Used when taking an impression while excellent solid impression cap is attached		Ť	Ħ	T
R Regular	Ø4.8	SSEPG484	SSEPG485	SSEPG 487
Wide	Ø 6.0	SSEPG604	SSEPG605	-

Excellent Solid Burn-out Cylinder	D <u>H</u>
 Used as a prosthetic framework when excellent solid lab analog is attached After casting a prosthetic, margin area is adjusted using specialized reamer 	Ø4.8
R Regular	Ø6.0
Wide	

4.0



SSEIC**484** SSEIC**604**

5.5



SSEIC485 SSEIC605

7.0







SSEA**484** SSEA**604**

5.5



SSEA**485** SSEA**605**





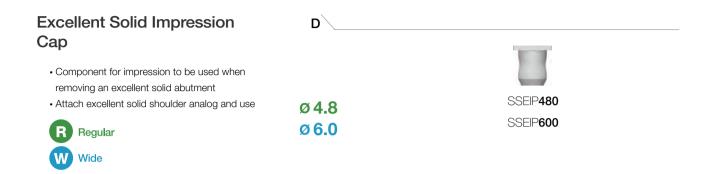
SSEA**487** SSEA**607**

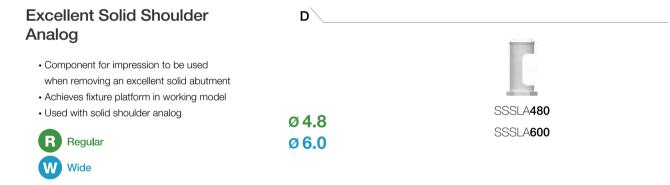


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Excellent Solid Abutment Components





D

Ø4.8

Ø6.0



Excellent Solid Shoulder Analog Pin

W Wide

 Component for impression to be used when removing an excellent solid abutment • Attach excellent solid shoulder analog and use Prosthetic component for preventing fractures in working models Used with solid shoulder analog pin R Regular







ComOcta / SmartFit

Fixture Level Impression

ComOcta Abutment

4.0

17

SSCA484

4.0

SSCA604

Туре

5.5

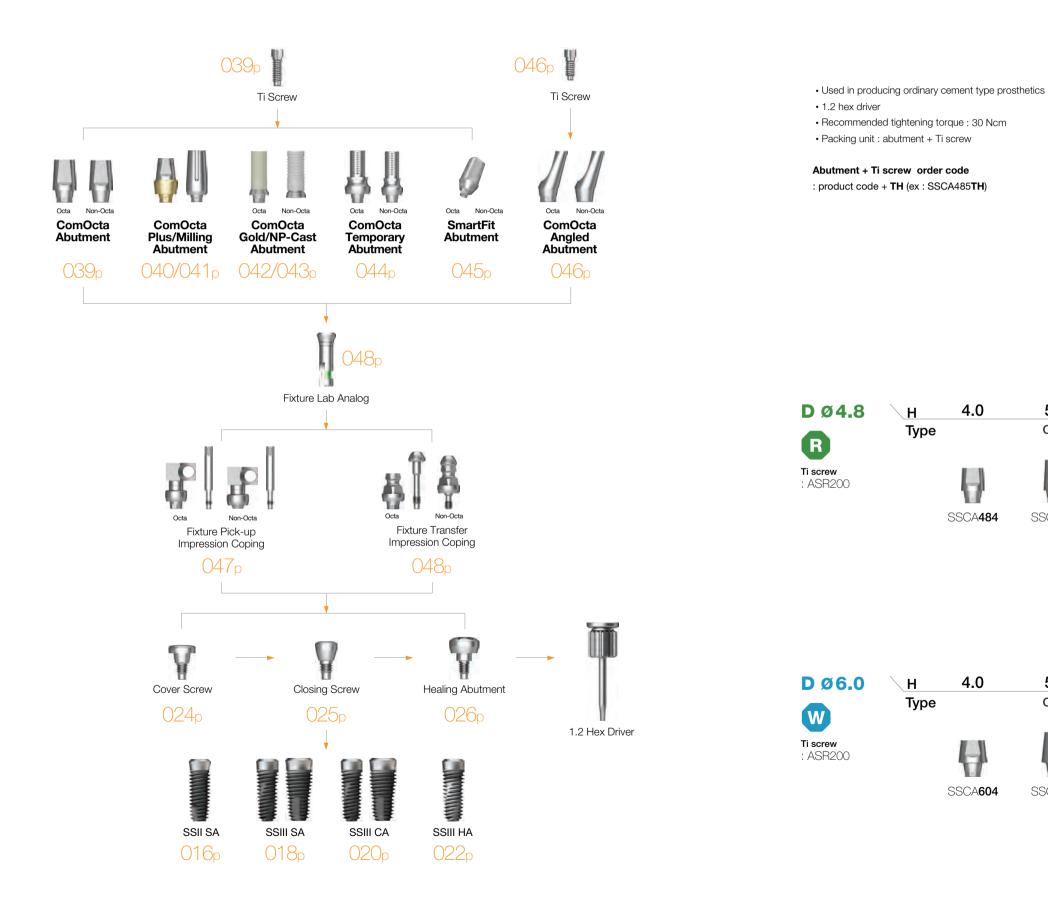
Octa

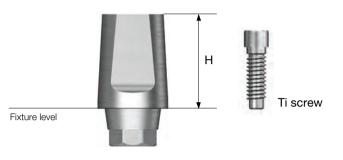
SSCA485

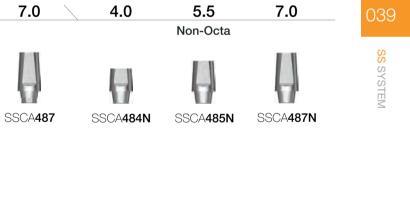
5.5

Octa

SSCA605









ComOcta Plus Abutment

ComOcta Milling Abutment

- Used when there is deep gingiva or a fixture is to be deeply inserted
- Gold coloring on gingiva region for aesthetics
- Shoulder contact with fixture platform region
- 1.2 hex driver
- Recommended tightening torque : 30 Ncm
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code : product code + TH (ex : SSCAP4826CTH)



- Tightening torque : 30 Ncm
- Uses 1.2 hex driver
- Used when an abutment's path must be altered or a
- prosthetic's margin area must be customized
- Shoulder contact with fixture platform region
- Packing unit : abutment + Ti Screw

Abutment + Ti screw order code

: product code + TH (ex : SSCMA4830TH)



DØ4.8

Octa SSCAP4816C Non-Octa SSCAP4816CN

G/H

1.0



3.0

2.0

SSCAP4826CN

SSCAP4846C SSCAP4836CN SSCAP4846CN

4.0













2.0



U	14	
	SS	

SYSTEM

ComOcta Gold Abutment

ComOcta NP-Cast Abutment

• Used when path, aesthetics, or space have limitations Shoulder contact with fixture platform region Prosthetic must be produced by casting dental-grade gold alloy Abutment region fusion range : 1400°C~1450°C (casting with non-precious metal alloys is incompatible) 11.5 • 1.2 hex driver Recommended tightening torque : 30 Ncm • Packing unit : abutment + Ti screw Abutment + Ti screw order code Fixture level : product code + **TH** (ex : COG480S**TH**)

- Used when path, aesthetics, or space have limitations
- Shoulder contact with fixture platform region
- Prosthetic must be produced by casting dental-grade non-precious metal alloy
- Abutment region fusion range : 1400°C~1550°C
- 1.2 hex driver
- Recommended tightening torque : 30 Ncm
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code : product code + TH (ex : CON480STH)





Octa

COG**480S**

Non-Octa

COG480B





D Ø6.0 \ Type



Octa



Non-Octa

Ti screw







CON600S

CON600B

ComOcta Temporary Abutment

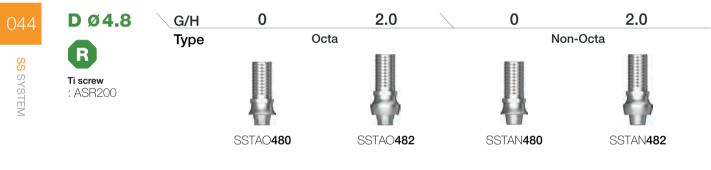
SmartFit Abutment

- Used in producing temporary prosthetics (Material: Ti Gr-3) Structure enabling easy customization and minimizing indication restrictions 10 • 1.2 hex driver Recommended tightening torque : 20Ncm • Packing unit : abutment + Ti screw Abutment + Ti screw order code G/H : product code + TH (ex : SSTAO480TH) Fixture level
 - Ti screw

- CAD/CAM abutment
- 1.2 hex driver
- Recommended tightening torque : 20Ncm(mini), 30Ncm(regular)
- Recommended clinical case
- Case where implant insertion area or angle is incorrect (max 30°)
- Multiple cases requiring consistent path and stable support
- Anterior case where aesthetic design is required
- Irregular or exceedingly deep gingiva case

How to Order

- Fill out order sheet - Send necessary items for each case to Osstem Implant CAD/CAM center
- Working time : 5~7days









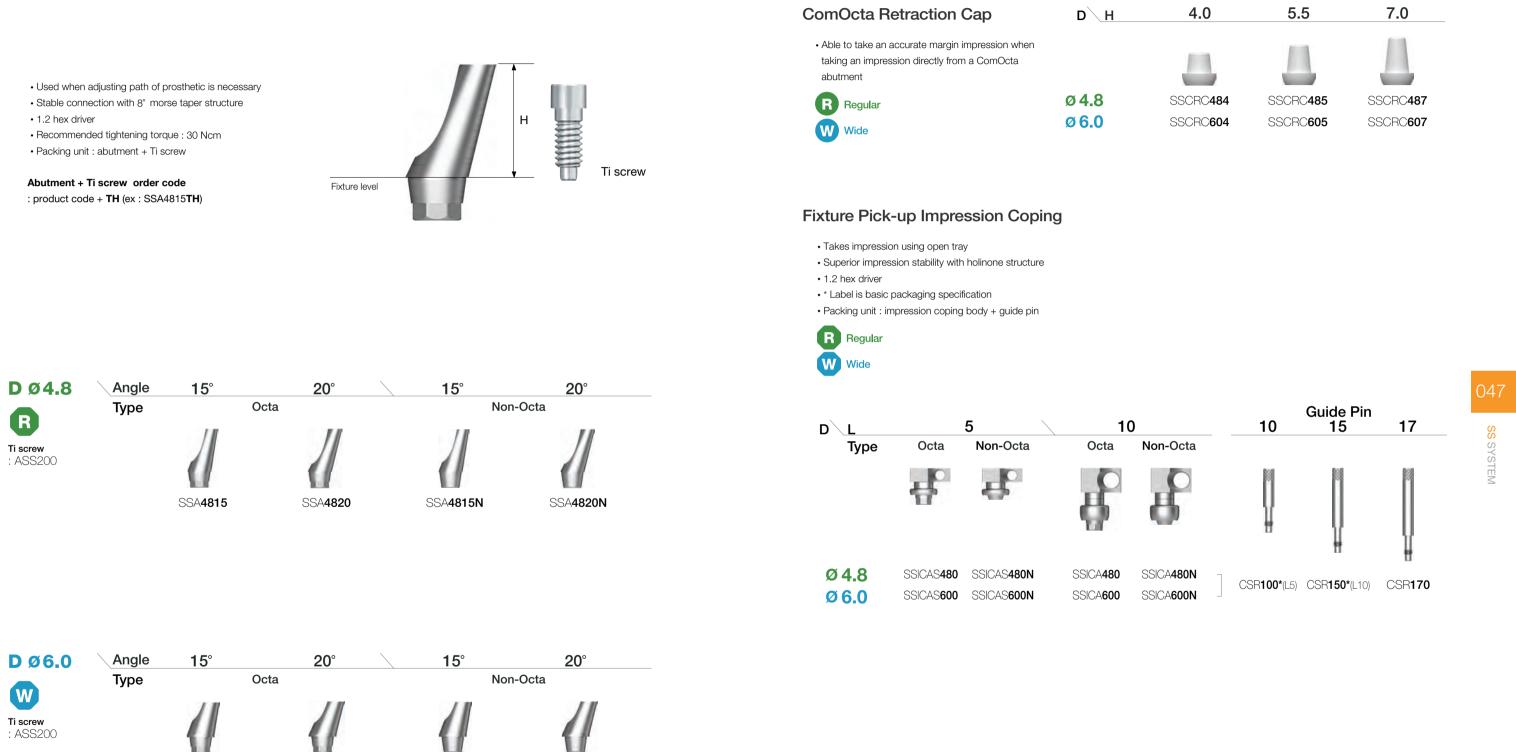


ComOcta Angled Abutment

046

SS SYSTEN

ComOcta Abutment Components



SSA6015

SSA6020

SSA6015N

SSA6020N

ComOcta Abutment Components

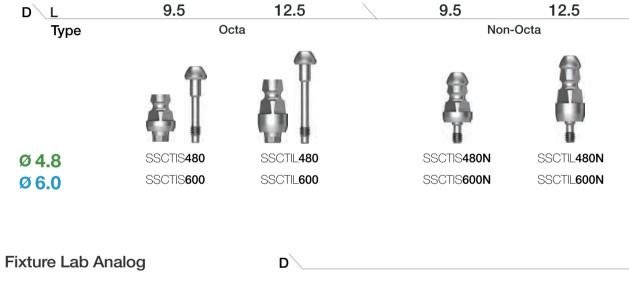
Hanaro Abutment

Fixture Transfer Impression Coping

- Takes impression using closed tray
- Increased popularity after creating impression with gemstone-shaped structure (\bigcirc)
- 1.2 hex driver
- Packing unit : octa Impression coping + guide pin
- non-octa Impression coping



SS SYSTEM



Achieves a fixture of the oral cavity on a working modelAchieves small groove for G/H identification



Ø 4.8

Ø6.0

SSFA**480**

SSFA600

Has three functions: fixture mount, transfer impression coping, abutment

- $\ensuremath{\cdot}$ Must use specialized screw when using as an abutment
- Shoulder contact with fixture platform region
- Gold coloring for aesthetics
- 1.2 hex driver
- Recommended tightening torque : 30 Ncm
- Packing unit : abutment + Ti screw + mount screw

Order made

Abutment + Ti screw + mount screw order code : product code + TH (ex : SSHM480CTH)

DØ4.8











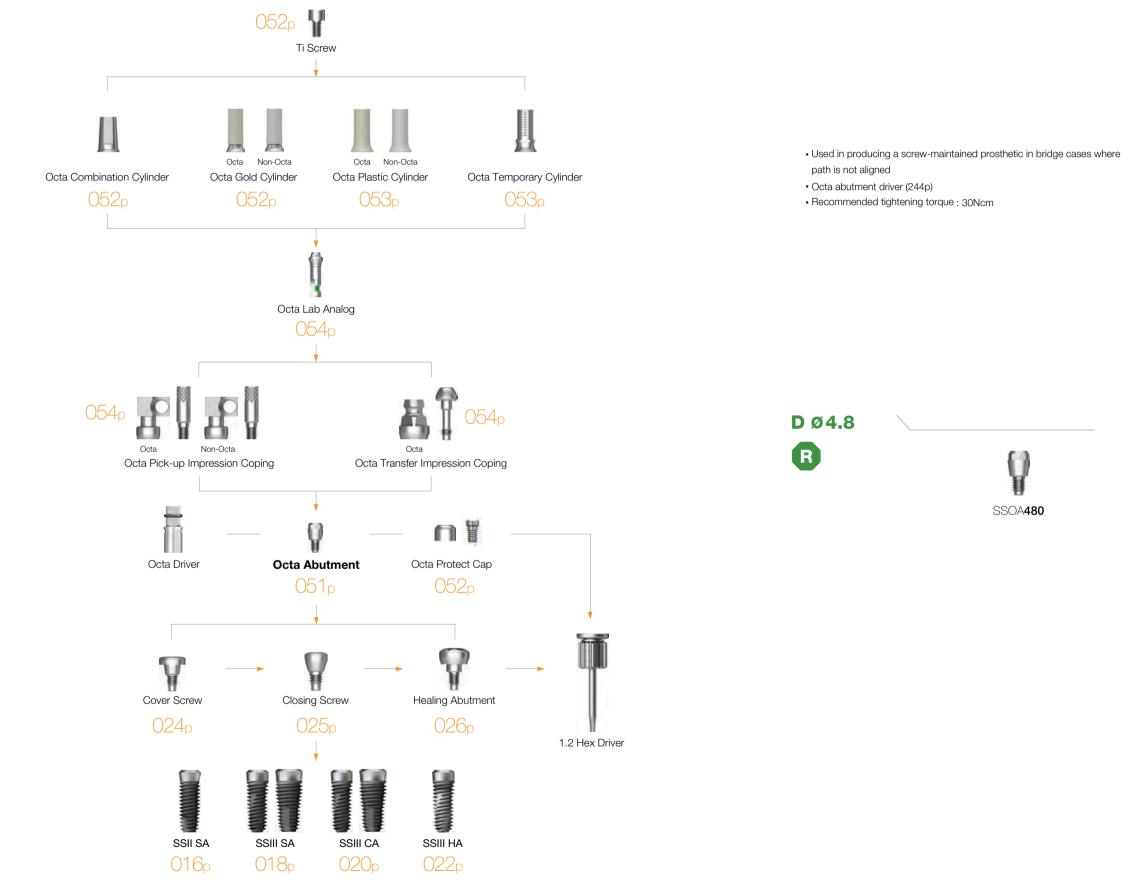


PROSTHETIC FLOW DIAGRAM 3

Octa

Abutment Level Impression

Octa Abutment



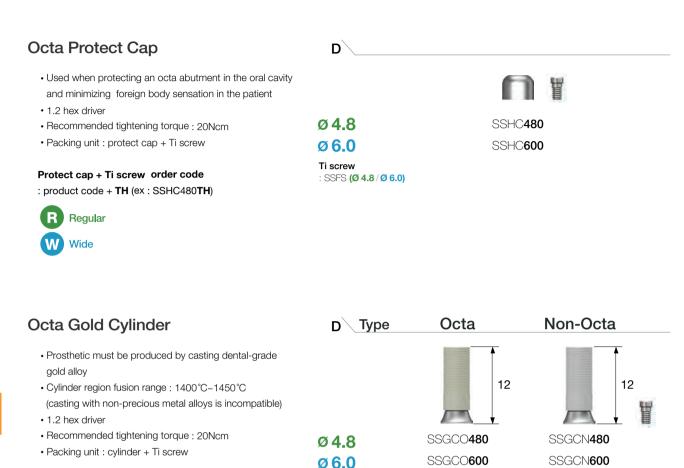








Octa Abutment Components



Ti screw

: SSFS (Ø 4.8 / Ø 6.0)

Cylinder + Ti screw order code





052

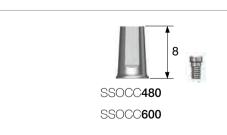
SS SYSTEN

Octa Combination Cylinder

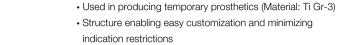
- Used in making a combination-retained prosthetic
- Inherent connection structure with two octa/non-octa
- advantages (max 60° path compensation)
- 1.2 hex driver
- Recommended tightening torque : 20Ncm
- Packing unit : cylinder + Ti screw

Cylinder + Ti screw order code : product code + TH (ex : SSOCC480TH)









Octa Temporary Cylinder

- Inherent connection structure with two octa/non-octa advantages (max 60° path compensation)
- 1.2 hex driver
- Recommended tightening torque : 20Ncm
- Packing unit : cylinder + Ti screw
- Ø6.0 Ti screw

Cylinder + Ti screw order code

: product code + TH (ex : SSTCO480TH)



Octa Plastic Cylinder

- Prosthetic production by casting with dental-grade alloy (gold, non-precious metals) after customization
- Lower precision in connection area compared to gold cylinder
- 1.2 hex driver
- Recommended tightening torque : 20Ncm
- Packing unit : cylinder + Ti screw

Cylinder + Ti screw order code

: product code + TH (ex : SSPSO480TH)



W Wide

Ti screw

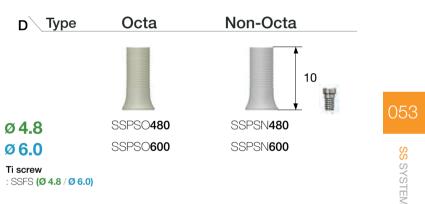
Ø4.8 Ø6.0

D





: SSFS (Ø 4.8/Ø 6.0)

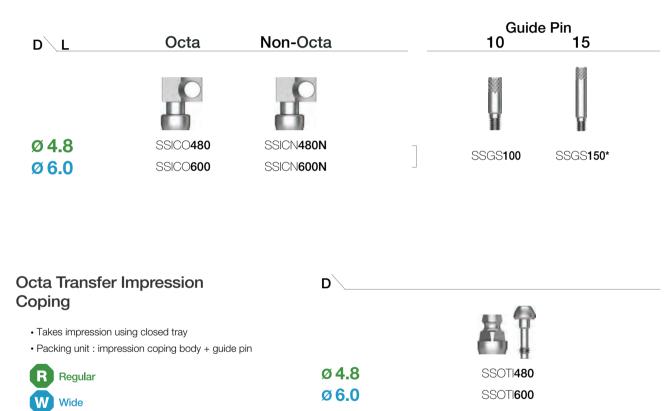


Octa Abutment Components

Octa Pick-up Impression Coping

- Takes impression using open tray
- Superior impression stability with holinone structure
- 1.2 hex driver
- * Label is basic packaging specification
- Packing unit : impression coping body + guide pin







D

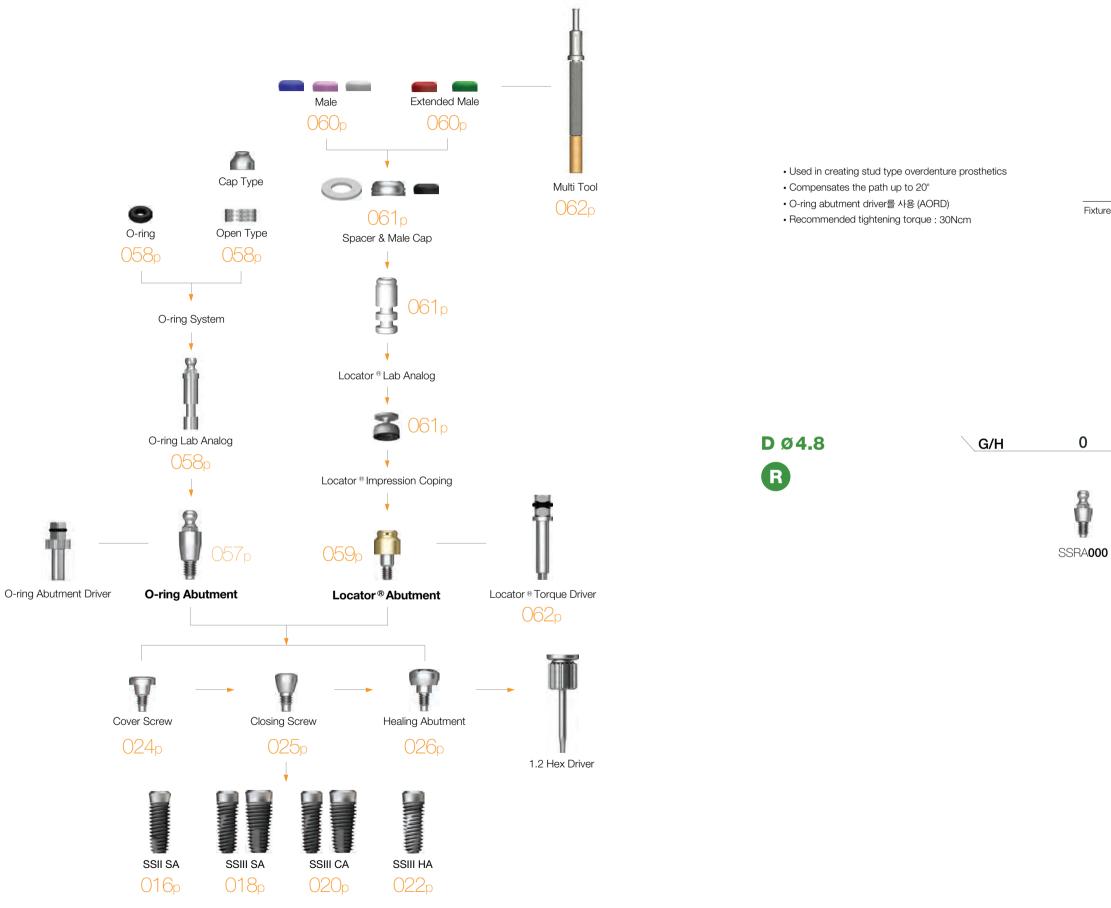
Achieves octa abutment of the oral cavity on a working model
 Achieves small groove for G/H identification
 Regular
 Wide
 Ø 4.8
 SSLA480
 SSLA600

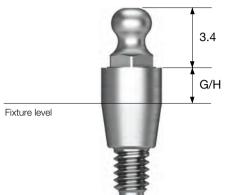




O-ring /	Locator [®]
Overdenture	

O-ring Abutment









2

SSRA**200**



4

SSRA**400**

O-ring Abutment Components

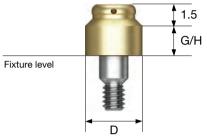
Locator[®] Abutment



O-ring Lab Analog

 Achieves O-ring abutment of the oral cavity on a working model

OAL



2.0





3.0



4.0







Locator[®] Abutment Components

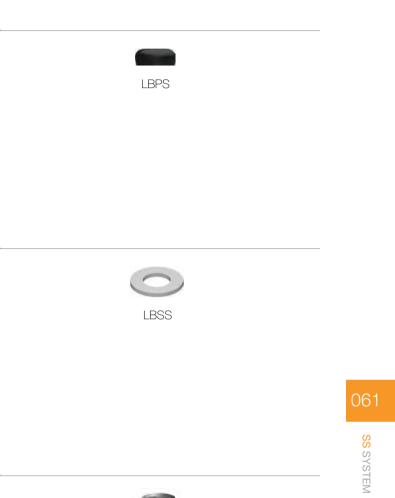
ocator [®] Male Processing Kit		Locator [®] Black Processing Male
 Component Block out spacer / denture cap connected black processing male 		Used in lab. processPacking unit : 4ea
 Replacement male blue/pink/clear Used after selecting retention males that are appropriate for the case 	LMPS	
Exchanged with male using a locator core tool Packing unit : 2set		
		Locator [®] Block Out Spacers
		Gap sealing component between denture cap and abutment
cator® Benlacement Male		Packing unit : 20ea
• Retention: Approximately 6N		
	LRM06S	
 Retention: Approximately 6N 0° ~20° paths (two implant standard) Packing unit : blue replacement male 4ea Retention: Approximately 12N 	LRM06S	
 Retention: Approximately 6N 0°~20° paths (two implant standard) Packing unit : blue replacement male 4ea 	LRM06S LRM12S	
 Retention: Approximately 6N 0°~20° paths (two implant standard) Packing unit : blue replacement male 4ea Retention: Approximately 12N 0°~20° paths (two implant standard) 		• Packing unit : 20ea

Locator[®] Extended Replacement Male

 Retention: Approximately 6N 20°~40° paths (two implant standard) Packing unit : red extended replacement male 4ea 	LEM06S
 Retention: Approximately 12N 20°~40° paths (two implant standard) Packing unit : green extended replacement male 4ea 	LEM12S

Locator[®] Lab Analog

Achieves locator abutment on the modelPacking unit : 4ea

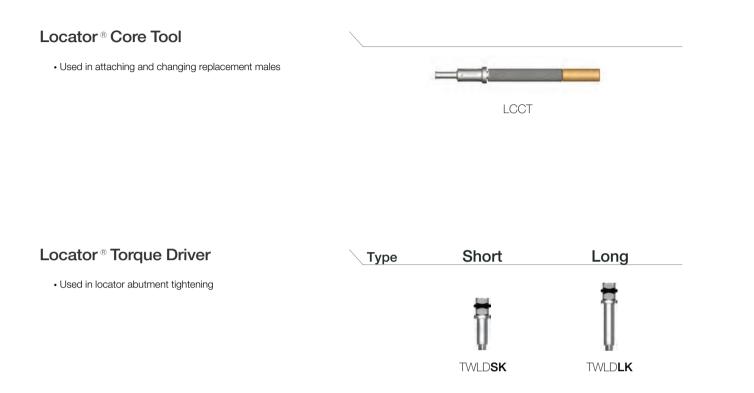






LAL50S

Locator[®] Abutment Components







Osstem Implant Key References

Clinic

No.	Title	Reference / Author			
1	Retrospective clinical study of new tapered design implants in maxillary posterior areas	Oral Biology Research. 2013; 37(2):105-111 / Young-Kyun Kim et al.	16	Evaluation of sinus bone resorption and marginal bone loss after sinus bone grafting and implant placement	Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2009;107:e21-8 / Young-Kyun Kim et al.
2	A randomized controlled clinical trial of two types of tapered implants on immediate loading in the posterior maxilla and mandible	Int J Oral Maxillofac Implants. 2013 Nov-Dec;28(6):1602-11 (IF 1.908) / Young-Kyun Kim et al.	17	Evaluation of peri-implant tissue response according to the presence of keratinized mucosa	Oral Surg Oral Med Oral Pathol OralRadiol Endod. 2009;107:e24-8 / Young-Kyun Kim et al.
3	Bony window repositioning without using a barrier membrane in the lateral approach for maxillary sinus bone grafts: clinical and radiologic results at 6 months.	Int J Oral Maxillofac Implants. 2012 27:211-217 / Chang-Joo Park et al.	18	Study on radiographic evaluation of marginal bone loss around osseonintegrated implant after functional loading	J Kor Oral Maxillofac Surg. 2009;35:240-7 / Young - Deok, Chee
4	A relaxed implant bed: implants placed after two weeks of osteotomy with immediate loading: a one year clinical trial.	J Oral Implantol. 2012 Apr;38(2):155-64 / Bansal J et al.	19	Four-year survival rate of RBM surface internal connection non- submerged implants and the change of the peri-implant crestal bone	J Korean Assoc Maxillofac Plast Reconstr Surg. 2009;31(3):237-42 / Sok-Min Ko et al.
5	A multicenter prospective study in type IV bone of a single type of implant	Implant Dent. 2012 Aug;21(4):330-34 / Su-Gwan Kim et al.			
6	Comparison of clinical outcomes of sinus bone graft with simultaneous implant placement: 4-month and 6-month final prosthetic loading	Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2011 Feb;111(2):164-9 / Young-Kyun Kim et al.	Biology No.	Title	Reference / Author
7	Prospective study of tapered resorbable blasting media surface implant stability in the maxillary posterior area	Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2012 Feb 28. [Epub ahead of print] / Young-Kyun Kim et al.	1	Experiment study of bone response to hydroxyapatite coating implants: bone-implant contact and removal torque test	Oral Surg Oral Med Oral Pathol Oral Radiol. 2012 Jun 29. [Epub ahead of print] / Young-Kyun Kim et al.
8	A 1-year prospective clinical study of soft tissue conditions and marginal bone changes around dental implants after flapless implant surgery	Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2011 Jan;111(1):41-6 / Byung-Ho Choi et al.	2	Experimental study about the bony healing of hydroxyapatite coating implants	J Kor Oral Maxillofac Surg. 2011;27(4):295-300 / Young-Kyun Kim et al.
9	Evaluation of peri-implant tissue in nonsubmerged dentallmplants: a multicenter retrospective study	Clin Implant Dent Relat Res. 2011 Dec;13(4):324-9 / Young-Kyun Kim et al.	3	The use of autologous venous blood for maxillary sinus floor augmentation in conjunction with sinus membrane elevation: an experimental study	Clin. Oral Impl. Res. 2010;21:346-9 / Byung-Ho Choi et al.
10	A relaxed implant bed: implants placed after two weeks of osteotomy with immediate loading: a one year clinical trial	J Oral Implantol. 2012 Apr;38(2):155-64 / Bansal J et al.	4	Effects of soft tissue punch size on the healing of peri-Implant tissue in flapless implant surgery	Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2010;109:525-30 / Byung-Ho Choi et al.
11	A comparison of implant stability quotients measured using magnetic resonance frequency analysis from two directions: prospective clinical study during the initial healing period	Clin. Oral Impl. Res. 2010;21(6):591-7 / Jong-Ho Lee et al.	5	Morphogenesis of the peri-implant mucosa: a comparison between flap and flapless procedures in the canine mandible	Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2009;107:66-70 / Byung-Ho Choi et al.
12	A short-term clinical study of marginal bone level change around microthreaded and platform-switched implants	J Periodontal Implant Sci. 2011;41:211-217 / Kyoo-Sung Cho et al.	6	A comparative study of two noninvasive techniques to evaluate implant stability: periotest and osstell mentor	Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2009;107:513-8 / Su-Gwan Kim et al.
13	A randomized clinical one-year trial comparing two types of nonsubmerged dental implant	Clin. Oral Impl. Res. 2010;21(2):228-36 / Jong-Ho Lee et al.	7	Influence of abutment connections and plaque control on the initial healing of prematurely exposed implants: an experimental study in dogs	J Periodontol. 2008;79(6):1070-4 / Byung-Ho Choi et al.
14	Short-term, multi-center prospective clinical study of short implants measuring less than 7mm	J Kor Dent Sci. 2010;3(1):11-6 / Young-Kyun Kim et al.	8	Er:YAG laser irradiated implant surface observation with scanning electron microscopy	J Korean Assoc Maxillofac Plast Reconstr Surg. 2008;30(6):540-5 / Seung-Ki Min et al.
15	Evaluation of peri-implant tissue in nonsubmerged dentallmplants: a multicenter retrospective study	Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2009;108(2):189-95 / Young-Kyun Kim et al.	9	The effect of surface treatment of the cervical area of implant on bone regeneration in mini-pig	J Kor Oral Maxillofac Surg. 2008;34:285-92 / Hong-Ju Park et al.

O65 REFERENCE

User Manual 2013.02 ver.4.0 "Disposable, re-use prohibited, medical appliance"

10	Histologic and histomorphometric evaluation of early and immediately loaded implants in the dog mandible	J Biomed Mater Res A. 2008;86:1122-7 / Su-Gwan Kim et al.
11	Effects of different depths of gap on healing of surgically created coronal defects around implants in dogs: a pilot study	J Periodontol. 2008;79(2):355-61 / June-Sung Shim et al.
12	Comparative study of removal effect on artificial plaque from RBM treated implant	J Korean Assoc Maxillofac Plast Reconstr Surg. 2007;29(4):309-20 / Hee-Jyun Oh et al.

Biomechanics

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No.	Title	Reference / Author
1	Evaluation of the correlation between insertion torque and primary stability of dental implants using a block bone test	J Periodontal Implant Sci. 2013;43:41-46 / Ki-Tae Koo et al.
2	Self-cutting blades and their influence on primary stability of tapered dental implants in a simulated low-density bone model: a laboratory study	Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2011;112:573-580 / Young-Jun Lim et al.
3	Variation in the total lengths of abutment/implant assemblies generated with a function of applied tightening torque in external and internal implant-abutment connection	Clin. Oral Impl. Res. 2011;22:834-9 / Ki-Seong Kim et al.
4	Effect of impression coping and implant angulation on the accuracy of implant impressions: an in vitro study	J Adv Prosthodont. 2010;2(4):128-33 / Seung-Geun Ahn et al.
5	Influence of implant diameter and length changes on initial stability	J Kor Acad Prosthodont. 2009;47:335-41 / Chang-Mo Jeong et al.
6	Mechanical strength of zirconia abutment in implant restoration	J KASFO. 2009;25(4):349-60 / Young-Chan Jeon et al.
7	Heat transfer to the implant-bone interface during preparation of zirconia/alumina complex abutment	Int J Oral Maxillofac Implants. 2009;24(4):679-83 / Yong-Geun Choi et al.
8	Fatigue fracture of different dental Implant system under cyclic loading	J Kor Acad Prosthodont. 2009;47(4):424-34 / In-Ho Cho et al.
9	Effect of tightening torque on abutment-fixture joint stability using 3-dimensional finite element analysis	J Kor Acad Prosthodont. 2009;47(2):125-35 / Chang-Mo Jeong et al.
10	The effect of various thread designs on the initial stability of taper implants	J Adv. Prosthodont. 2009;1:19-25 / Young-Jun Lim et al.
11	Influence of tungsten carbide/carbon coating of implant-abutment screw on screw loosening	J Kor Acad Prosthodont. 2008;46(2):137-47

/ Chang-Mo Jeong et al.

Osstem Implant product information

Osstem Implant dental fixtures and products are manufactured using medical grade Titanium. Osstem Implant abutments, denture material and surgical tools are only compatible with Osstem fixtures. For more detailed information about each product, please refer to the user manuals, catalogs or please visit our corporate website (www.osstem.com). Please check all product labels for product codes. specifications, manufactured dates and expiration dates.

Sterility

Fixtures, cover screws and healing abutments are cleansed and gamma-sterilized. These products are disposable sterile medical appliances, and must be used in a sterile field. If the package is damaged or has expired, it must not be used. If the product package has been opened but not used, there is a risk of contamination and it is not recommended that the product resterilized and therefore should be discarded.

Storage conditions

Store all products in a dry place at room temperature (30oC). Avoid direct sunlight.

General precautions

Dental implant surgery require proper and formal training and education.

Cautions before dental surgery

Before dental implant surgery, a through patient health history review, oral and radiographic examinations must be completed to determine bone quality and proper treatment planning.

Cautions during dental implant surgery

Osstem Implant System are for single or two stage dental implant procedures. In order to minimize damage to the patient's tissue, special attention to temperature. surgical lesions and eliminating all sources of contamination and infection are needed. Any deviation from the standard surgical protocol increases the risk of failure. When inserting the dental implant, sufficient cooling must be introduced (water or saline) and excessive torque (greater than 55Ncm) can result in dental implant fracture or possibly bone necrosis. Placing dental implants greater than 300 has a very high risk of implant fracture. Direct pressure to the fixture should be avoided right after surgery. Immediate or delayed loading of the fixture must be determined after proper examination of the patient's bone condition and initial stability after placement.

"Mini" implants or implants with a diameter less than 4.0mm are not recommended for the posterior region.

Ultra-wide dental implants are recommended for the posterior region but should not be used with angled abutments. If considering an Ultra-wide dental implant, proper radiographic evaluation must be made to determine the bone mass and potential anatomical restrictions. Short dental implants (diameter greater than 5mm and shorter than 7mm) are only used for the posterior region. The clinician must

Manufacturer : Osstem Implant Co., Ltd. 203, Geoje-daero, Yeonje-gu, Busan, Korea TEL 82-51-850-2500 FAX 82-51-861-4693

EC REP DEUTSCHE OSSTEM GmbH.

Mergenthalerallee 25 65760 Eschborn, Germany +49-(0)6196-777-550

Storage condition Dry place at room temperature

Rx only For USA only : Federal law restricts this device to sale by or on the order of a dentist





thoroughly evaluate the patient's condition and recognized the following issues: 1) bone loss due to peri-implantitis, 2) changes to the dental implant condition. 3) proper osseointegration determined by a x-ray examination. If there is movement or if there is bone loss more than 50% removing the dental implant should be a course of action. Wide diameter implants should be performed as a two stage surgery. Sufficient healing time must be given before splinting with other implants or when loading. Immediate loading is not recommended.

Take care when placing dental implants with HA coating. The coating is prone to cracking or fracturing under high torque, therefore hard bone should be avoided and be inserted under 35Ncm of force.

CA and SOSI treated dental implants are encased in a solution to prevent the chemically treated surface from reacting with air. After removing the CA or SOSI dental implant, place the implant within 15 minutes to avoid degradation of the surface.

Warning

Improper patient selection and treatment planning may result in dental implant failure or loss of bone. Osstem Implants must not be used for purpose other than prescribed and must not be alter in any shape or form. Implant movement, bone loss, and chronic infections can result in implant failure.

Indications

Osstem Implant Systems are designed to replace a patient's tooth or teeth. They can be placed in both the maxillary and submaxillary alveolar bones and after full osseointegration can be restored prosthetically. Osstem Implant Systems offer both temporary and final prosthesis and can be retained by cement, screw, overdenture or fixed bridge.

Side effects

There are possible side effects after implant surgery (lost of implant stability, damage to dentures). These issues can be due to the lack of bone or poor bone quality, an infection, patient's poor oral hygiene, non compliance with post op procedures, movement of the implant, degradation of surrounding tissue, or improper placement of the dental implant

Contraindications

Patients with the following contraindications are not eligible for dental implants:

- Patients with blood clotting issues or issues with wound healing.
- Diabetic patients
- Patients that smoke or drink excessively
- Patient's with compromised immune systems due disease or chemo and radiation therapy.
- Patients with an oral infection or inflammation (improper oral hygiene or teeth grinding)
- Patients with an incurable malocclusion/arthropathia and insufficient arch space.







Catalogue numbe









Non-Sterile



Do not resterilize





Keep away from sunlight





