SS SYSTEM
CATALOG

Osstem Implant
2016-17 Comprehensive Catalog

Overall Planning/Editing PR Department Design Team
Supervision Implant Lab, Marketing PM
Production/Distribution Marketing & Planning Team
Date of Publication 2016.
Publisher Osstem Implant
8th FL, World Meridian II, 123, Gasan digital 2-ro,
Geumcheon-gu, Seoul, Korea
Phone +82.2.2016.7000
Fax +82.2.2016.7001
www.osstem.com

003 INTRODUCTION
012 CONTENTS
016 SS SYSTEM
066 REFERENCE

CEO’S Message



Providing cutting edge technology and superior quality

Making products that dentists want to use, trust, and are satisfied with:
This is our mission at OSSEM IMPLANT.

We are forever grateful to all the dentists who have given unwavering support to OSSTEM IMPLANT.

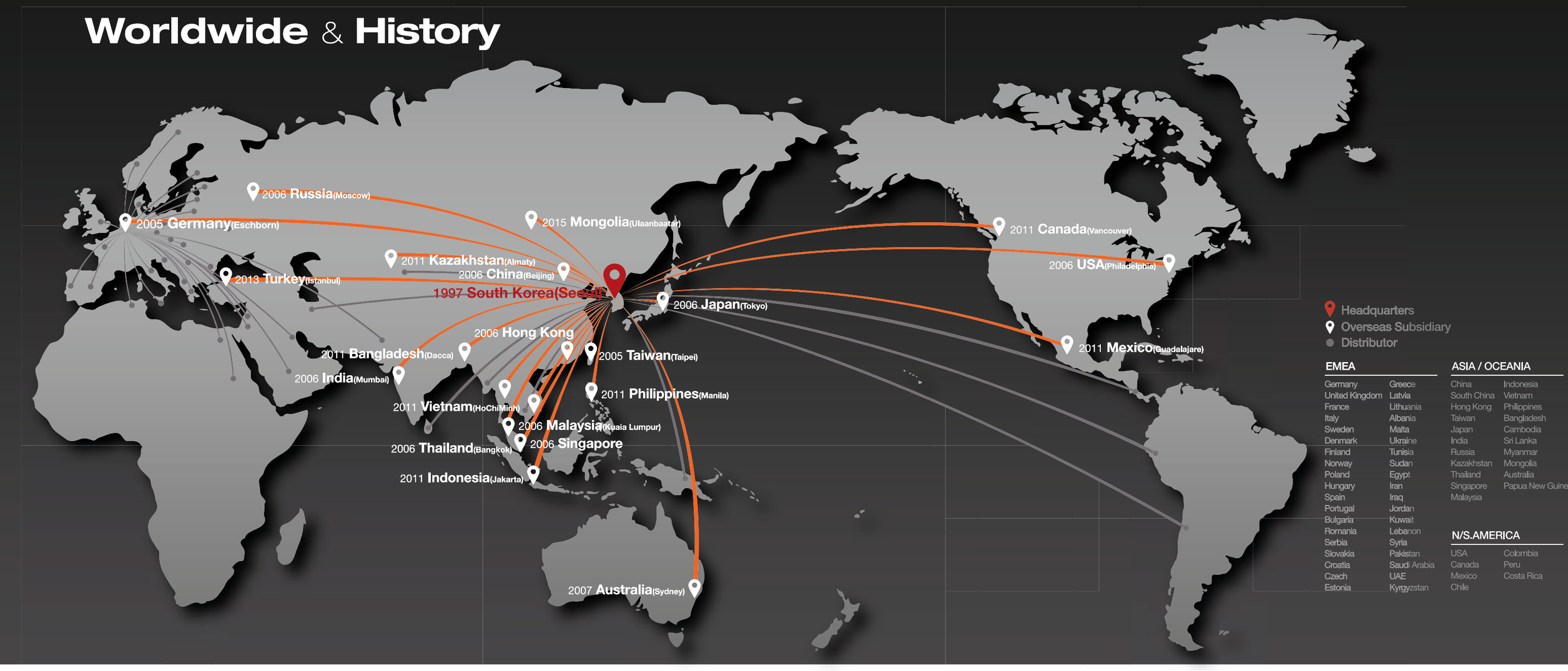
We would like to take this opportunity to express our special thanks to all of our customers. Osstem has been continuously engaged in research and development, and over the past year our efforts have led to the launch of multiple new products.
We are excited to publish the 2016-17 Osstem Product Catalog, which showcases these new products and includes all the information you need to know about our fixtures, abutments, surgical tools and regenerative products. We spent countless hours editing, revising and rearranging this catalogue to make it the most comprehensive and user-friendly resource for Osstem products possible. Product codes, specifications and all the information you need about our products are at your fingertips.
A number of noteworthy additions have been introduced to the 2016 - 17 Osstem Product Catalog; each product is labeled with the newest products This is unclear. Also sounds impossible.

How do you label a 'product with a product'?. All product images are at the highest resolution possible, and a comprehensive description is provided with each item to ensure customers order correctly. As well, the quality of the 2D and 3D graphical illustrations of our components has been significantly enhanced.
The color-coding system has been expanded from just fixtures to include components as well as tools. In addition, complimentary products and equipment are listed "complimentary" means "free of charge". "complementary" means "compatible". Unless you plan to give your products away you may want to change this.
Finally, the included QR codes link you to videos of the products being used in actual surgeries. It is our sincere hope that the 2016 - 17 Osstem Product Catalog will become an invaluable resource for you in your practice. Thank you!

CEO of OSSTEM IMPLANT
Choi Kyu-ok (DDS.Ph.D)



Worldwide & History



EMEA

Germany, United Kingdom, France, Italy, Sweden, Denmark, Finland, Norway, Poland, Hungary, Spain, Portugal, Bulgaria, Romania, Serbia, Slovakia, Croatia, Czech, Estonia, Greece, Latvia, Lithuania, Albania, Malta, Ukraine, Tunisia, Sudan, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Syria, Pakistan, Saudi Arabia, UAE, Kyrgyzstan

ASIA / OCEANIA

China, South China, Hong Kong, Taiwan, Japan, India, Russia, Kazakhstan, Thailand, Singapore, Malaysia, Indonesia, Vietnam, Philippines, Bangladesh, Cambodia, Sri Lanka, Myanmar, Mongolia, Australia, Papua New Guinea

N/S.AMERICA

USA, Canada, Mexico, Chile, Colombia, Peru, Costa Rica

1997

- **01** Established 'OSSTEM Co., Ltd.'
- **12** Released 'Doobunae' (health insurance claim application software program)

2000

- **06** Released 'Hanaro' (dentistry management software)
- **10** Acquired Sumin Comprehensive Dental Materials

2001

- **01** Obtained CE-0434 certification
- **03** Established AIC Training Center

2002

- **01** Established Osstem Implant R&D Center
- **08** Obtained FDA certification, launched USII line
- **10** Launched SSII line

2006

- **01** Changed the company name to Osstem Implant Co., Ltd
- **04** Obtained GOST-R certification (Russia)
- **12** Established 12 overseas branches (first round)

2007

- **02** Listed on KOSDAQ and began trading publicly
- **06** Selected as No. 1 products for the next generation and obtained TGA certification (Australia)

2008

- **01** Established Osstem Bone Science Research Center
- **12** Selected as a managing organization for the National Strategic Technology Development Project

2009

- **10** Obtained approval for medical device manufacturing and sale from the Ministry of Health, Labor and Welfare, Japan

2010

- **03** Launched TS III SA line
- **06** Launched TS III HA line
- **08** Selected as a business participating in the WPM Biomedical National Project
- **12** Users of Hanaro program exceeded 10,000

2011

- **06** Osstem Implant R&D Center was selected as ATC (Advanced Technology Center)
- **07** Selected as 'World Champ' business

2011

- **10** Obtained 'Health Canada' certification
- **12** Launched 'K2 Unit Chair, which was selected as a 'World Class Product'

2012

- **06** Launched TSIII CA line
- **07** Established Osstem Dental Equipment Research Institute

2013

- **01** Launched Osstem xenograft material 'A-Oss'
- **09** Launched 'K3 Unit Chair'
- **10** Selected as a 'Hidden Champion' company

2014

- **05** Selected as World Class 300
- **05** Released 'HyFlex', an impression material
- **08** Released 'Beau TIS' whitening material

2015

- **03** Established Osstem BioPharma Co., Ltd.
- **12** Awarded 'USD 50 Million Export Tower'

OSSTEM Implant Design feature

OSSTEM IMPLANT has revolutionized implant dentistry in South Korea. With a focus on aggressive R&D, a commitment to education and a dedication to manufacturing the best products, Osstem Implant's ultimate goal is to become the global leader in implant dentistry.









Each implant system has its own unique color code.

Submerged type implant with an internal hex and 11° tapered connection

- Internal connection type - Mini / Regular
- Excellent initial stability in soft bone due to smaller threads in the upper section
- Corkscrew thread with cutting edges
  - Easy path adjustments via the implant's excellent self-threading effect
  - Higher initial stability and consistent insertion torque, regardless of the drill's diameter
- Different body types to properly match the patient's bone quality and clinical condition
  - TSII (straight body type): Easy to adjust the insertion depth
  - TSIII (1.5° tapered body type): Excellent initial stability necessary for immediate loading, even in soft bone
  - TSIV (6° tapered body type): Specifically designed for the maxillary sinus and soft bone, excellent initial stability
- Available surface types - SA / CA / BA / HA

Non-submerged type implant with an internal octa and 8° tapered connection

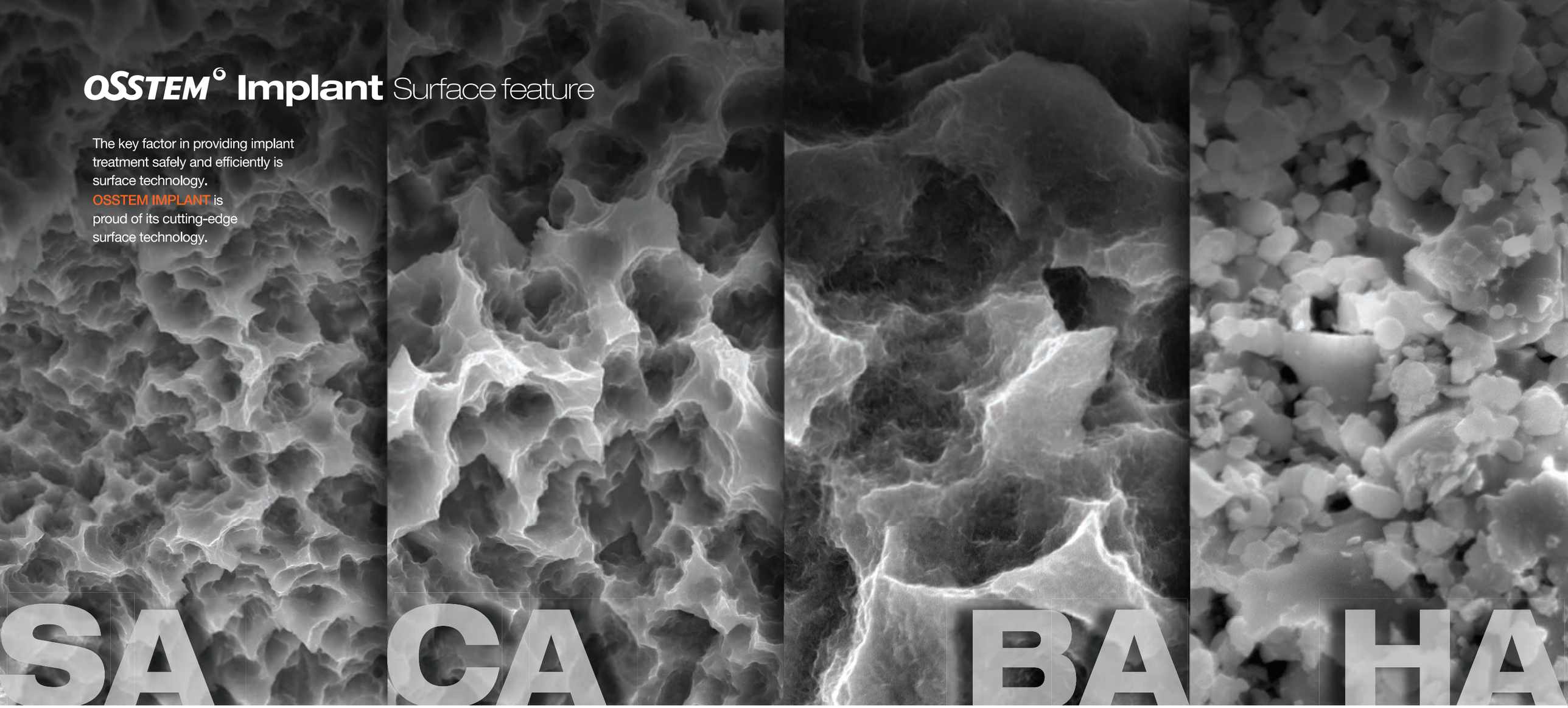
- Internal connection type - Regular / Wide
- Corkscrew thread with cutting edges
  - Easy path adjustments via the implant's excellent self-threading effect
  - Higher initial stability and consistent insertion torque, regardless of the drill's diameter
- Different body types to properly match the patient's bone quality and clinical condition
  - SSII (straight body type): Easy to adjust the insertion depth
  - SSIII (1.5° tapered body type): Excellent initial stability necessary for immediate loading, even in soft bone
- Available surface types - SA / CA / HA

Submerged type implant with an external hex connection structure

- Internal connection type - Mini / Regular / Wide / Wide PS
- Corkscrew thread with cutting edges
  - Easy path adjustments via the implant's excellent self-threading effect
  - Higher initial stability and consistent insertion torque, regardless of the drill's diameter
- Different body types to properly match the patient's bone quality and clinical condition
  - USII (straight body): Easy to adjust the insertion depth
  - USIII (1.5° tapered body): Excellent initial stability necessary for immediate loading, even in soft bone
  - USIV (6° tapered body): Specifically designed for the maxillary sinus and soft bone, excellent initial stability
- Available surface types - SA / CA

OSSTEM Implant Surface feature

The key factor in providing implant treatment safely and efficiently is surface technology.
OSSTEM IMPLANT is proud of its cutting-edge surface technology.



SA

Acid Treated Optimized Surface

- Surface roughness value of about Ra 2.5 to 3.0㎛
  Note: The upper 0.5mm section of the implant has a surface roughness of about Ra 0.5 to 0.6㎛
- Consistent surface micro pits between 1 to 3㎛
- Surface area is increased by 46 percent compared to RBM treated implants

In Bone Response

- Increased osteoblastic differentiation and ossification by 20 percent compared to RBM surface
- Initial bone response studied in animal models (mini pigs)
  - Initial stability increased initial stability by 48 percent compared to RBM surface (RT at 4 weeks)
  - Ossification rate increased ossification rate by 20 percent compared to RBM surface (BIC at 4 weeks)

CA

Super-hydrophilic SA surface suspended in a calcium solution

- Same SA surface morphology
- Optimizing surface reaction by suspension in a calcium (CaCl2) solution
- Increased new bone formation area due to the excellent blood wettability
- Bone response improved in early osseointegration stage compared to standard SA surface

In Bone Response

- Protein and cellular adhesion tripled compared to SA surfaces
- Initial cellular differentiation by 19 percent compared to SA surfaces (7 days)
- Initial stability increased by 34 percent compared to SA surfaces (RT at 4 weeks)
- Ossification rate Increased by 26 percent compared to SA surfaces (BIC at 4 weeks)

BA

Premium low crystalline nano-HA coated SA surface

- SA surface (Ra 2.5 to 3.0㎛) coated with HA
- 10nm ultra-thin HA coating
- Dual function between titanium and HA
  - HA is naturally resorbed during ossification

In Bone Response

- Advantages of both SA and HA surfaces
  - SA's ability to maintain an optimal surface morphology
  - HA's ability to form high quality initial bone, even in a poor bone quality
- Ossification rate increased by 40 percent compared to SA surfaces (BIC)
- Unlike conventional HA surfaces, it is applicable to all types of bone quality

HA

Premium high-crystalline HA-coated surface

- 30 to 60㎛ thick high-crystalline HA coating
- HA coated onto a RBM surface (Ra 3.0 to 3.5㎛)
- High HA crystalline over 98 percent
- Solved the problem with low-crystalline HA resorption

In-vitro & In-vivo Bone Response

- Excellent biocompatibility because HA is very similar to actual human bone
- Initial ossification by osteoblasts doubled compared to SA surfaces (5 days)
- Initial stability in animal models increased by 40 percent compared to SA surfaces (RT, 4 weeks)
- Suitable for poor bone quality, tooth extraction sites or immediate implant insertion

SS SYSTEM Contents

016 SSII SA Fixture
018 SSII CA Fixture
020 SSIII SA Fixture
022 SSIII CA Fixture
024 SSIII HA Fixture
026 Simple Mount
026 Cover Screw
027 Closing Screw
028 Healing Abutment
031 Solid Abutment
032 Solid Protect Cap
032 Solid Retraction Cap
033 Solid Impression Coping
033 Solid Lab Analog
033 Solid Burn-out Cylinder
034 Solid Impression Cap
034 Solid Shoulder Analog
034 Solid Shoulder Analog Pin
035 Excellent Solid Abutment
036 Excellent Solid Protect Cap
036 Excellent Solid Retraction Cap
037 Excellent Solid Impression Coping
037 Excellent Solid Lab Analog
037 Excellent Solid Burn-out Cylinder
038 Excellent Solid Impression Cap
038 Excellent Solid Shoulder Analog
038 Excellent Solid Shoulder Analog Pin
041 ComOcta Abutment
042 ComOcta Plus Abutment
043 ComOcta Milling Abutment
044 ComOcta Gold Abutment
045 ComOcta NP-Cast Abutment
046 ComOcta Temporary Abutment
047 SmartFit Abutment
047 Scan Boby
048 ComOcta Angled Abutment
049 ComOcta Retraction Cap
049 Fixture Pick-up Impression Coping
050 Fixture Transfer Impression Coping
050 Fixture Lab Analog
053 Octa Abutment
054 Octa Protect Cap
054 Octa Gold Cylinder
054 Octa Combination Cylinder
055 Octa Temporary Cylinder
055 Octa Plastic Cylinder
056 Octa Pick-up Impression Coping
056 Octa Transfer Impression Coping
056 Octa Lab Analog
059 O-ring Abutment
060 O-ring Retainer Cap Set
060 O-ring Retainer Set
060 O-ring Set
060 O-ring Lab Analog
061 Locator® Abutment
062 Locator® Male Processing Kit
062 Locator® Replacement Male
062 Locator® Extended Replacement Male
063 Locator® Black Processing Male
063 Locator® Block Out Spacers
063 Locator® Impression Coping
063 Locator® Lab Analog
064 Locator® Core Tool
064 Locator® Torque Driver



FIXTURE

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

COMPONENTS

030 **PROSTHETIC FLOW DIAGRAM 1**
031 Solid Abutment
035 Excellent Solid Abutment
040 **PROSTHETIC FLOW DIAGRAM 2**
041 ComOcta Abutment
042 ComOcta Plus Abutment
043 ComOcta Milling Abutment
044 ComOcta Gold Abutment
045 ComOcta NP-Cast Abutment
046 ComOcta Temporary Abutment
047 SmartFit Abutment
048 ComOcta Angled Abutment
052 **PROSTHETIC FLOW DIAGRAM 3**
053 Octa Abutment
058 **PROSTHETIC FLOW DIAGRAM 4**
059 O-ring Abutment
061 Locator® Abutment

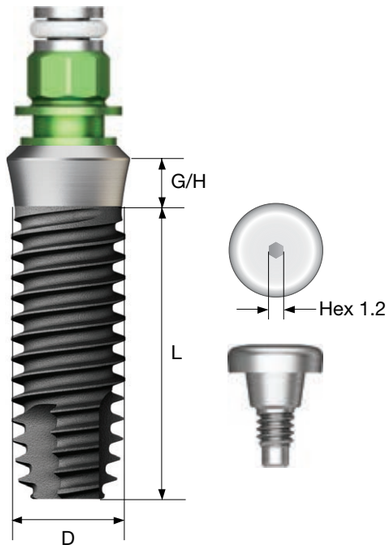
SSII SA Fixture

- Non-submerged type implant with an internal octa and 8° tapered connection
- Optimized screw thread design with the ideal SA surface
- Straight body design allows easy insertion depth adjustments
- Excellent initial stability in soft bone due to small threads in the upper section
- Corkscrew threading with excellent self-threading effect
- Recommended insertion torque: ≤40 Ncm

※ Fixtures with a diameter of 4.5mm or more are recommended for the posterior area.

NoMount fixture order code
: fixture product code (ex : SS2R4011S18)

Pre-Mounted fixture (fixture + simple mount + cover screw) order code
: **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	SS2R**4007S18**	SS2R**4008S18**	SS2R**4010S18**	SS2R**4011S18**	SS2R**4013S18**
2.8		SS2R**4008S28**	SS2R**4010S28**	SS2R**4011S28**	SS2R**4013S28**

D ø4.5
P ø4.8
R

G/H \ L	7	8.5	10	11.5	13
1.8	SS2R**4507S18**	SS2R**4508S18**	SS2R**4510S18**	SS2R**4511S18**	SS2R**4513S18**
2.8		SS2R**4508S28**	SS2R**4510S28**	SS2R**4511S28**	SS2R**4513S28**

D ø4.5
P ø6.0
W

G/H \ L	7	8.5	10	11.5	13
2.0	SS2W**4507S20**	SS2W**4508S20**	SS2W**4510S20**	SS2W**4511S20**	SS2W**4513S20**

D ø5.0
P ø6.0
W

G/H \ L	6	7	8.5	10	11.5	13
	Short					
2.0	SS2W**5006S20**	SS2W**5007S20**	SS2W**5008S20**	SS2W**5010S20**	SS2W**5011S20**	SS2W**5013S20**

Nominal and actual diameters may slightly differ.
Caution : For a short implant, a sufficient healing period is strongly recommended. A short implant should be splinted with another implant when considering prosthetic options.

SSII CA Fixture

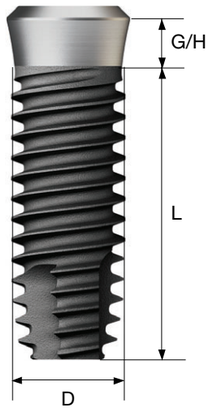
- Non-submerged type implant with an internal octa and 8° tapered connection
- Super-hydrophilic SA surface suspended in a calcium solution
- Straight body design allows easy insertion depth adjustments
- Excellent initial stability in soft bone due to small threads in the upper section
- Corkscrew threading with excellent self-threading effect

Ultra-wide

- Ideal for an extracted tooth site in the posterior area, for immediate placement, or for replacing a failed implant
- Apex is designed specially for excellent initial stability in an extracted tooth site
- Recommended insertion torque: ≤40 Ncm

※ Fixtures with a diameter of 4.5mm or more are recommended for the posterior area.

NoMount fixture order code
: fixture product code (ex : SS2R4010C18)



D ø4.0 / P ø4.8 (R)

G/H \ L	7	8.5	10	11.5	13
1.8	SS2R4007C18	SS2R4008C18	SS2R4010C18	SS2R4011C18	SS2R4013C18
2.8		SS2R4008C28	SS2R4010C28	SS2R4011C28	SS2R4013C28

D ø4.5 / P ø4.8 (R)

G/H \ L	7	8.5	10	11.5	13
1.8	SS2R4507C18	SS2R4508C18	SS2R4510C18	SS2R4511C18	SS2R4513C18
2.8		SS2R4508C28	SS2R4510C28	SS2R4511C28	SS2R4513C28

D ø4.5 / P ø6.0 (W)

G/H \ L	7	8.5	10	11.5	13
2.0	SS2W4507C20	SS2W4508C20	SS2W4510C20	SS2W4511C20	SS2W4513C20

D ø5.0 / P ø6.0 (W)

G/H \ L	6	7	8.5	10	11.5	13
2.0	SS2W5006C20 (Short)	SS2W5007C20	SS2W5008C20	SS2W5010C20	SS2W5011C20	SS2W5013C20

Ultra-wide

D ø6.0 / P ø6.0 (W)

G/H \ L	6	7	8.5	10	11.5	13
2.0	SS2WB6006C20 (Short)	SS2WB6007C20	SS2WB6008C20	SS2WB6010C20	SS2WB6011C20	SS2WB6013C20

D ø7.0 / P ø6.0 (W)

G/H \ L	6	7	8.5	10	11.5	13
2.0	SS2WB7006C20 (Short)	SS2WB7007C20	SS2WB7008C20	SS2WB7010C20	SS2WB7011C20	SS2WB7013C20

Nominal and actual diameters may slightly differ.
Caution : For a short implant, a sufficient healing period is strongly recommended. A short implant should be splinted with another implant when considering prosthetic options.

SSIII SA Fixture

- Non-submerged type implant with an internal octa and 8° tapered connection
- Optimized screw thread design with the ideal SA surface
- Tapered body design with high initial stability
- Excellent initial stability in soft bone due to the small thread on the upper part
- Corkscrew threading with excellent self-threading effect
- Excellent initial stability necessary for immediate loading, even in soft bone

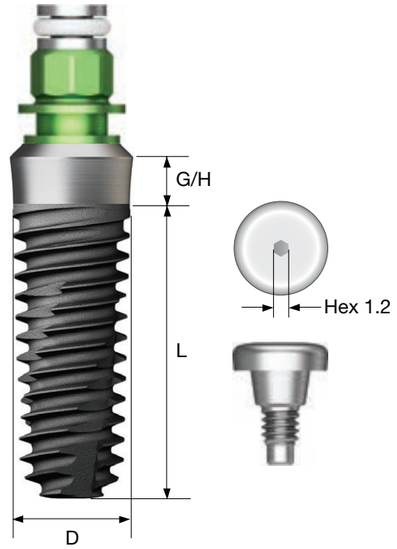
Ultra-wide

- Ideal for an extracted tooth site in the posterior area, for immediate placement, or for replacing a failed implant
- Apex is specifically design for excellent initial stability in an extracted tooth site
- Recommended insertion torque: ≤40 Ncm

※ Fixtures with a diameter of 4.5mm or more are recommended for the posterior area.

NoMount fixture order code
: fixture product code (ex : SS3R4011S18)

Pre-Mounted fixture (fixture + simple mount + cover screw) order code
: A + fixture product code (ex : ASS3R4011S18)



D ø3.5 / P ø4.8 (R)

G/H \ L	8.5	10	11.5	13
1.8	SS3R3508S18	SS3R3510S18	SS3R3511S18	SS3R3513S18
2.8	SS3R3508S28	SS3R3510S28	SS3R3511S28	SS3R3513S28

D ø4.0 / P ø4.8 (R)

G/H \ L	7	8.5	10	11.5	13
1.8	SS3R4007S18	SS3R4008S18	SS3R4010S18	SS3R4011S18	SS3R4013S18
2.8		SS3R4008S28	SS3R4010S28	SS3R4011S28	SS3R4013S28

D ø4.5 / P ø4.8 (R)

G/H \ L	7	8.5	10	11.5	13
1.8	SS3R4507S18	SS3R4508S18	SS3R4510S18	SS3R4511S18	SS3R4513S18
2.8		SS3R4508S28	SS3R4510S28	SS3R4511S28	SS3R4513S28

D ø4.5 / P ø6.0 (W)

G/H \ L	7	8.5	10	11.5	13
2.0	SS3W4507S20	SS3W4508S20	SS3W4510S20	SS3W4511S20	SS3W4513S20

D ø5.0 / P ø6.0 (W)

G/H \ L	6	7	8.5	10	11.5	13
2.0	SS3W5006S20 (Short)	SS3W5007S20	SS3W5008S20	SS3W5010S20	SS3W5011S20	SS3W5013S20

Ultra-wide

D ø6.0 / P ø6.0 (W)

G/H \ L	6	7	8.5	10	11.5	13
2.0	SS3WB6006S20 (Short)	SS3WB6007S20	SS3WB6008S20	SS3WB6010S20	SS3WB6011S20	SS3WB6013S20

D ø7.0 / P ø6.0 (W)

G/H \ L	6	7	8.5	10	11.5	13
2.0	SS3WB7006S20 (Short)	SS3WB7007S20	SS3WB7008S20	SS3WB7010S20	SS3WB7011S20	SS3WB7013S20

Nominal and actual diameters may slightly differ.
Caution : For a short implant, a sufficient healing period is strongly recommended. A short implant should be splinted with another implant when considering prosthetic options.

SSIII CA Fixture

- Non-submerged type implant with an internal octa and 8° tapered connection
- Tapered body design with high initial stability
- Corkscrew threading with excellent self-threading effect
- Excellent initial stability necessary for immediate loading, even in soft bone

Ultra-wide

- Ideal for an extracted tooth site in the posterior area, for immediate placement, or for replacing a failed implant
- Apex is designed specially for excellent initial stability in an extracted tooth site
- Recommended insertion torque: ≤40 Ncm

※ Fixtures with a diameter of 4.5mm or more are recommended for the posterior area.

NoMount fixture order code
: fixture product code (ex : SS3R4011C18)



D ø3.5 / P ø4.8 (R)

G/H \ L	8.5	10	11.5	13
1.8	SS3R3508C18	SS3R3510C18	SS3R3511C18	SS3R3513C18
2.8	SS3R3508C28	SS3R3510C28	SS3R3511C28	SS3R3513C28

D ø4.0 / P ø4.8 (R)

G/H \ L	7	8.5	10	11.5	13
1.8	SS3R4007C18	SS3R4008C18	SS3R4010C18	SS3R4011C18	SS3R4013C18
2.8		SS3R4008C28	SS3R4010C28	SS3R4011C28	SS3R4013C28

D ø4.5 / P ø4.8 (R)

G/H \ L	7	8.5	10	11.5	13
1.8	SS3R4507C18	SS3R4508C18	SS3R4510C18	SS3R4511C18	SS3R4513C18
2.8		SS3R4508C28	SS3R4510C28	SS3R4511C28	SS3R4513C28

D ø4.5 / P ø6.0 (W)

G/H \ L	7	8.5	10	11.5	13
2.0	SS3W4507C20	SS3W4508C20	SS3W4510C20	SS3W4511C20	SS3W4513C20

D ø5.0 / P ø6.0 (W)

G/H \ L	6	7	8.5	10	11.5	13
2.0	SS3W5006C20 (Short)	SS3W5007C20	SS3W5008C20	SS3W5010C20	SS3W5011C20	SS3W5013C20

Ultra-wide

D ø6.0 / P ø6.0 (W)

G/H \ L	6	7	8.5	10	11.5	13
2.0	SS3WB6006C20 (Short)	SS3WB6007C20	SS3WB6008C20	SS3WB6010C20	SS3WB6011C20	SS3WB6013C20

D ø7.0 / P ø6.0 (W)

G/H \ L	6	7	8.5	10	11.5	13
2.0	SS3WB7006C20 (Short)	SS3WB7007C20	SS3WB7008C20	SS3WB7010C20	SS3WB7011C20	SS3WB7013C20

Nominal and actual diameters may slightly differ.
Caution : For a short implant, a sufficient healing period is strongly recommended. A short implant should be splinted with another implant when considering prosthetic options.

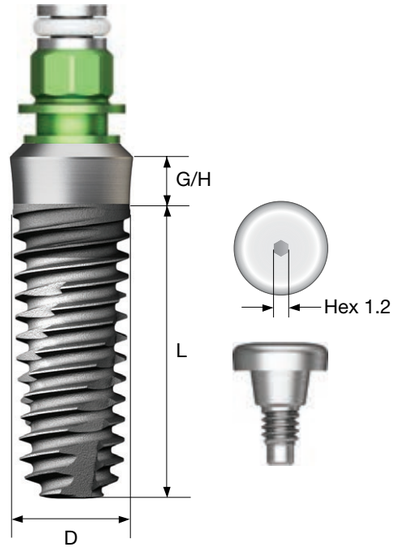
SSIII HA Fixture

- Non-submerged type implant with an internal octa and 8° tapered connection
- Premium high-crystalline HA-coated surface
- Tapered body design with high initial stability
- Corkscrew threading with excellent self-threading effect
- Excellent initial stability necessary for immediate loading, even in soft bone
- Recommended insertion torque: ≤40 Ncm

※ Fixtures with a diameter of 4.5mm or more are recommended for the posterior area

※ Recommended to use carefully, as the high-crystalline HA coating has a risk of fracturing or flaking off

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



D ø4.0
P ø4.8
R

G/H \ L	7	8.5	10	11.5	13
1.8	SS3R**4007H18**	SS3R**4008H18**	SS3R**4010H18**	SS3R**4011H18**	SS3R**4013H18**
2.8		SS3R**4008H28**	SS3R**4010H28**	SS3R**4011H28**	SS3R**4013H28**

D ø4.5
P ø4.8
R

G/H \ L	7	8.5	10	11.5	13
1.8	SS3R**4507H18**	SS3R**4508H18**	SS3R**4510H18**	SS3R**4511H18**	SS3R**4513H18**
2.8		SS3R**4508H28**	SS3R**4510H28**	SS3R**4511H28**	SS3R**4513H28**

D ø4.5
P ø6.0
W

G/H \ L	7	8.5	10	11.5	13
2.0	SS3W**4507H20**	SS3W**4508H20**	SS3W**4510H20**	SS3W**4511H20**	SS3W**4513H20**

D ø5.0
P ø6.0
W

G/H \ L	6	7	8.5	10	11.5	13
	Short					
2.0	SS3W**5006H20**	SS3W**5007H20**	SS3W**5008H20**	SS3W**5010H20**	SS3W**5011H20**	SS2W**5013H20**

Nominal and actual diameters may slightly differ.
Caution : For a short implant, a sufficient healing period is strongly recommended. A short implant should be splinted with another implant when considering prosthetic options.

Mount & Screw

Simple Mount

- Select appropriate mount according to the fixture platform
- Use a 1.2 hex driver (fasten manually)
- ※ Disposable; re-use is not allowed
- P = Platform

R Regular
W Wide

P

R



SSH**RG**

W



SSH**WB**

Cover Screw

- Select appropriate mount according to the fixture platform
- Use a 1.2 hex driver (fasten manually)
- P = Platform

R Regular
W Wide

P

R



SSCS**480**

W



SSCS**600**

Closing Screw

- Use when there is insufficient soft tissue
- Use a 1.2 hex driver (fasten manually)
- P = Platform

R Regular
W Wide

P

R



SSCS**480N**

W



SSCS**600N**

Healing Abutment

- Select appropriate mount according to the fixture platform
- Use a 1.2 hex driver (fasten manually)

R Regular

W Wide



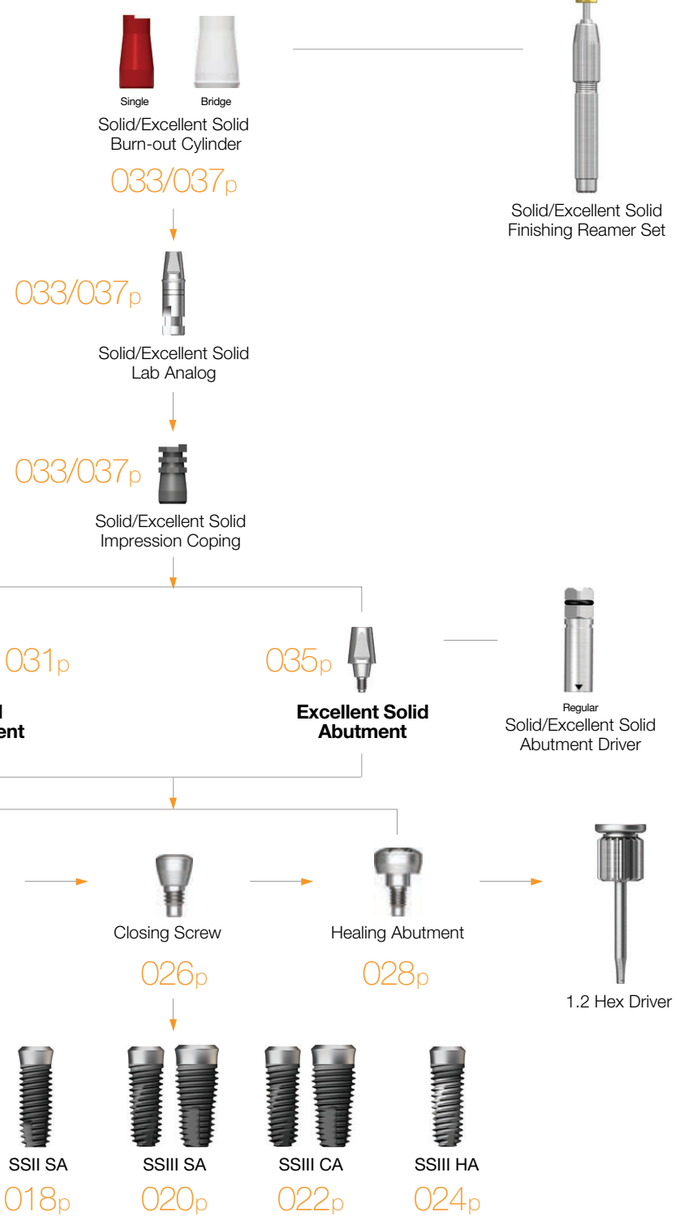
D \ H	2.0	3.0	4.0	5.0
ø 4.8	SSH482	SSH483	SSH484	SSH485

D \ H	2.0	3.0	4.0	5.0
ø 6.0	-	SSH603	SSH604	SSH605

PROSTHETIC FLOW DIAGRAM 1

Solid / Excellent Solid

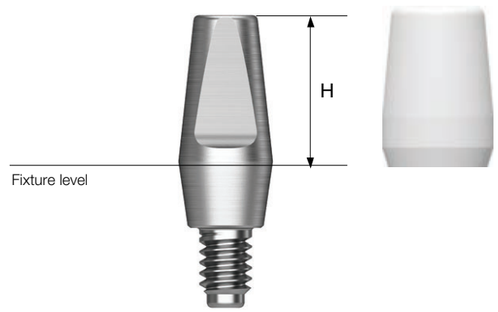
Abutment Level Impression



Solid Abutment

- Cement-retained prosthesis
- Abutment level impression
- ø 4.8: Connect using a solid abutment driver (code: SDSL/SDSS)
- ø 6.0: Connect using a 1.2 hex driver or solid abutment driver
- Recommended tightening torque: 30Ncm
- Packing unit : abutment + protect cap

Abutment + protect cap order code
: product code + **P** (ex : SSS485**P**)



D ø4.8

R

H	4.0	5.5	7.0
	SSS**484**	SSS**485**	SSS**487**

D ø6.0

W

H	4.0	5.5	7.0
	SSS**604**	SSS**605**	SSS**607**

Solid Abutment Components

Solid Protect Cap

- Protects the solid abutment and minimizes patient irritation
- Can be used as the base for a provisional crown

R Regular
W Wide

D \ H	4.0	5.5	7.0
			
ø 4.8	SSC**484**	SSC**485**	SSC**487**
ø 6.0	SSC**604**	SSC**605**	SSC**607**

Solid Retraction Cap

- Used for accurate margin reproduction when taking a direct impression
- Can be used as the base for a provisional crown

R Regular
W Wide

D \ H	4.0	5.5	7.0
			
ø 4.8	SSSRC**484**	SSSRC**485**	SSSRC**487**
ø 6.0	SSSRC**604**	SSSRC**605**	SSSRC**607**

Solid Impression Coping

- Color coded by abutment height

R Regular
W Wide

D \ H	4.0	5.5	7.0
			
ø 4.8	SSIC**484**	SSIC**485**	SSIC**487**
ø 6.0	SSIC**604**	SSIC**605**	SSIC**607**

Solid Lab Analog

- Connect to the appropriate color coded rigid impression coping

R Regular
W Wide

D \ H	4.0	5.5	7.0
			
ø 4.8	SSSA**484**	SSSA**485**	SSSA**487**
ø 6.0	SSSA**604**	SSSA**605**	SSSA**607**

Solid Burn-out Cylinder

- Used after casting, clean the margin for proper fitting

R Regular
W Wide

D \ H	Single	Bridge
		
ø 4.8	SSSP**480S**	SSSP**480B**
ø 6.0	SSSP**600S**	SSSP**600B**

Solid Abutment Components

Solid Impression Cap

- An impression cap used when the solid abutment is trimmed
- Used with a solid shoulder analog and analog pin

R Regular
W Wide

D

Ø 4.8
Ø 6.0



SSIP**480**
SSIP**600**

Solid Shoulder Analog

- Lab analog for solid impression cap impressions
- Used with solid impression cap and shoulder analog pin

R Regular
W Wide

D

Ø 4.8
Ø 6.0



SSSLA**480**
SSSLA**600**

Solid Shoulder Analog Pin

- An impression coping component used when the solid abutment is trimmed
- Reinforces the narrow part of the abutment
- Used with a solid shoulder analog and impression cap

R Regular
W Wide

D

Ø 4.8
Ø 6.0

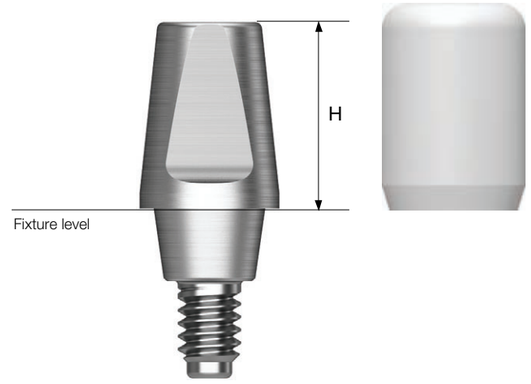


SSSAP**480**

Excellent Solid Abutment

- Cement-retained prosthesis
- Ideal for molar cases due to its larger volume (compared to the solid abutment), trim as needed
- Abutment level impression
- Ø 4.8: Connect using a 1.2 hex driver or an excellent solid abutment driver (code: ESDSS/ESDSL)
- Ø 6.0: Connect using a 1.2 hex driver or an 60S excellent solid abutment driver (code: ESD60S)
- Recommended tightening torque: 30Ncm
- Packing unit : abutment + protect cap

Abutment + protect cap order code
: product code + **P** (ex : SSE485**P**)



D Ø 4.8
R

H	4.0	5.5	7.0
			
	SSE**484**	SSE**485**	SSE**487**

D Ø 6.0
W

H	4.0	5.5	7.0
			
	SSE**604**	SSE**605**	SSE**607**

Excellent Solid Abutment Components

Excellent Solid Protect Cap

- Protects the solid abutment and minimizes patient irritation
- Can be used as the base for a provisional crown

R Regular
W Wide

D \ H	4.0	5.5	7.0
			
ø 4.8	SSEC**484**	SSEC**485**	SSEC**487**
ø 6.0	SSEC**604**	SSEC**605**	SSEC**607**

Excellent Solid Retraction Cap

- Used for accurate margin reproduction when taking a direct impression
- Can be used as the base for a provisional crown

R Regular
W Wide

D \ H	4.0	5.5	7.0
			
ø 4.8	SSERC**484**	SSERC**485**	SSERC**487**
ø 6.0	SSERC**604**	SSERC**605**	SSERC**607**

Excellent Solid Impression Coping

- Color coded by abutment height

R Regular
W Wide

D \ H	4.0	5.5	7.0
			
ø 4.8	SSEIC**484**	SSEIC**485**	SSEIC**487**
ø 6.0	SSEIC**604**	SSEIC**605**	SSEIC**607**

Excellent Solid Lab Analog

- Connect to the appropriate color coded rigid impression coping

R Regular
W Wide

D \ H	4.0	5.5	7.0
			
ø 4.8	SSEA**484**	SSEA**485**	SSEA**487**
ø 6.0	SSEA**604**	SSEA**605**	SSEA**607**

Excellent Solid Burn-out Cylinder

- Used after casting, clean the margin for proper fitting

R Regular
W Wide

D \ H	Single	Bridge
		
ø 4.8	SSEP**480S**	SSEP**480B**
ø 6.0	SSEP**600S**	SSEP**600B**

Excellent Solid Abutment Components

Excellent Solid Impression Cap

- An impression cap used when the solid abutment is trimmed
- Used with an excellent solid shoulder analog and an analog pin

R Regular
W Wide

D



ø 4.8
ø 6.0

SSEIP**480**
SSEIP**600**

Excellent Solid Shoulder Analog

- Lab analog for Solid Impression Cap impressions
- Used with an excellent solid impression cap and a shoulder analog pin

R Regular
W Wide

D



ø 4.8
ø 6.0

SSSLA**480**
SSSLA**600**

Excellent Solid Shoulder Analog Pin

- An impression coping component used when the solid abutment is trimmed
- Reinforces the narrow part of the abutment
- Used with an excellent solid shoulder analog and an impression cap

R Regular
W Wide

D



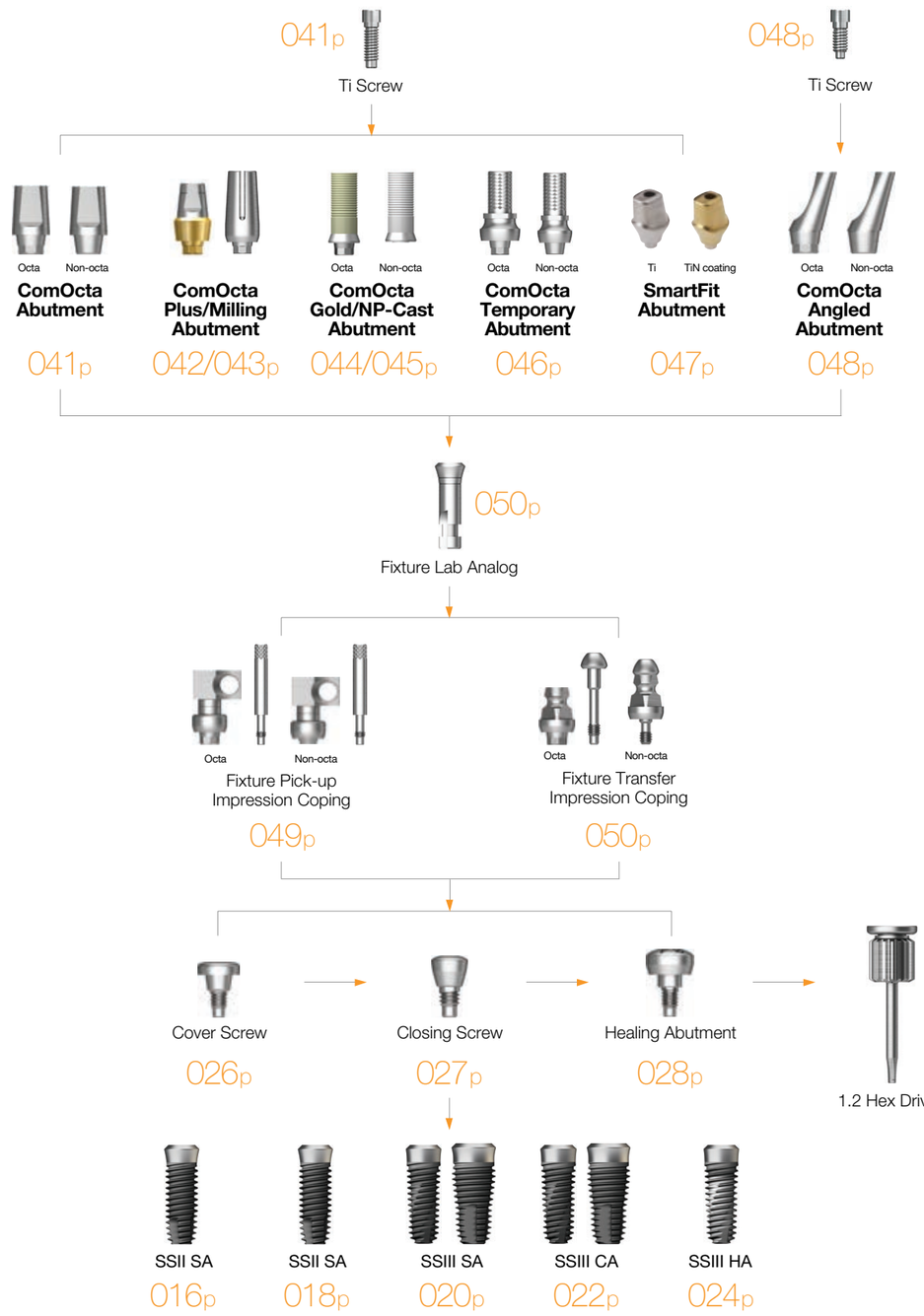
ø 4.8
ø 6.0

SSSAP**480**

PROSTHETIC FLOW DIAGRAM 2

ComOcta / SmartFit

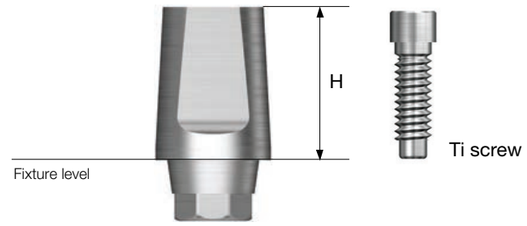
Fixture Level Impression



ComOcta Abutment

- Cement/combination-retained prosthesis
- Fixture level impression
- Able to take abutment level impression using a retraction cap
- Use a 1.2 hex driver
- Recommended tightening torque: 30Ncm
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code
: product code + **TH** (ex : SSCA485**TH**)



D ø4.8

R

Ti screw
: ASR200

H	4.0	5.5	7.0	4.0	5.5	7.0
Type	Octa			Non-Octa		
	SSCA**484**	SSCA**485**	SSCA**487**	SSCA**484N**	SSCA**485N**	SSCA**487N**

D ø6.0

W

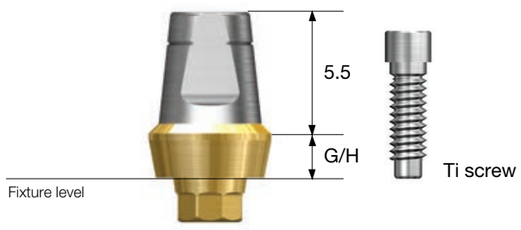
Ti screw
: ASR200

H	4.0	5.5	7.0	4.0	5.5	7.0
Type	Octa			Non-Octa		
	SSCA**604**	SSCA**605**	SSCA**607**	SSCA**604N**	SSCA**605N**	SSCA**607N**

ComOcta Plus Abutment

- Cement/combination-retained prosthesis
- Use when the gingiva is thick or the fixture is inserted deeply
- Abutment fastens to the platform at a 45° angle
- Fixture level impression
- Use a 1.2 hex driver
- Recommended tightening torque: 30Ncm
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code
: product code + **TH** (ex : SSCAP4826C**TH**)



D ø4.8

R

Ti screw
: ASR200

G/H	1.0	2.0	3.0	4.0
				
Octa	SSCAP**4816C**	SSCAP**4826C**	SSCAP**4836C**	SSCAP**4846C**
Non-Octa	SSCAP**4816CN**	SSCAP**4826CN**	SSCAP**4836CN**	SSCAP**4846CN**

D ø6.0

W

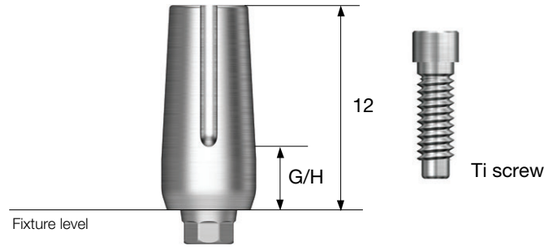
Ti screw
: ASR200

G/H	1.0	2.0	3.0	4.0
				
Octa	SSCAP**6016C**	SSCAP**6026C**	SSCAP**6036C**	SSCAP**6046C**
Non-Octa	SSCAP**6016CN**	SSCAP**6026CN**	SSCAP**6036CN**	SSCAP**6046CN**

ComOcta Milling Abutment

- Cement/combination-retained prosthesis
- Used when the abutment's margin shape needs corrections
- Abutment fastens to the platform at a 45° angle
- Fixture level impression
- Use a 1.2 hex driver
- Recommended tightening torque: 30Ncm
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code
: product code + **TH** (ex : SSCMA4830**TH**)



D ø4.8

R

Ti screw
: ASR200

G/H	3.0
	
	SSCMA**4830**

D ø6.0

W

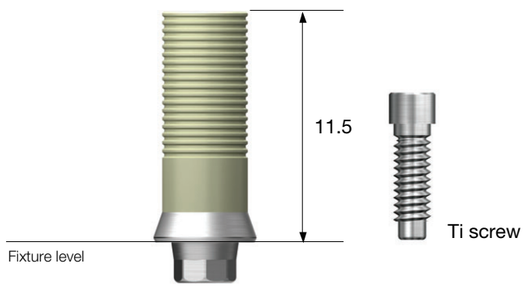
Ti screw
: ASR200

G/H	3.0
	
	SSCMA**6030**

ComOcta Gold Abutment

- Cement/combination/screw-retained prosthesis
- Customized prosthesis cast with gold alloy
- Abutment fastens to the platform at a 45° angle
- Abutment melting point: 1400~1450°C
- Fixture level impression
- Use a 1.2 hex driver
- Recommended tightening torque: 30Ncm
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code
: product code + **TH** (ex : COG480S**TH**)



D ø4.8

R

Ti screw
: ASR200

Type	Octa	Non-Octa
		
	COG**480S**	COG**480B**

D ø6.0

W

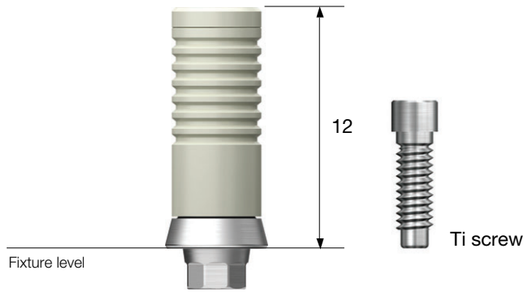
Ti screw
: ASR200

Type	Octa	Non-Octa
		
	COG**600S**	COG**600B**

ComOcta NP-Cast Abutment

- Cement/combination/screw-retained prosthesis
- Customized prosthesis cast with non-precious alloys
- Abutment fastens to the platform at a 45° angle
- Abutment melting point: 1400~1450°C
- Fixture level impression
- Use a 1.2 hex driver
- Recommended tightening torque: 30Ncm
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code
: product code + **TH** (ex : CON480S**TH**)



D ø4.8

R

Ti screw
: ASR200

Type	Octa	Non-Octa
		
	CON**480S**	CON**480B**

D ø6.0

W

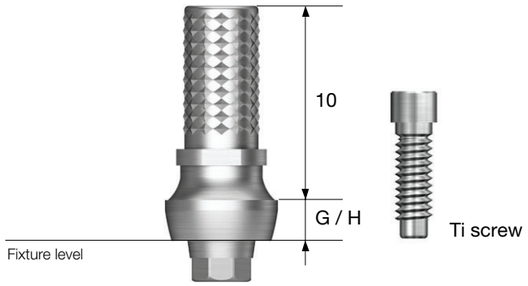
Ti screw
: ASR200

Type	Octa	Non-Octa
		
	CON**600S**	CON**600B**

ComOcta Temporary Abutment

- Cement/screw-retained prosthesis
- A trim able provisional prosthesis (made of Ti Gr-3)
- Fixture level impression
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code
: product code + **TH** (ex : SSTAO480**TH**)



D ø4.8

R
Ti screw
: ASR200

G/H	0	2.0	0	2.0
Type	Octa		Non-Octa	
				
	SSTAO**480**	SSTAO**482**	SSTAN**480**	SSTAN**482**

D ø6.0

W
Ti screw
: ASR200

G/H	0	2.0	0	2.0
Type	Octa		Non-Octa	
				
	SSTAO**600**	SSTAO**602**	SSTAN**600**	SSTAN**602**

SmartFit Abutment

- Cement/combination-retained prosthesis
- CAD/CAM designed and milled customized abutments
- Fixture level impression
- Lead time (by working days)
  - Titanium: 5 days
  - Titanium + gold color: 7 days
- Use a 1.2 hex driver
- Recommended tightening torque: 30Ncm
- Packing unit : abutment + Ti screw



Scan Boby

- Scan body for manufacturing a titanium SmartFit abutment
- Use a 1.2 hex driver (fastened manually)
- Packing unit : scan body + Ti screw

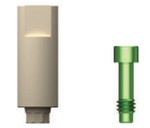
Scan body + screw order code
: product code + **TH** (ex : SSSBM**TH**)

R Regular
W Wide

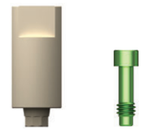
- Titanium SmartFit abutment 제작용 scan body
- 1.2 hex driver로 손 힘으로 체결
- Packing unit : scan body + Ti screw

Scan body + screw order code
: product code + **TH** (ex : SSSBM**TH**)

R
Green color screw
: USSBRS


SSSBR

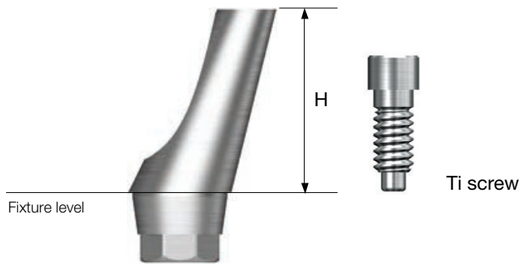
W
Green color screw
: USSBRS


SSSBW

ComOcta Angled Abutment

- Cement/combination-retained prosthesis
- Angle compensation between 15° and 20°
- Fixture level impression
- Fastened using a 1.2 hex driver
- Recommended tightening torque: 30Ncm
- Packing unit : abutment + Ti screw(only angled)

Abutment + Ti screw order code
: product code + **TH** (ex : SSA4815**TH**)



D ø4.8

R
Ti screw
: ASS200

Angle	15°	20°	15°	20°
Type	Octa		Non-Octa	
	SSA**4815**	SSA**4820**	SSA**4815N**	SSA**4820N**

D ø6.0

W
Ti screw
: ASS200

Angle	15°	20°	15°	20°
Type	Octa		Non-Octa	
	SSA**6015**	SSA**6020**	SSA**6015N**	SSA**6020N**

ComOcta Abutment Components

ComOcta Retraction Cap

- Used for accurate margin reproduction when taking a direct impression
- Can be used as the base for a provisional crown

R Regular
W Wide

D \ H	4.0	5.5	7.0
			
ø 4.8	SSCRC**484**	SSCRC**485**	SSCRC**487**
ø 6.0	SSCRC**604**	SSCRC**605**	SSCRC**607**

Fixture Pick-up Impression Coping

- For open tray impressions
- Unique design that is fixed position in the impression material
- Use a 1.2 hex driver (torque manually)
- Packing unit : impression coping body + guide pin(*)

R Regular (Silver)
W Wide (Blue)

D	L	5		10		Guide Pin 10	Guide Pin 15	Guide Pin 17
Type		Octa	Non-Octa	Octa	Non-Octa			
								
ø 4.8		SSICAS**480**	SSICAS**480N**	SSICA**480**	SSICA**480N**	CSR**100***(L5)	CSR**150***(L10)	CSR**170**
ø 6.0		SSICAS**600**	SSICAS**600N**	SSICA**600**	SSICA**600N**			

ComOcta Abutment Components

Fixture Transfer Impression Coping

- For closed tray impressions
- Triangular arc enabling precise placement
- Use a 1.2 hex driver (torque manually)
- Packing unit
  - Octa : impression coping body + guide pin
  - Non-octa : impression coping

R Regular (Silver)

W Wide (Blue)

D \ L	9.5	12.5	9.5	12.5
Type	Octa		Non-Octa	
				
Ø 4.8	SSCTIS**480**	SSCTIL**480**	SSCTIS**480N**	SSCTIL**480N**
Ø 6.0	SSCTIS**600**	SSCTIL**600**	SSCTIS**600N**	SSCTIL**600N**

Fixture Lab Analog

- A lab analog for fixture level impression
- Select an appropriate fixture platform; Ø 4.8 or Ø 6.0

R Regular (Silver)

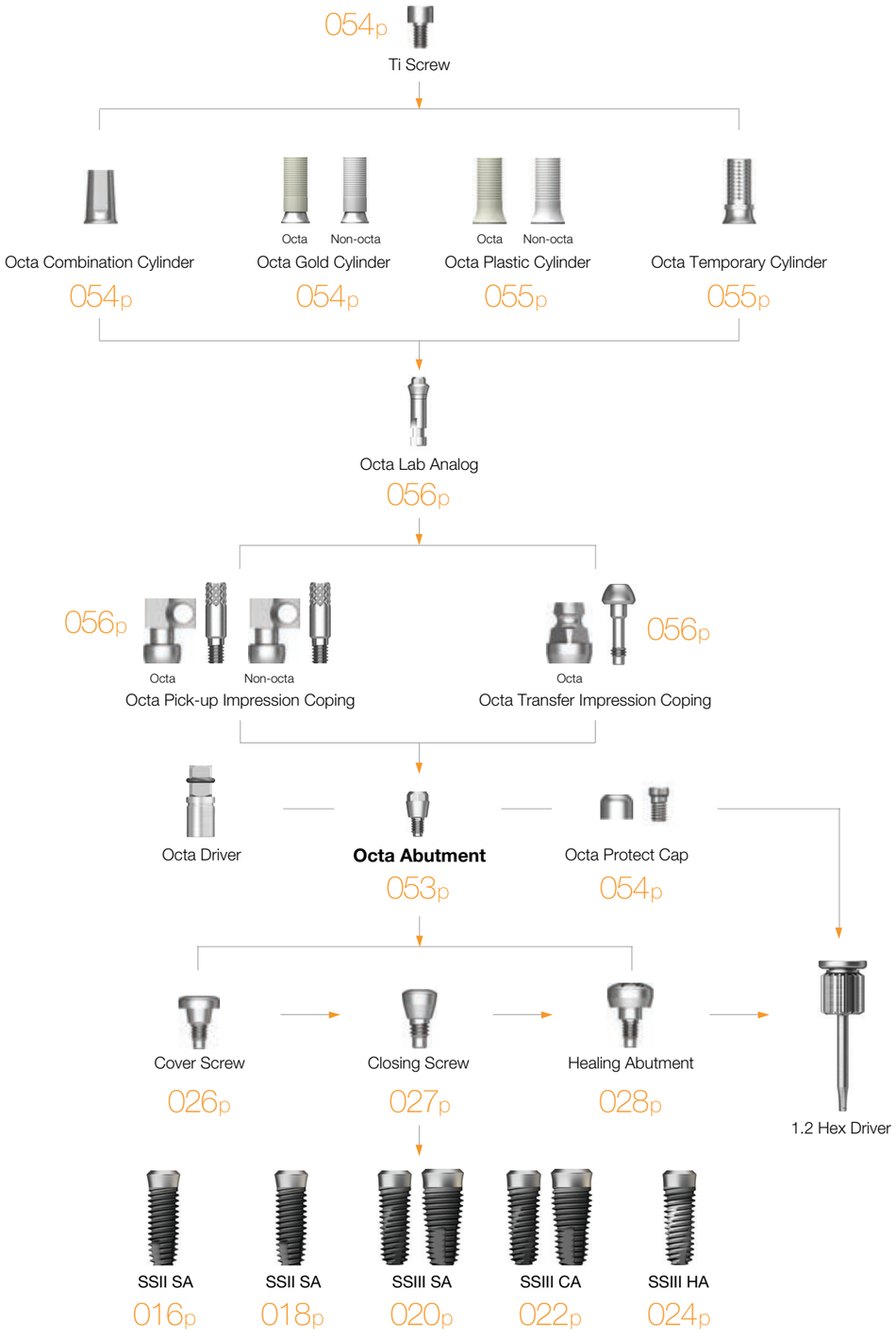
W Wide (Blue)

D	
	
Ø 4.8	SSFA**480**
Ø 6.0	SSFA**600**

PROSTHETIC FLOW DIAGRAM 3

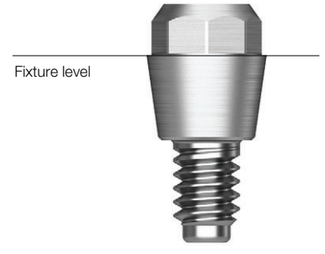
Octa

Abutment Level Impression



Octa Abutment

- Screw-retained prosthesis for multiple prosthetic options
- Angle compensation of up to 60°
- Use a dedicated outer driver (code: ODSL/ODSS)
- Recommended tightening torque: 30Ncm



D ø4.8

R



SSOA**480**

D ø6.0

W



SSOA**600**

Octa Abutment Components

Octa Protect Cap

- Protective cap
- Use a 1.2 hex driver (fastened manually)
- Packing unit : protect cap + Ti screw

Protect cap + Ti screw order code
: product code + **TH** (ex : SSHC480**TH**)

R Regular
W Wide

D	
	
Ø 4.8	SSHC**480**
Ø 6.0	SSHC**600**

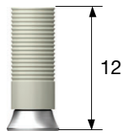
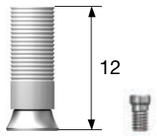
Ti screw
: SSFS **(Ø 4.8 / Ø 6.0)**

Octa Gold Cylinder

- Screw-retained prosthesis
- Customized prosthesis cast with gold alloy
- Cylinder melting point: 1400~1450˚C
- Fastened using a 1.2 hex driver
- Recommended tightening torque: 20Ncm
- Packing unit : cylinder + Ti cylinder screw

Cylinder + Ti screw order code
: product code + **TH** (ex : SSGCO480**TH**)

R Regular
W Wide

D	Type	Octa	Non-Octa
			
Ø 4.8		SSGCO**480**	SSGCN**480**
Ø 6.0		SSGCO**600**	SSGCN**600**

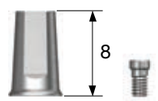
Ti screw
: SSFS **(Ø 4.8 / Ø 6.0)**

Octa Combination Cylinder

- Combination-retained prosthesis
- Compatible both with Octa/non-octa specs
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm
- Packing unit : cylinder + Ti cylinder screw

Cylinder + Ti screw order code
: product code + **TH** (ex : SSOCC480**TH**)

R Regular
W Wide

D	
	
Ø 4.8	SSOCC**480**
Ø 6.0	SSOCC**600**

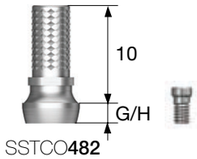
Ti screw
: SSFS **(Ø 4.8 / Ø 6.0)**

Octa Temporary Cylinder

- Provisional prosthesis (Ti Gr-3)
- Fastened using a 1.2 hex driver
- Recommended tightening torque: 20Ncm
- Packing unit : cylinder + Ti cylinder screw

Cylinder + Ti screw order code
: product code + **TH** (ex : SSTCO480**TH**)

R Regular
W Wide

D	G/H	0	2
			
Ø 4.8		SSTCO**480**	SSTCO**482**
Ø 6.0		SSTCO**600**	SSTCO**602**

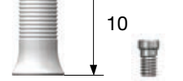
Ti screw
: SSFS **(Ø 4.8 / Ø 6.0)**

Octa Plastic Cylinder

- Screw-retained prosthesis
- Customized prosthesis cast with non-precious alloys
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm
- Packing unit : cylinder + Ti cylinder screw

Cylinder + Ti screw order code
: product code + **TH** (ex : SSPSO480**TH**)

R Regular
W Wide

D	Type	Octa	Non-Octa
			
Ø 4.8		SSPSO**480**	SSPSN**480**
Ø 6.0		SSPSO**600**	SSPSN**600**

Ti screw
: SSFS **(Ø 4.8 / Ø 6.0)**

Octa Abutment Components

Octa Pick-up Impression Coping

- A pick up impression coping for octa abutment
- Use a 1.2 hex driver (fastened manually)
- Packing unit : impression coping body + guide pin(*)

R Regular (Silver)
W Wide (Blue)

D \ L	Octa	Non-Octa	Guide Pin 10	Guide Pin 15
				
Ø 4.8	SSICO**480**	SSICN**480N**	SSGS**100**	SSGS**150***
Ø 6.0	SSICO**600**	SSICN**600N**		

Octa Transfer Impression Coping

- A pick-up impression coping
- Use a 1.2 hex driver (fastened manually)
- Packing unit : Impression coping body + guide pin

R Regular (Silver)
W Wide (Blue)

D	
	
Ø 4.8	SSOTI**480**
Ø 6.0	SSOTI**600**

Octa Lab Analog

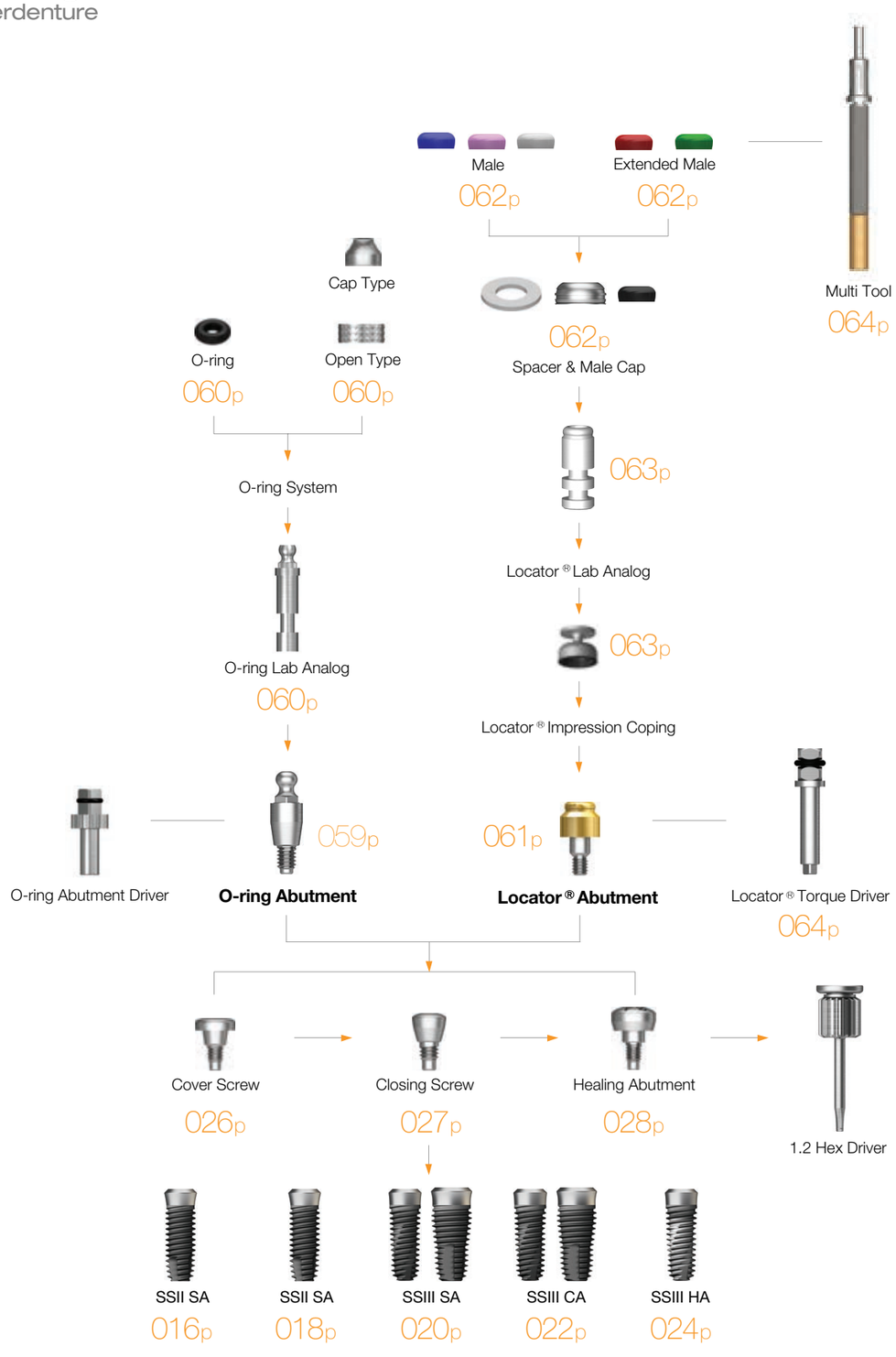
- A lab analog
- Use a 1.2 hex driver (fastened manually)

R Regular (Silver)
W Wide (Blue)

D	
	
Ø 4.8	SSLA**480**
Ø 6.0	SSLA**600**

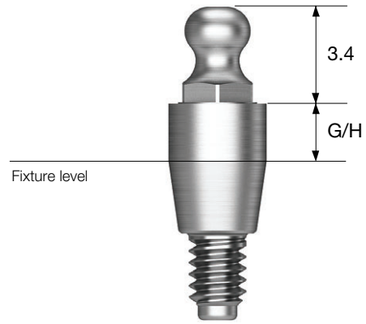
O-ring / Locator®

Overdenture



O-ring Abutment

- Retains overdenture with o-ring system
- Angle compensation of up to 20°
- Torque using an outer driver (code: AORD)
- Recommended tightening torque: 30Ncm



D ø4.8

R

G/H	0	2	4
	SSRA**000**	SSRA**200**	SSRA**400**

O-ring Abutment Components

O-ring Retainer Cap Set

- O-ring housing
- Place an appropriate o-ring in the metal housing before connecting to the abutment
- Packing unit : retainer cap + o-ring



RCS01

O-ring Retainer Set

- Used when vertical dimension is shorter than the retainer cap
- Packing unit : retainer cap + o-ring



RS01

O-ring Set

- O-ring set
- Packing unit : o-ring x 5ea



OAON01S

O-ring Lab Analog

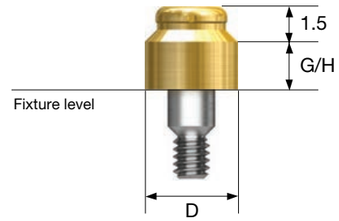
- A lab analog



OAL

Locator® Abutment

- Genuine Zest Anchors abutment
- Angle compensation of up to 40˚
- 1.5mm lower profile, attachment with various and stable retention forces
- Torque using a dedicated outer driver (code: TWLDLK/TWLDLSK)
- Recommended tightening torque: 30Ncm



D ø4.8

R

G/H	0.7	2.0	3.0	4.0
				
	HSLCA**4810R**	HSLCA**4820R**	HSLCA**4830R**	HSLCA**4840R**

Locator® Abutment Components

Locator® Male Processing Kit

- Components
  - Block out spacer / denture cap connected black processing male
  - Replacement male blue/pink/clear
- A full range of retentive males are included with each denture cap to allow personalized retention for each specific patient
- LOCATOR Core Tool places and removes nylon retentive males
- Packing unit : 2set



LMPS

Locator® Replacement Male

- Retention force: approx. 6N
- Angle compensation up to 20°
- Packing unit : 4ea



LRM06S

- Retention force: approx. 12N
- Angle compensation up to 20°
- Packing unit : 4ea



LRM12S

- Retention force: approx. 22N
- Angle compensation up to 20°
- Packing unit : 4ea



LRM22S

Locator® Extended Replacement Male

- Retention force: approx. 6N
- Angle compensation up to 20° to 40°
- Packing unit : 4ea



LEM06S

- Retention force: approx. 12N
- Angle compensation up to 20° to 40°
- Packing unit : 4ea



LEM12S

Locator® Black Processing Male

- A nylon male used in prosthesis fabrication process
- Packing unit : 4ea



LBPS

Locator® Block Out Spacers

- Place block-out spacers on the heads of the LOCATOR® abutments. Position denture cap with integrated black processing onto the LOCATOR® abutments. If necessary, add additional block-out spacers until no gap is visible between female, block-out spacer and gum.
- Packing unit : 20ea



LBSS

Locator® Impression Coping

- A pick up impression coping
- Closed tray
- Packing unit : 4ea



LICS

Locator® Lab Analog

- A lab analog
- Packing unit : 4ea



LAL50S

Locator® Abutment Components

Locator® Core Tool

- Places and removes nylon retentive males in the denture cap
- Separated into three different tools, includes a hand driver for locator abutment



LCCT

Locator® Torque Driver

- A torque driver for locator abutment

Type	Short	Long
	 TWLD**SK**	 TWLD**LK**

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.**
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.**
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.**
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.**
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.**
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.**
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.**
9	Evaluation of peri-implant tissue in nonsubmerged dentalImplants: a multicenter retrospective study	Clin Implant Dent Relat Res. 2011 Dec;13(4):324-9 **/ Young-Kyun Kim 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.**
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.**
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.**
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.**
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.**
15	Evaluation of peri-implant tissue in nonsubmerged dentalImplants: a multicenter retrospective study	Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2009;108(2):189-95 **/ 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.**
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.**
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**
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.**

Biology

No.	Title	Reference / Author
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.**
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.**
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.**
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.**
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.**
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.**
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.**
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.**
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.**

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

No.	Title	Reference / Author
1	Evaluation of the correlation between insertion torque and primary stabilityof 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's dental fixtures and products are manufactured using medical grade Titanium. Osstem Implant's abutments, denture material and surgical tools are only compatible with Osstem fixtures. For more details about any individual product, please refer to the user manual or catalog, or visit our company website (www.osstem.com). Please check all product labels for product codes, specifications, date of manufacture and expiration date.

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 requires proper and formal training and education.

Cautions before dental surgery

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

Cautions during dental implant surgery

Osstem Implant Systems 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 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 altered 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 caused by 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.

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

CE 0434

PCT

STERILE R — Sterilized using irradiation

Use by

Manufacture

Do not reuse

Date of manufacture

Keep away from sunlight

REF — Catalogue number

NON STERILE — Non-Sterile

Keep dry

LOT — Batch code

2 STERILIZE — Do not resterilize

Caution, Consult accompanying documents

OSSTEM IMPLANT