TS 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

CEO's Message

Providing cutting edge technology and superior quality

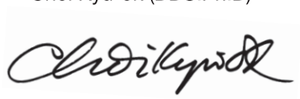
Making products that dentists want to use, trust, and are satisfied with:
This is our mission at OSSEM IMPLANT.

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

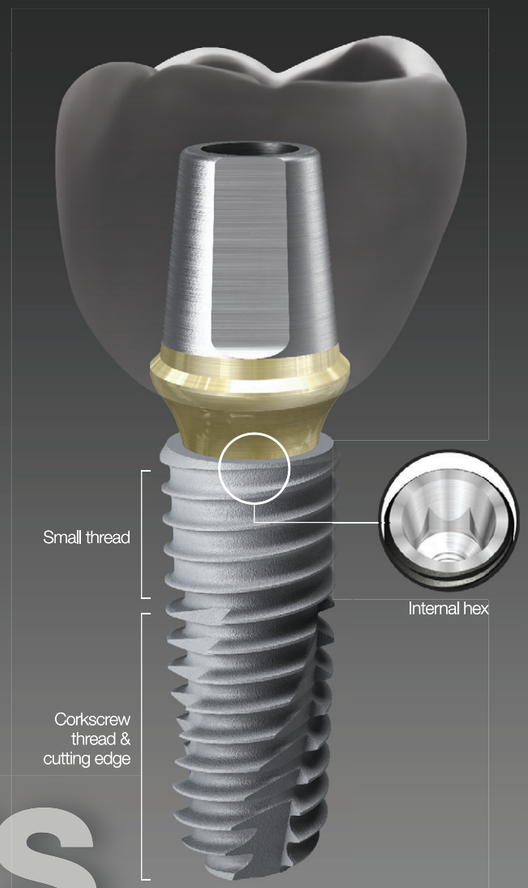
- **05** Selected as World Class 300
- **05** Released 'HyFlex', an impression material
- **08** Released 'Beau TIS' whitening material

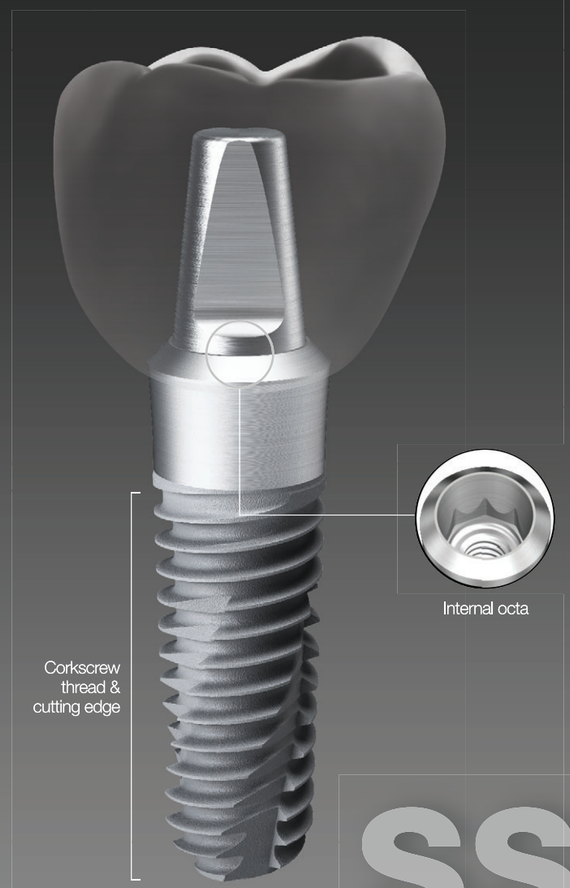
2015

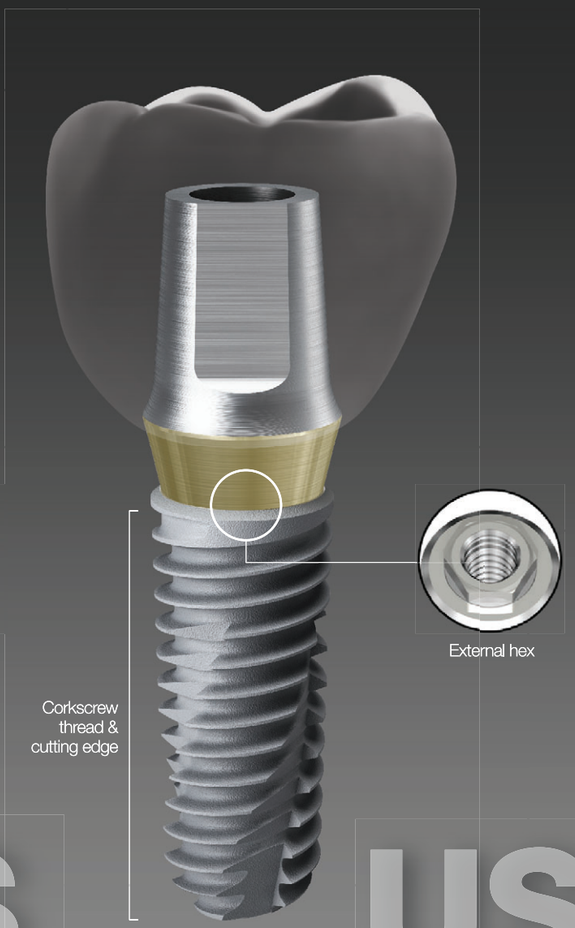
- **03** Established Osstem BioPharma Co., Ltd.
- **12** Awarded 'USD 50 Million Export Tower'

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

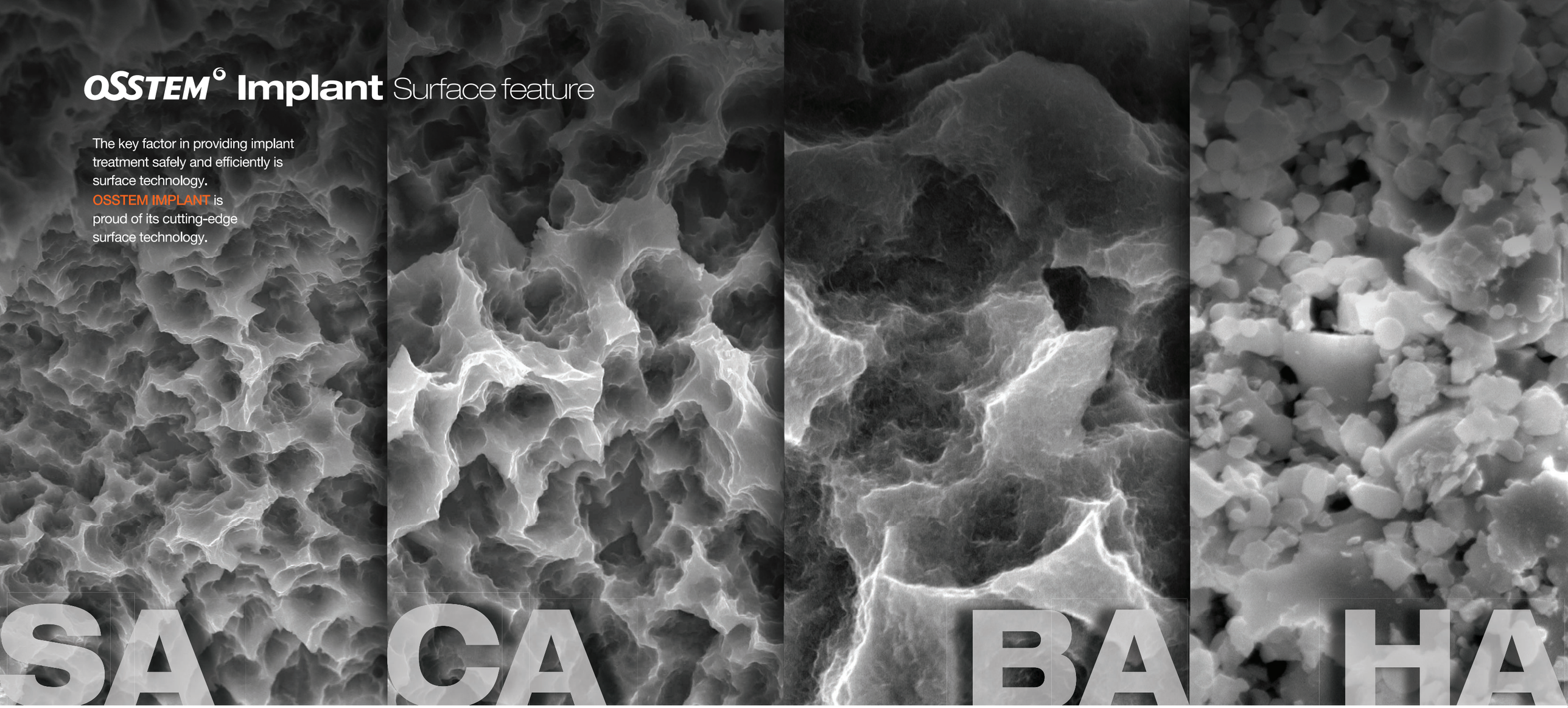
- Internal connection type - Regular / Wide
- Corkscrew thread with cutting edges
  - Easy path adjustments via the implant's excellent self-threading effect
  - Higher initial stability and consistent insertion torque, regardless of the drill's diameter
- Different body types to properly match the patient's 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.



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)

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)

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

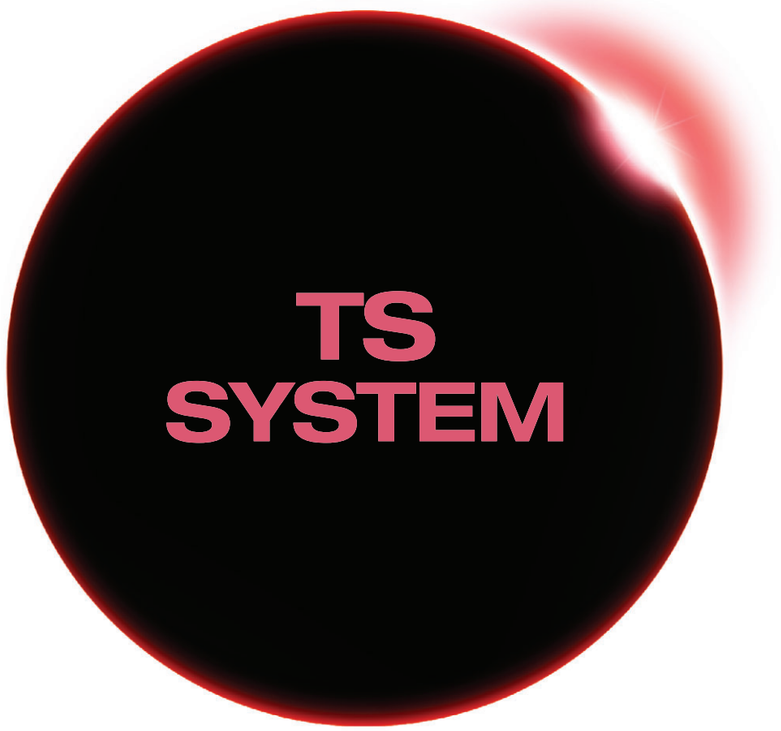
Premium high-crystalline HA-coated surface

- 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

TS SYSTEM Contents



OSSTEM
IMPLANT

FIXTURE

COMPONENTS

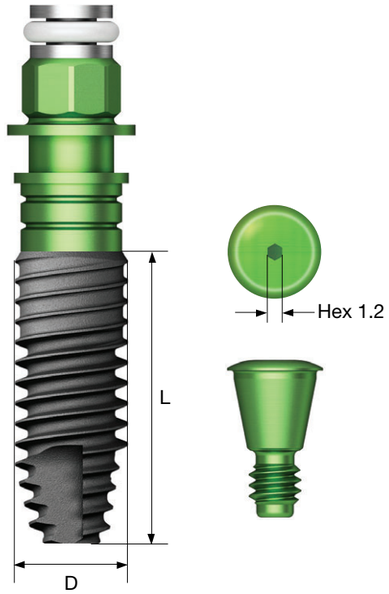
TSII SA Fixture

- Submerged type implant with an internal hex and 11° 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 : TS2S4010S)

Pre-Mounted fixture (fixture + mount + cover screw) order code
: **B** + fixture product code (ex : **B**TS2S4010S)



D ø5.0 Hex 2.5 (R)

L: 6 (Short), 7, 8.5, 10, 11.5, 13

TS2S**5006S** TS2S**5007S** TS2S**5008S** TS2S**5010S** TS2S**5011S** TS2S**5013S**

D ø3.5 Hex 2.1 (M)

L: 8.5, 10, 11.5, 13

TS2M**3508S** TS2M**3510S** TS2M**3511S** TS2M**3513S**

D ø4.0 Hex 2.5 (R)

L: 7, 8.5, 10, 11.5, 13

TS2S**4007S** TS2S**4008S** TS2S**4010S** TS2S**4011S** TS2S**4013S**

D ø4.5 Hex 2.5 (R)

L: 7, 8.5, 10, 11.5, 13

TS2S**4507S** TS2S**4508S** TS2S**4510S** TS2S**4511S** TS2S**4513S**

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.

TSII CA Fixture

- Submerged type implant with an internal hex and 11° 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

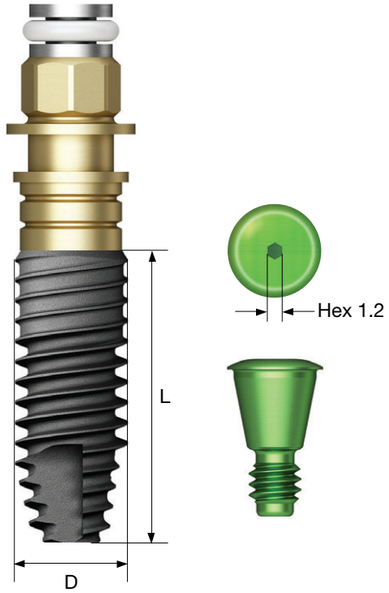
Ultra-wide

- Ideal for an extracted tooth site in the posterior area, for immediate placement, or for replacing a failed implant
- Apex is 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 : TS2S4010C)

Pre-Mounted fixture (fixture + mount + cover screw) order code
: **B** + fixture product code (ex : **B**TS2S4010S)



D ø3.5
Hex 2.1
M

L	8.5	10	11.5	13
	TS2M**3508C**	TS2M**3510C**	TS2M**3511C**	TS2M**3513C**

D ø4.0
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS2S**4007C**	TS2S**4008C**	TS2S**4010C**	TS2S**4011C**	TS2S**4013C**

D ø4.5
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS2S**4507C**	TS2S**4508C**	TS2S**4510C**	TS2S**4511C**	TS2S**4513C**

D ø5.0
Hex 2.5
R

L	6	7	8.5	10	11.5	13
	Short					
	TS2S**5006C**	TS2S**5007C**	TS2S**5008C**	TS2S**5010C**	TS2S**5011C**	TS2S**5013C**

Ultra-Wide

D ø6.0
Hex 2.5
R

L	6	7	8.5	10	11.5	13
	Short					
	TS2S**6006C**	TS2S**6007C**	TS2S**6008C**	TS2S**6010C**	TS2S**6011C**	TS2S**6013C**

D ø7.0
Hex 2.5
R

L	6	7	8.5	10	11.5	13
	Short					
	TS2S**7006C**	TS2S**7007C**	TS2S**7008C**	TS2S**7010C**	TS2S**7011C**	TS2S**7013C**

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.

TSIII SA Fixture

- Submerged type implant with an internal hex and 11° 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

Narrow

- A fixture that can be placed in tight spaces (narrow ridge)
- Angle compensate is easy in the anterior area
- Compatible with existing mini-international connection abutments (Cover screw, mount, or lab analog not compatible)

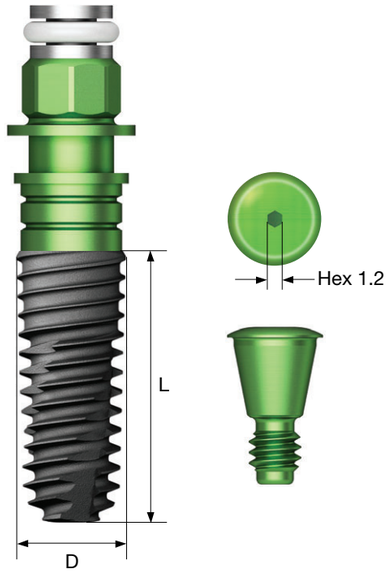
Ultra-wide

- 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 : TS3S4010S)

Pre-Mounted fixture (fixture + mount + cover screw) order code
: **B** + fixture product code (ex : **B**TS3S4010S)



D ø3.0 Hex 2.1 Narrow

M

L	8.5	10	11.5	13
	TS3M**3008S**	TS3M**3010S**	TS3M**3011S**	TS3M**3013S**

D ø3.5 Hex 2.1

M

L	8.5	10	11.5	13
	TS3M**3508S**	TS3M**3510S**	TS3M**3511S**	TS3M**3513S**

D ø4.0 Hex 2.5

R

L	7	7	8.5	10	11.5	13
	Extra short					
	TS3S**4006S**	TS3S**4007S**	TS3S**4008S**	TS3S**4010S**	TS3S**4011S**	TS3S**4013S**

D ø4.5 Hex 2.5

R

L	7	7	8.5	10	11.5	13
	Extra short					
	TS3S**4506S**	TS3S**4507S**	TS3S**4508S**	TS3S**4510S**	TS3S**4511S**	TS3S**4513S**

D ø5.0 Hex 2.5

R

L	6	6	6	7	8.5	10	11.5	13
	Extra short	Extra short	Short					
	TS3S**5004S**	TS3S**5005S**	TS3S**5006S**	TS3S**5007S**	TS3S**5008S**	TS3S**5010S**	TS3S**5011S**	TS3S**5013S**

D ø5.5 Hex 2.5

R

L	6	7	8.5	10	11.5	13
	Short					
	TS3S**5506S**	TS3S**5507S**	TS3S**5508S**	TS3S**5510S**	TS3S**5511S**	TS3S**5513S**

Ultra-Wide

D ø6.0 Hex 2.5

R

L	6	7	8.5	10	11.5	13
	Short					
	TS3S**6006S**	TS3S**6007S**	TS3S**6008S**	TS3S**6010S**	TS3S**6011S**	TS3S**6013S**

D ø7.0 Hex 2.5

R

L	6	7	8.5	10	11.5	13
	Short					
	TS3S**7006S**	TS3S**7007S**	TS3S**7008S**	TS3S**7010S**	TS3S**7011S**	TS3S**7013S**

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.

TSIII CA Fixture

- Submerged type implant with an internal hex and 11° tapered connection
- Super-hydrophilic SA surface suspended in a calcium solution
- 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

Narrow

- A fixture that can be placed in tight spaces (narrow ridge)
- Angle compensate is easy in the anterior area
- Compatible with existing mini-international connection abutments (Cover screw, mount, or lab analog not compatible)

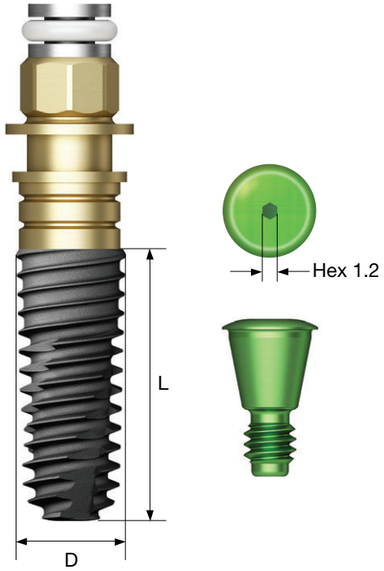
Ultra-wide

- 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 : TS3S4010C)

Pre-Mounted fixture (fixture + mount + cover screw) order code
: **B** + fixture product code (ex : **B**TS3S4010C)



D ø3.0 Hex 2.1 Narrow

M

L	8.5	10	11.5	13
	TS3M**3008C**	TS3M**3010C**	TS3M**3011C**	TS3M**3013C**

D ø3.5 Hex 2.1

M

L	8.5	10	11.5	13
	TS3M**3508C**	TS3M**3510C**	TS3M**3511C**	TS3M**3513C**

D ø4.0 Hex 2.5

R

L	7	7	8.5	10	11.5	13
	Extra short					
	TS3S**4006C**	TS3S**4007C**	TS3S**4008C**	TS3S**4010C**	TS3S**4011C**	TS3S**4013C**

D ø4.5 Hex 2.5

R

L	7	7	8.5	10	11.5	13
	Extra short					
	TS3S**4506C**	TS3S**4507C**	TS3S**4508C**	TS3S**4510C**	TS3S**4511C**	TS3S**4513C**

D ø5.0 Hex 2.5

R

L	6	6	6	7	8.5	10	11.5	13
	Extra short	Extra short	Short					
	TS3S**5004C**	TS3S**5005C**	TS3S**5006C**	TS3S**5007C**	TS3S**5008C**	TS3S**5010C**	TS3S**5011C**	TS3S**5013C**

D ø5.5 Hex 2.5

R

L	6	7	8.5	10	11.5	13
	Short					
	TS3S**5506C**	TS3S**5507C**	TS3S**5508C**	TS3S**5510C**	TS3S**5511C**	TS3S**5513C**

Ultra-Wide

D ø6.0 Hex 2.5

R

L	6	7	8.5	10	11.5	13
	Short					
	TS3S**6006C**	TS3S**6007C**	TS3S**6008C**	TS3S**6010C**	TS3S**6011C**	TS3S**6013C**

D ø7.0 Hex 2.5

R

L	6	7	8.5	10	11.5	13
	Short					
	TS3S**7006C**	TS3S**7007C**	TS3S**7008C**	TS3S**7010C**	TS3S**7011C**	TS3S**7013C**

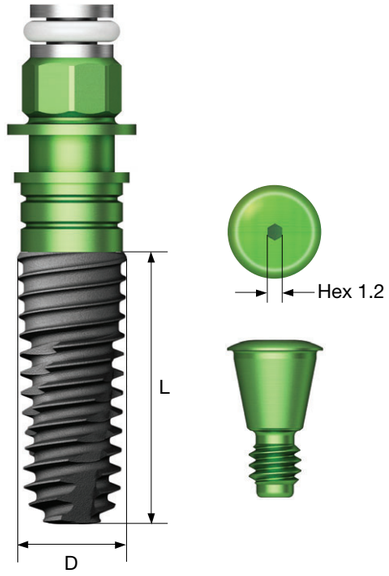
Nominal and actual diameters may slightly differ.
Caution : For a short implant, a sufficient healing period is strongly recommended. A short implant should be splinted with another implant when considering prosthetic options.

TSIII BA Fixture

- Submerged type implant with an internal hex and 11° tapered connection
- Super-hydrophilic surface enhances the rapid formation of blood clots
- SA surface coated with premium low crystalline nano-HA
- Bio-absorbable coating with no risk of fracturing or flaking off
- 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
- Recommended insertion torque: ≤40 Ncm

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

Pre-Mounted fixture (fixture + mount + cover screw) **order code**
: **B** + fixture product code (ex : **B**TS3S4010B)



D ø3.5
Hex 2.1
M

L	8.5	10	11.5	13
	TS3M**3508B**	TS3M**3510B**	TS3M**3511B**	TS3M**3513B**

D ø4.0
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS3S**4007B**	TS3S**4008B**	TS3S**4010B**	TS3S**4011B**	TS3S**4013B**

D ø4.5
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS3S**4507B**	TS3S**4508B**	TS3S**4510B**	TS3S**4511B**	TS3S**4513B**

D ø5.0
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS3S**5007B**	TS3S**5008B**	TS3S**5010B**	TS3S**5011B**	TS3S**5013B**

Nominal and actual diameters may slightly differ.

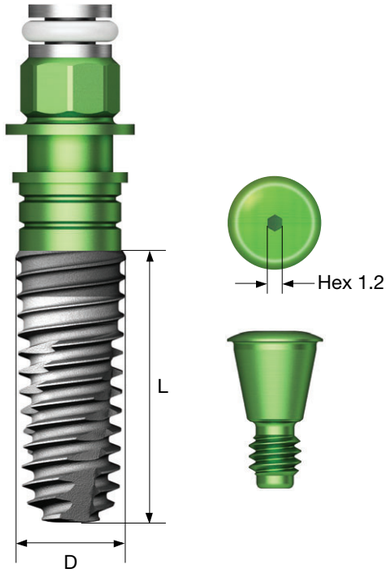
TSIII HA Fixture

- Submerged type implant with an internal hex and 11° tapered connection
- Premium high-crystalline HA-coated 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
- 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 + mount + cover screw) **order code**
: **B** + fixture product code (ex : **B**TS3S4010H)



D ø3.5
Hex 2.1
M

L	8.5	10	11.5	13
	TS3M**3508H**	TS3M**3510H**	TS3M**3511H**	TS3M**3513H**

D ø4.0
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS3S**4007H**	TS3S**4008H**	TS3S**4010H**	TS3S**4011H**	TS3S**4013H**

D ø4.5
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS3S**4507H**	TS3S**4508H**	TS3S**4510H**	TS3S**4511H**	TS3S**4513H**

D ø5.0
Hex 2.5
R

L	6	7	8.5	10	11.5	13
	Short					
	TS3S**5006H**	TS3S**5007H**	TS3S**5008H**	TS3S**5010H**	TS3S**5011H**	TS3S**5013H**

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.

TSIV SA Fixture

- Submerged type implant with an internal hex and 11° tapered connection
- Optimized screw thread design with the ideal SA surface
- Designed specifically for the maxillary sinus and soft bone
- Excellent initial stability in soft bone due to the small thread on the upper part
- Corkscrew threading with excellent self-threading effect
- Aggressive apex design allows placement even in a ø2.0 or ø3.0mm osteotomy in D4 bone

Ultra-wide

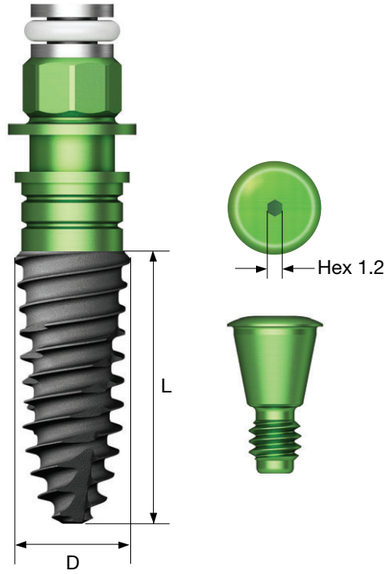
- Ideal for an extracted tooth site in the posterior area, for immediate placement, or for replacing a failed implant
- Apex is specifically design for excellent initial stability in an extracted tooth site
- Recommended insertion torque: ≤40 Ncm

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

※ It is recommended to reduce the insertion speed to 15RPM or lower, the TSIV fixture has aggressive threads and insert very quickly.

NoMount fixture order code
: fixture product code (ex : TS4S4010S)

Pre-Mounted fixture (fixture + mount + cover screw) order code
: **B** + fixture product code (ex : **B**TS4S4010S)



Ultra-wide

D ø6.0
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS4S**6007S**	TS4S**6008S**	TS4S**6010S**	TS4S**6011S**	TS4S**6013S**

D ø7.0
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS4S**7007S**	TS4S**7008S**	TS4S**7010S**	TS4S**7011S**	TS4S**7013S**

D ø4.0 Pitch 0.8
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS4S**4007S**	TS4S**4008S**	TS4S**4010S**	TS4S**4011S**	TS4S**4013S**

D ø4.5 Pitch 1.0
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS4S**4507S**	TS4S**4508S**	TS4S**4510S**	TS4S**4511S**	TS4S**4513S**

D ø5.0 Pitch 1.2
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS4S**5007S**	TS4S**5008S**	TS4S**5010S**	TS4S**5011S**	TS4S**5013S**

Nominal and actual diameters may slightly differ.

TSIV CA Fixture

- Submerged type implant with an internal hex and 11° tapered connection
- Super-hydrophilic SA surface suspended in a calcium solution
- Designed specifically for the maxillary sinus and soft bone
- Excellent initial stability in soft bone due to the small thread on the upper part
- Corkscrew threading with excellent self-threading effect
- Aggressive apex design allows placement even in a ø2.0 or ø3.0mm osteotomy in D4 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.

※ It is recommended to reduce the insertion speed to 15RPM or lower, the TSIV fixture has aggressive threads and insert very quickly.

NoMount fixture order code

: fixture product code (ex : TS4S4010C)

Ultra-wide

D ø6.0
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS4S**6007C**	TS4S**6008C**	TS4S**6010C**	TS4S**6011C**	TS4S**6013C**

D ø7.0
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS4S**7007C**	TS4S**7008C**	TS4S**7010C**	TS4S**7011C**	TS4S**7013C**

D ø4.0 Pitch 0.8
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS4S**4007C**	TS4S**4008C**	TS4S**4010C**	TS4S**4011C**	TS4S**4013C**

D ø4.5 Pitch 1.0
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS4S**4507C**	TS4S**4508C**	TS4S**4510C**	TS4S**4511C**	TS4S**4513C**

D ø5.0 Pitch 1.2
Hex 2.5
R

L	7	8.5	10	11.5	13
	TS4S**5007C**	TS4S**5008C**	TS4S**5010C**	TS4S**5011C**	TS4S**5013C**

Nominal and actual diameters may slightly differ.

Mount & Screw

Simple Mount

- Use a 1.2 hex driver
- Recommended tightening torque: 8 to 10Ncm
- Packing unit: mount + mount screw

※ Disposable; re-use is not allowed

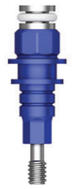
- C = Connection

M Mini

R Regular

C

M
For Ø3.0



TSS**M30**

M

TSHA**MM**

R

TSHA**MR**

Cover Screw

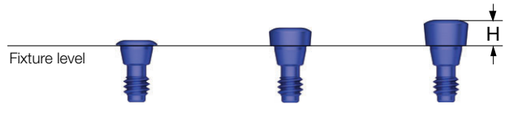
- Height(H) selection is based on the fixture' s insertion depth
- A separate cover screw is made exclusively for the ø3.0 fixture
- Use a 1.2 hex driver (torque manually)
- P = Platform

M Mini

R Regular

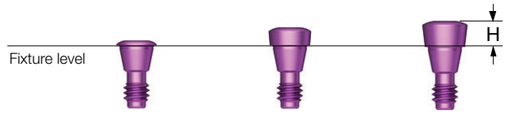
P \ H	0.4	1.4	2.0

M
For Ø3.0



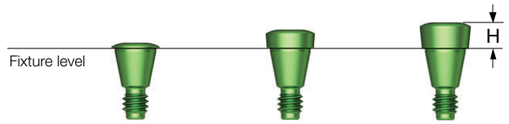
GSCS**30** GSCS**30M** GSCS**30L**

M



GSCS**35** GSCS**35M** GSCS**35L**

R



GSCS**40S-G** GSCS**40M-G** GSCS**40L-G**

Healing Abutment

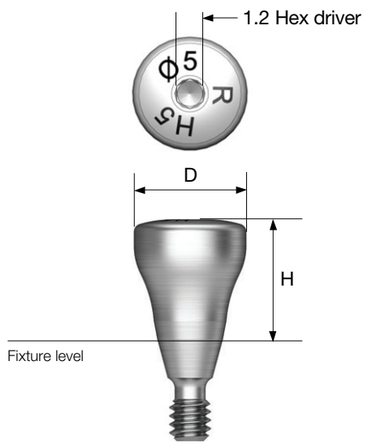
- Yellow (Mini) color coded prosthetic parts are for ø3.5 and ø3.0 fixtures
- Use a 1.2 hex driver (torque manually)

M Mini

R Regular

Matching table

Healing Abutment	**H**	3.0	4.0	5.0	7.0
Abutment	**G/H**	1.0	2.0 or 3.0	3.0 or 4.0	5.0 이상
Impression coping	**Type**	Short	Short	Long	Long



D \ H	3.0	4.0	5.0	7.0	9.0
					
ø4.0	TSHA**403M**	TSHA**404M**	TSHA**405M**	TSHA**407M**	TSHA**409M**
ø4.5	TSHA**453M**	TSHA**454M**	TSHA**455M**	TSHA**457M**	TSHA**459M**

D \ H	3.0	4.0	5.0	7.0	9.0
					
ø4.0	TSHA**403R**	TSHA**404R**	TSHA**405R**	TSHA**407R**	TSHA**409R**
ø4.5	TSHA**453R**	TSHA**454R**	TSHA**455R**	TSHA**457R**	TSHA**459R**
ø5.0	TSHA**503R**	TSHA**504R**	TSHA**505R**	TSHA**507R**	TSHA**509R**
ø6.0	TSHA**603R**	TSHA**604R**	TSHA**605R**	TSHA**607R**	TSHA**609R**
ø7.0	TSHA**703R**	TSHA**704R**	TSHA**705R**	TSHA**707R**	TSHA**709R**
ø8.0	-	-	TSHA**805R**	-	-

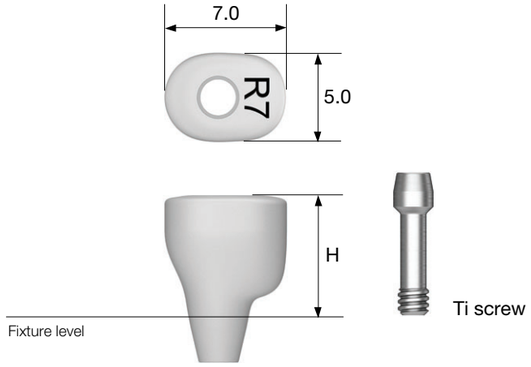
Custom Healing Abutment

- Healing abutment shaped like a tooth
- Prep able and resin friendly
- Material: medical grade PEEK
- Titanium screw included
- Use a 1.2 hex driver (torque manually)
- Packing unit: abutment + Ti screw
- P = Platform

Abutment + Ti screw order code
: product code + **TH** (ex : TSCHAPR7**TH**)

M Mini

R Regular

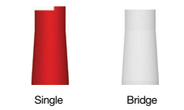


P \ H	5.0	7.0	9.0
M **Ti screw** : GSCHABSMT	 TSCHAP**M5**	 TSCHAP**M7**	 TSCHAP**M9**
R **Ti screw** : GSCHABSST	 TSCHAP**R5**	 TSCHAP**R7**	 TSCHAP**R9**

PROSTHETIC FLOW DIAGRAM 1

Rigid / Transfer

Abutment Level Impression



Rigid Burn-out Cylinder

041p

Rigid Lab Analog

041p

Rigid Impression Coping

040p

Rigid Protect Cap

Rigid Retraction Cap

Finishing
Reamer set

040p 040p

Rigid Outer Driver,
1.2 Hex Driver
: Mini, Regular(ø 4.0) -
only outer driver

Rigid Abutment

037p

Transfer Abutment

042p

1.2 Hex Driver

Cover Screw

032p

Healing Abutment

033p

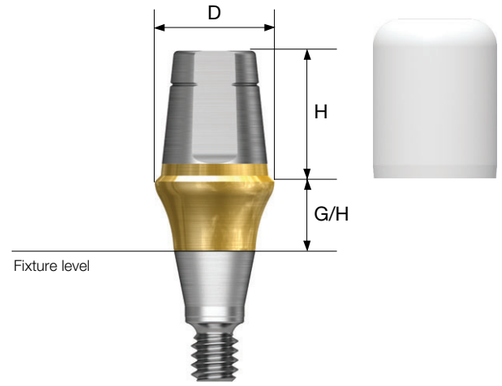
1.2 Hex Driver

TSII SA 016p | TSII CA 018p | TSIII SA 020p | TSIII CA 022p | TSIII BA 024p | TSIII HA 026p | TSIV SA 028p | TSIV CA 030p

Rigid Abutment

- Cement-retained prosthesis
- Abutment level impression
- ø 4.0: Torque with the outer driver (code: ORDML/ORDMS)
- ø 4.5/ø 5.0/ø 6.0: Torque with the outer driver or 1.2 hex driver
- ø .0: Torque with a 1.2 hex driver
- Recommended tightening torque: 30Ncm
- Packing unit : abutment + protect cap

Abutment + protect cap order code
: product code + **P** (ex : GSRA5620**P**)



D ø4.0

M

H \ G/H	1.0	2.0	3.0	4.0	5.0
4.0	GSRA**4410**	GSRA**4420**	GSRA**4430**	GSRA**4440**	GSRA**4450**
5.5	GSRA**4610**	GSRA**4620**	GSRA**4630**	GSRA**4640**	GSRA**4650**
7.0	GSRA**4710**	GSRA**4720**	GSRA**4730**	GSRA**4740**	GSRA**4750**

D ø4.5

M

H \ G/H	1.0	2.0	3.0	4.0	5.0
					
4.0	GSRA**4411**	GSRA**4421**	GSRA**4431**	GSRA**4441**	GSRA**4451**
5.5	GSRA**4611**	GSRA**4621**	GSRA**4631**	GSRA**4641**	GSRA**4651**
7.0	GSRA**4711**	GSRA**4721**	GSRA**4731**	GSRA**4741**	GSRA**4751**

Rigid Abutment

D ø4.0

R

H \ G/H	1.0	2.0	3.0	4.0	5.0
					
4.0	GSRAS**4410**	GSRAS**4420**	GSRAS**4430**	GSRAS**4440**	GSRAS**4450**
5.5	GSRAS**4610**	GSRAS**4620**	GSRAS**4630**	GSRAS**4640**	GSRAS**4650**
7.0	GSRAS**4710**	GSRAS**4720**	GSRAS**4730**	GSRAS**4740**	GSRAS**4750**

D ø4.5

R

H \ G/H	1.0	2.0	3.0	4.0	5.0
					
4.0	GSRAS**4411**	GSRAS**4421**	GSRAS**4431**	GSRAS**4441**	GSRAS**4451**
5.5	GSRAS**4611**	GSRAS**4621**	GSRAS**4631**	GSRAS**4641**	GSRAS**4651**
7.0	GSRAS**4711**	GSRAS**4721**	GSRAS**4731**	GSRAS**4741**	GSRAS**4751**

D ø5.0

R

H \ G/H	1.0	2.0	3.0	4.0	5.0
					
4.0	GSRA**5410**	GSRA**5420**	GSRA**5430**	GSRA**5440**	GSRA**5450**
5.5	GSRA**5610**	GSRA**5620**	GSRA**5630**	GSRA**5640**	GSRA**5650**
7.0	GSRA**5710**	GSRA**5720**	GSRA**5730**	GSRA**5740**	GSRA**5750**

D ø6.0

R

H \ G/H	1.0	2.0	3.0	4.0	5.0
					
4.0	GSRA**6410**	GSRA**6420**	GSRA**6430**	GSRA**6440**	GSRA**6450**
5.5	GSRA**6610**	GSRA**6620**	GSRA**6630**	GSRA**6640**	GSRA**6650**
7.0	GSRA**6710**	GSRA**6720**	GSRA**6730**	GSRA**6740**	GSRA**6750**

D ø7.0

R

H \ G/H	1.0	2.0	3.0	4.0	5.0
					
5.5	GSRA**7610**	GSRA**7620**	GSRA**7630**	GSRA**7640**	GSRA**7650**

Rigid Abutment Components

Rigid Protect Cap

- Protects the rigid abutment and minimizes patient irritation
- Can be used as the base for a provisional crown
- Available for transfer abutment (except for the ø 4.0)

M Mini
R Regular

D \ H	4.0	5.5	7.0
			
ø 4.0/ø 4.0	GSRPC**440**	GSRPC**460**	GSRPC**470**
ø 4.5/ø 4.5	GSRPC**441**	GSRPC**461**	GSRPC**471**
ø 5.0	GSRPC**540**	GSRPC**560**	GSRPC**570**
ø 6.0	GSRPC**640**	GSRPC**660**	GSRPC**670**
ø 7.0	-	GSRPC**760**	-

Rigid Retraction Cap

- Used for accurate margin reproduction when taking a direct impression
- Can be used as the base for a provisional crown
- Available for transfer abutment (except for the ø 4.0)

M Mini
R Regular

D \ H	4.0	5.5	7.0
			
ø 4.0/ø 4.0	GSRRC**440**	GSRRC**460**	GSRRC**470**
ø 4.5/ø 4.5	GSRRC**441**	GSRRC**461**	GSRRC**471**
ø 5.0	GSRRC**540**	GSRRC**560**	GSRRC**570**
ø 6.0	GSRRC**640**	GSRRC**660**	GSRRC**670**
ø 7.0	-	GSRRC**760**	-

Rigid Impression Coping

- Color coded by abutment height
- Available for transfer abutment (except for the ø 4.0)

M Mini
R Regular

D \ H	4.0	5.5	7.0
			
ø 4.0/ø 4.0	GSRIC**440S**	GSRIC**460S**	GSRIC**470S**
ø 4.5/ø 4.5	GSRIC**441S**	GSRIC**461S**	GSRIC**471S**
ø 5.0	GSRIC**540S**	GSRIC**560S**	GSRIC**570S**
ø 6.0	GSRIC**640S**	GSRIC**660S**	GSRIC**670S**
ø 7.0	-	GSRIC**760S**	-

Rigid Burn-out Cylinder

- Used after casting, clean the margin for proper fitting

M Mini
R Regular

D \ Type	Single	Bridge
		
ø 4.0/ø 4.0	GSRP**400S**	GSRP**400B**
ø 4.5/ø 4.5	GSRP**450S**	GSRP**450B**
ø 5.0	GSRP**500S**	GSRP**500B**
ø 6.0	GSRP**600S**	GSRP**600B**
ø 7.0	GSRP**700S**	GSRP**700B**

Rigid Lab Analog

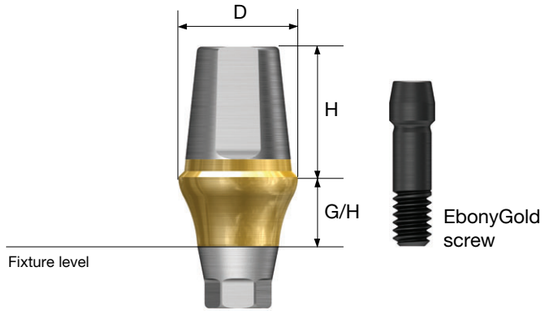
- Connect to the appropriate color coded rigid impression coping

M Mini
R Regular

D \ H	4.0	5.5	7.0
			
ø 4.0/ø 4.0	GSRLA**440**	GSRLA**460**	GSRLA**470**
ø 4.5/ø 4.5	GSRLA**441**	GSRLA**461**	GSRLA**471**
ø 5.0	GSRLA**540**	GSRLA**560**	GSRLA**570**
ø 6.0	GSRLA**640**	GSRLA**660**	GSRLA**670**
ø 7.0	-	GSRLA**760**	-

Transfer Abutment

- Cement/combination-retained prosthesis
- Fixture level impression
- Abutment level impression is available using the rigid impression coping (except the ⌀4.0)
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)
- Packing unit : abutment + EbonyGold screw



Abutment + EbonyGold screw order code
: product code + **WH** (ex : GSTA4621**WH**)

D ⌀4.0

M

EbonyGold screw
: GSABSM

Abutment level impression not possible

	H \ G/H	1.0	2.0	3.0	4.0	5.0
Hex	5.5	GSTA**4612**	GSTA**4622**	GSTA**4632**	GSTA**4642**	GSTA**4652**
	7.0	GSTA**4712**	GSTA**4722**	GSTA**4732**	GSTA**4742**	GSTA**4752**
Non-Hex	5.5	GSTA**4612N**	GSTA**4622N**	GSTA**4632N**	GSTA**4642N**	GSTA**4652N**
	7.0	GSTA**4712N**	GSTA**4722N**	GSTA**4732N**	GSTA**4742N**	GSTA**4752N**

D ⌀4.5

M

EbonyGold screw
: GSABSM

	H \ G/H	1.0	2.0	3.0	4.0	5.0
Hex	5.5	GSTA**4611**	GSTA**4621**	GSTA**4631**	GSTA**4641**	GSTA**4651**
	7.0	GSTA**4711**	GSTA**4721**	GSTA**4731**	GSTA**4741**	GSTA**4751**
Non-Hex	5.5	GSTA**4611N**	GSTA**4621N**	GSTA**4631N**	GSTA**4641N**	GSTA**4651N**
	7.0	GSTA**4711N**	GSTA**4721N**	GSTA**4731N**	GSTA**4741N**	GSTA**4751N**

D ⌀4.5

R

EbonyGold screw
: GSABSS

	H \ G/H	1.0	2.0	3.0	4.0	5.0
Hex	5.5	GSTAS**4611**	GSTAS**4621**	GSTAS**4631**	GSTAS**4641**	GSTAS**4651**
	7.0	GSTAS**4711**	GSTAS**4721**	GSTAS**4731**	GSTAS**4741**	GSTAS**4751**
Non-Hex	5.5	GSTAS**4611N**	GSTAS**4621N**	GSTAS**4631N**	GSTAS**4641N**	GSTAS**4651N**
	7.0	GSTAS**4711N**	GSTAS**4721N**	GSTAS**4731N**	GSTAS**4741N**	GSTAS**4751N**

D ⌀5.0

R

EbonyGold screw
: GSABSS

	H \ G/H	1.0	2.0	3.0	4.0	5.0
Hex	4.0	GSTA**5410**	GSTA**5420**	GSTA**5430**	GSTA**5440**	GSTA**5450**
	5.5	GSTA**5610**	GSTA**5620**	GSTA**5630**	GSTA**5640**	GSTA**5650**
	7.0	GSTA**5710**	GSTA**5720**	GSTA**5730**	GSTA**5740**	GSTA**5750**
Non-Hex	4.0	GSTA**5410N**	GSTA**5420N**	GSTA**5430N**	GSTA**5440N**	GSTA**5450N**
	5.5	GSTA**5610N**	GSTA**5620N**	GSTA**5630N**	GSTA**5640N**	GSTA**5650N**
	7.0	GSTA**5710N**	GSTA**5720N**	GSTA**5730N**	GSTA**5740N**	GSTA**5750N**

D ⌀6.0

R

EbonyGold screw
: GSABSS

	H \ G/H	1.0	2.0	3.0	4.0	5.0
Hex	4.0	GSTA**6410**	GSTA**6420**	GSTA**6430**	GSTA**6440**	GSTA**6450**
	5.5	GSTA**6610**	GSTA**6620**	GSTA**6630**	GSTA**6640**	GSTA**6650**
	7.0	GSTA**6710**	GSTA**6720**	GSTA**6730**	GSTA**6740**	GSTA**6750**
Non-Hex	4.0	GSTA**6410N**	GSTA**6420N**	GSTA**6430N**	GSTA**6440N**	GSTA**6450N**
	5.5	GSTA**6610N**	GSTA**6620N**	GSTA**6630N**	GSTA**6640N**	GSTA**6650N**
	7.0	GSTA**6710N**	GSTA**6720N**	GSTA**6730N**	GSTA**6740N**	GSTA**6750N**

D ⌀7.0

R

EbonyGold screw
: GSABSS

	H \ G/H	1.0	2.0	3.0	4.0	5.0
Hex	5.5	GSTA**7610**	GSTA**7620**	GSTA**7630**	GSTA**7640**	GSTA**7650**
Non-Hex	5.5	GSTA**7610N**	GSTA**7620N**	GSTA**7630N**	GSTA**7640N**	GSTA**7650N**

Transfer Abutment Components

Laboratory Screw

- Lab screw: Abutment screw for lab work
- Waxing screw: Longer screw for making screw-type prostheses and transfer jigs
- Packing unit : lab screw, waxing screw

M Mini
R Regular

	Lab Screw	Waxing Screw
M	 GSABS**ML**	GSABS**MW**
R	 GSABS**SL**	GSABS**SW**

Fixture Lab Analog

- Lab analog for fixture level impressions
- Select appropriate size according to the diameter of a fixture;
  ≥ ø 3.0/≥ ø 3.5/≥ ø 4.0

M Mini
R Regular

M	For Ø3.0	 GSTLA**300**
M		 GSTLA**350**
R		 GSTLA**400**

Bite Index

- Connected to a fixture to check the bite impression
- Torque manually using a 1.2 hex driver
- Packing unit : bite index x 2ea

M Mini
R Regular

D \ L	4.0	6.0	8.0	10.0	12.0
					
ø 4.5	GSBIM**4504S**	GSBIM**4506S**	GSBIM**4508S**	GSBIM**4510S**	GSBIM**4512S**
ø 5.5	GSBIS**5504S**	GSBIS**5506S**	GSBIS**5508S**	GSBIS**5510S**	GSBIS**5512S**

Transfer Abutment Components

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(*)

M Mini (Yellow)

R Regular (Silver)

D \ L Type	11 Hex	11 Non-Hex	Guide Pin 0	Guide Pin 5.0	Guide Pin 9.0
					
Ø 4.0	GSPIM**4011**	GSPIM**4011N**	GSPGPM**100**	GSPGPM**150***	GSPGPM**150L**
Ø 4.5	GSPIM**4511**	GSPIM**4511N**			
Ø 4.0	GSPIS**4011**	GSPIS**4011N**	GSPGPR**100**	GSPGPR**150***	GSPGPR**150L**
Ø 4.5	GSPIS**4511**	GSPIS**4511N**			
Ø 5.0	GSPIS**5011**	GSPIS**5011N**			
Ø 6.0	GSPIS**6011**	GSPIS**6011N**			
Ø 7.0	GSPIS**7011**	GSPIS**7011N**			

D \ L Type	15 Hex	15 Non-Hex	Guide Pin 0	Guide Pin 5.0	Guide Pin 9.0
					
Ø 4.0	GSPIM**4015**	GSPIM**4015N**	GSPGPM**100L**	GSPGPM**150L***	GSPGPM**200L**
Ø 4.5	GSPIM**4515**	GSPIM**4515N**			
Ø 4.0	GSPIS**4015**	GSPIS**4015N**	GSPGPR**100L**	GSPGPR**150L***	GSPGPR**200L**
Ø 4.5	GSPIS**4515**	GSPIS**4515N**			
Ø 5.0	GSPIS**5015**	GSPIS**5015N**			
Ø 6.0	GSPIS**6015**	GSPIS**6015N**			
Ø 7.0	GSPIS**7015**	GSPIS**7015N**			

Fixture Transfer Impression Coping

- For closed tray impressions
- Triangular arc ensure accurate placement
- Use a 1.2 hex driver (torque manually)
- Packing unit
  - Hex : impression coping body + guide pin
  - Non-hex : impression coping

M Mini (Yellow)

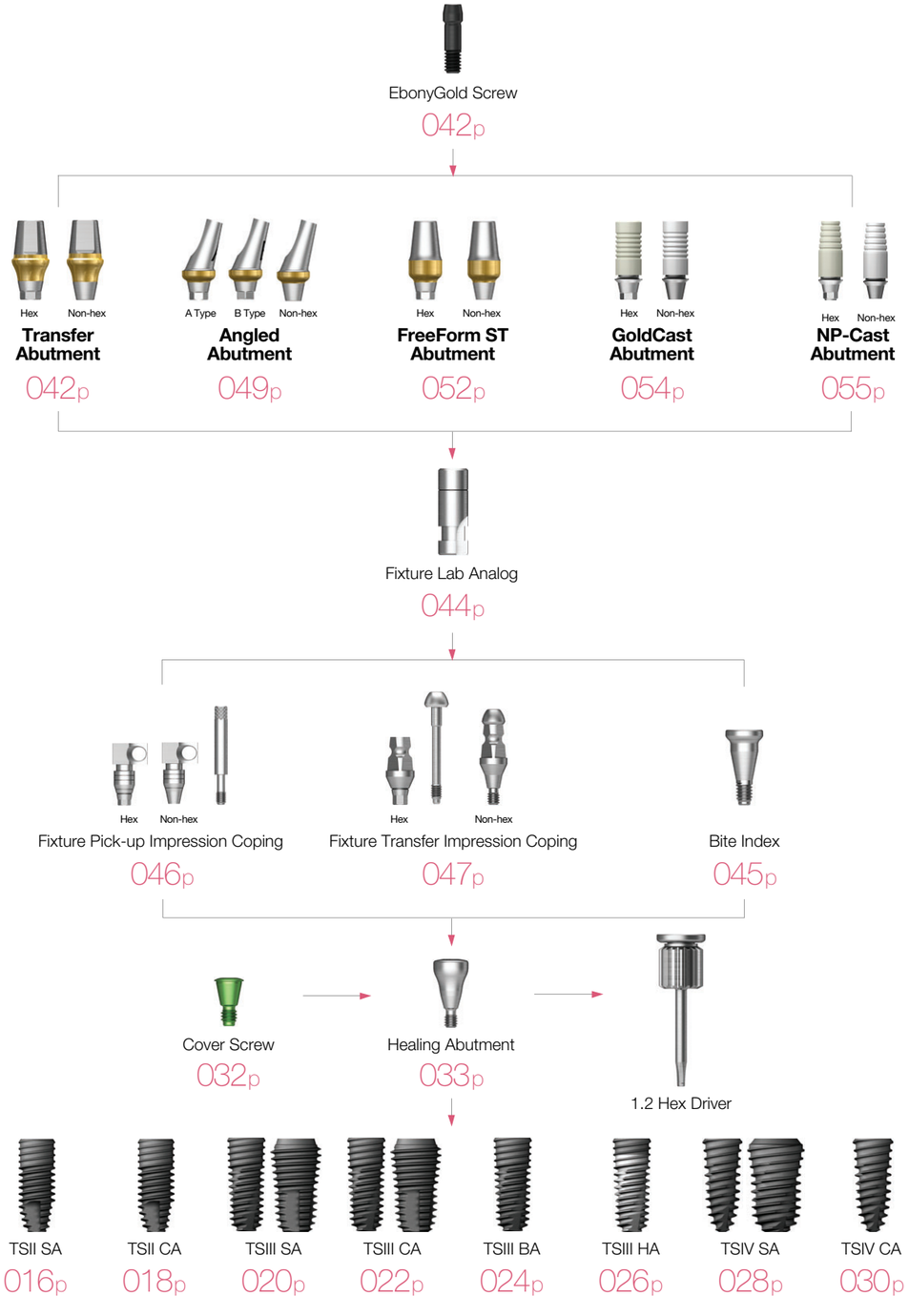
R Regular (Silver)

D \ L Type	11 Hex	11 Non-Hex	14 Hex	14 Non-Hex
				
Ø 4.0	GSTIM**4011**	GSTIM**4011N**	GSTIM**4014**	GSTIM**4014N**
Ø 4.5	GSTIM**4511**	GSTIM**4511N**	GSTIM**4514**	GSTIM**4514N**
Ø 4.0	GSTIS**4011**	GSTIS**4011N**	GSTIS**4014**	GSTIS**4014N**
Ø 4.5	GSTIS**4511**	GSTIS**4511N**	GSTIS**4514**	GSTIS**4514N**
Ø 5.0	GSTIS**5011**	GSTIS**5011N**	GSTIS**5014**	GSTIS**5014N**
Ø 6.0	GSTIS**6011**	GSTIS**6011N**	GSTIS**6014**	GSTIS**6014N**
Ø 7.0	GSTIS**7011**	GSTIS**7011N**	GSTIS**7014**	GSTIS**7014N**

PROSTHETIC FLOW DIAGRAM 2

Transfer / Angled / FreeForm ST / GoldCast / NP-Cast

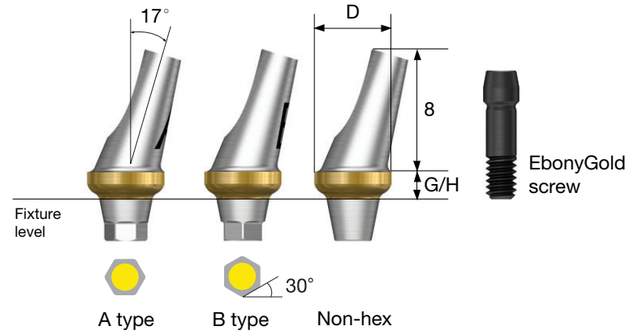
Fixture Level Impression



Angled Abutment

- Cement/combination-retained prosthesis
- Angle compensation up to 23° without the need for trimming
- Fixture level impression
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)
- Packing unit : abutment + EbonyGold screw

Abutment + EbonyGold screw order Code
: product code + **WH** (ex : GSAA5020A**WH**)



D ø4.0

M

EbonyGold screw
: GSABSM

G/H	2.0			4.0		
Type	Hex A	Hex B	Non-Hex	Hex A	Hex B	Non-Hex
	GSAA**4020MA**	GSAA**4020MB**	GSAA**4020MN**	GSAA**4040MA**	GSAA**4040MB**	GSAA**4040MN**

D ø4.5

M

EbonyGold screw
: GSABSM

G/H	2.0			4.0		
Type	Hex A	Hex B	Non-Hex	Hex A	Hex B	Non-Hex
	GSAA**4520MA**	GSAA**4520MB**	GSAA**4520MN**	GSAA**4540MA**	GSAA**4540MB**	GSAA**4540MN**

Angled Abutment

D ø4.5

R

EbonyGold screw
: GSABSS

G/H	2.0			4.0		
Type	Hex A	Hex B	Non-Hex	Hex A	Hex B	Non-Hex
						
	GSAA**4520A**	GSAA**4520B**	GSAA**4520N**	GSAA**4540A**	GSAA**4540B**	GSAA**4540N**

D ø5.0

R

EbonyGold screw
: GSABSS

G/H	2.0			4.0		
Type	Hex A	Hex B	Non-Hex	Hex A	Hex B	Non-Hex
						
	GSAA**5020A**	GSAA**5020B**	GSAA**5020N**	GSAA**5040A**	GSAA**5040B**	GSAA**5040N**

D ø6.0

R

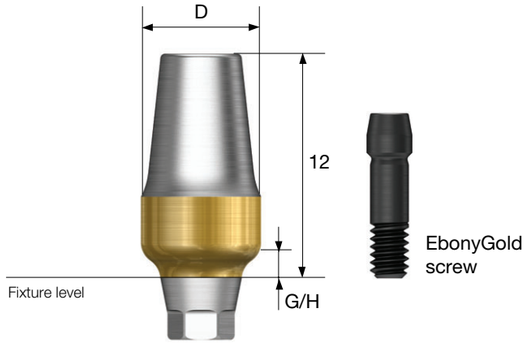
EbonyGold screw
: GSABSS

G/H	2.0			4.0		
Type	Hex A	Hex B	Non-Hex	Hex A	Hex B	Non-Hex
						
	GSAA**6020A**	GSAA**6020B**	GSAA**6020N**	GSAA**6040A**	GSAA**6040B**	GSAA**6040N**

FreeForm ST Abutment

- Cement/combination-retained prosthesis
- Prep-able margins can be contoured as needed
- Fixture level impression
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)
- Packing unit : abutment + EbonyGold screw

Abutment + EbonyGold screw order code
: pcode + **WH** (ex : GSFA5015**WH**)



D ø4.0

M

EbonyGold screw
: GSABSM

G/H	1.5		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSFAM**4015**	GSFAM**4015N**	GSFAM**4030**	GSFAM**4030N**

D ø4.0

R

EbonyGold screw
: GSABSS

G/H	1.5		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSFA**4015**	GSFA**4015N**	GSFA**4030**	GSFA**4030N**

D ø5.0

R

EbonyGold screw
: GSABSS

G/H	1.5		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSFAS**5015**	GSFAS**5015N**	GSFAS**5030**	GSFAS**5030N**

D ø5.0

R

EbonyGold screw
: GSABSS

G/H	1.5		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSFA**5015**	GSFA**5015N**	GSFA**5030**	GSFA**5030N**

D ø6.0

R

EbonyGold screw
: GSABSS

G/H	1.5		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSFA**6015**	GSFA**6015N**	GSFA**6030**	GSFA**6030N**

D ø7.0

R

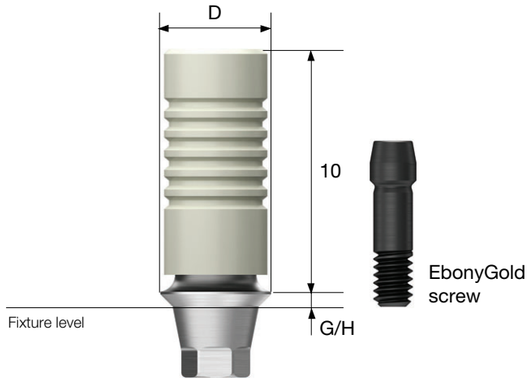
EbonyGold screw
: GSABSS

G/H	1.5		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSFA**7015**	GSFA**7015N**	GSFA**7030**	GSFA**7030N**

GoldCast Abutment

- Cement/combination/screw-retained prosthesis
- Customized prosthesis cast with gold alloy
- Abutment melting point: 1400 to 1450˚C
- Fixture level impression
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)
- Packing unit : abutment + EbonyGold screw

Abutment + EbonyGold screw order code
: product code + **WH** (ex : GSGA4510S**WH**)



D ø4.0

M

EbonyGold screw
: GSABSM

G/H	1.0		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSGA**4010S**	GSGA**4010B**	GSGA**4030S**	GSGA**4030B**

D ø4.5

R

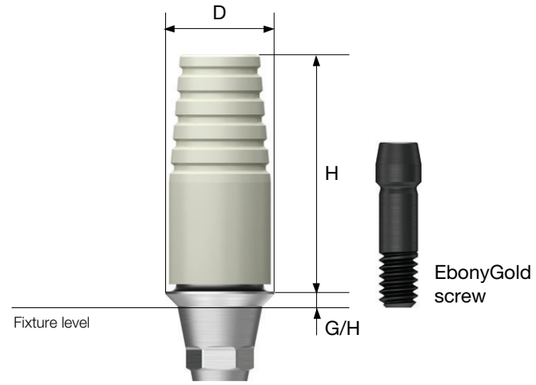
EbonyGold screw
: GSABSS

G/H	1.0		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSGA**4510S**	GSGA**4510B**	GSGA**4530S**	GSGA**4530B**

NP-Cast Abutment

- Cement/combination/screw-retained prosthesis
- Customized prosthesis cast with non-precious alloys
- Abutment melting point: 1400 to 1550˚C
- Fixture level impression
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)
- Packing unit : abutment + EbonyGold screw

Abutment + EbonyGold screw order code
: product code + **WH** (ex : GSNA4510S**WH**)



D ø4.0

M

EbonyGold screw
: GSABSM

G/H	1.0		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSNA**4010S**	GSNA**4010B**	GSNA**4030S**	GSNA**4030B**

D ø4.5

R

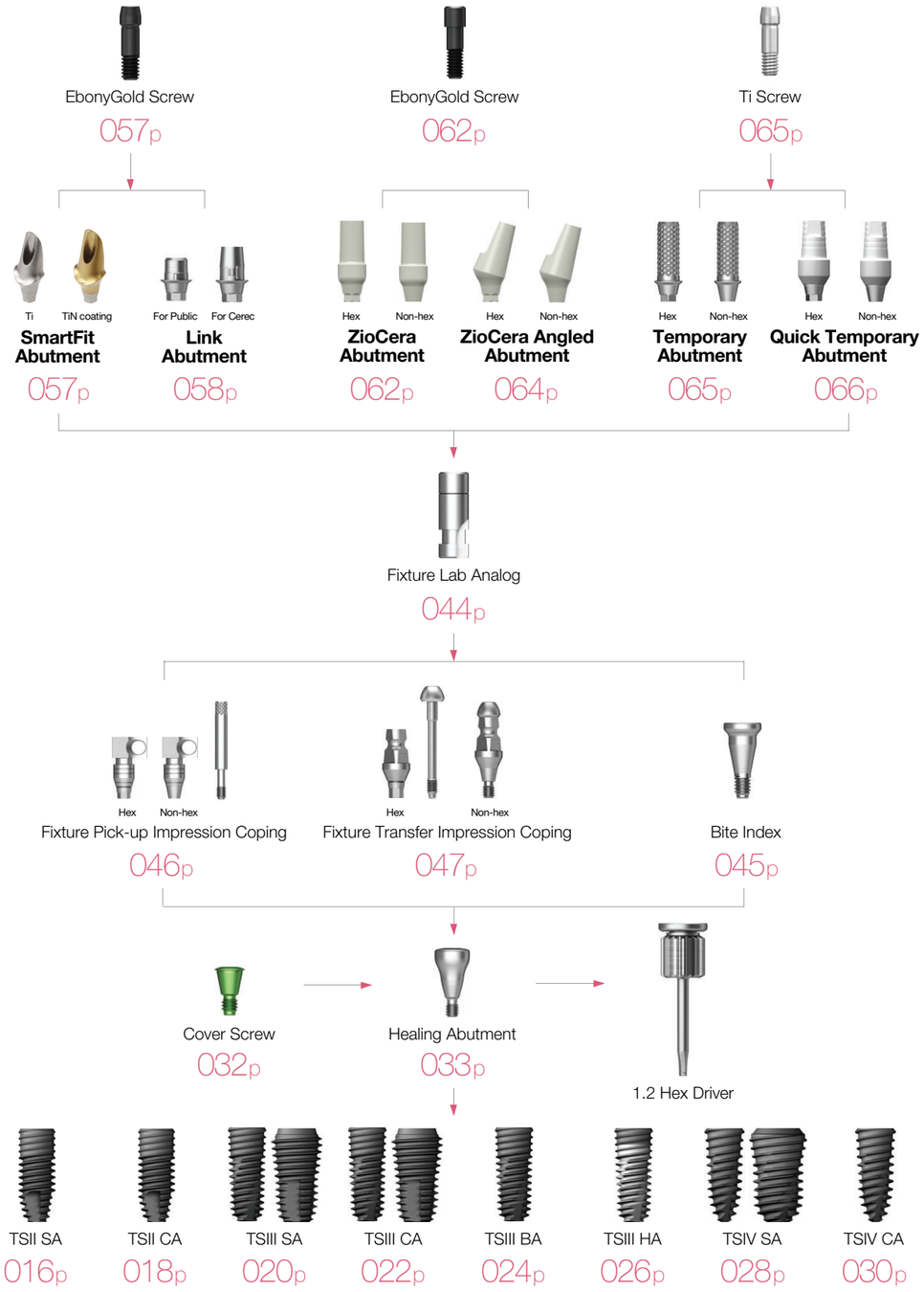
EbonyGold screw
: GSABSS

G/H	1.0		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSNA**4510S**	GSNA**4510B**	GSNA**4530S**	GSNA**4530B**

PROSTHETIC FLOW DIAGRAM 3

SmartFit / Link / ZioCera / ZioCera Angled Temporary / Quick Temporary

Fixture Level Impression



SmartFit Abutment

- Cement/combination-retained prosthesis
- CAD/CAM designed and milled customized abutments
- Fixture level impression
- Lead time (in working days)
  - Titanium: 5 days
  - Titanium + gold color: 7 days
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)
- Packing unit : abutment + EbonyGold screw

Scan Boby

- Component used to scan the position of the implant to design the SMARTFIT custom abutment.
- Color coded screws
- Use a 1.2 hex driver (torque manually)
- Packing unit : scan body + Ti screw

Scan body + screw order code

: product code + **TH** (ex : TSSBM**TH**)

M Mini

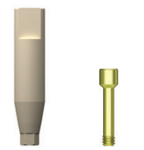
R Regular

Scan body compatible with other manufacturers' SmartFit abutment

Dentium Superline	DESBSTH	Purple anodizing screw
Dio UF **Dentis One Q** **Megagen AnyOne**	CUSBSTH	

M

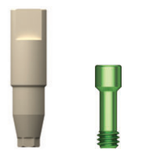
Yellow color screw
: TSSBSM



TSSBM

R

Green color screw
: TSSBSS

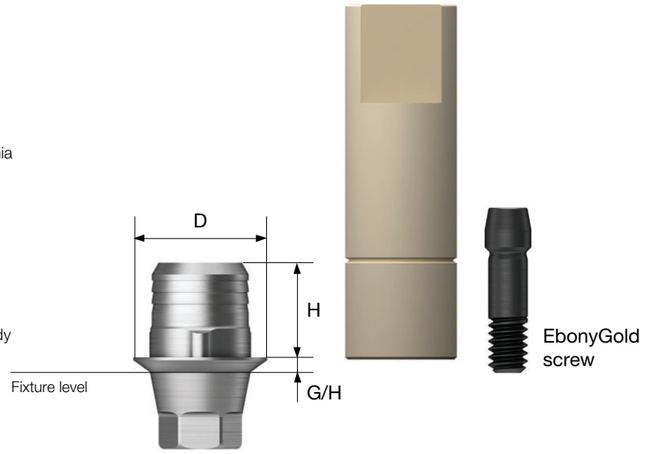


TSSBS

Link Abutment for Public

- Cement/combination/screw-retained prosthesis
- Titanium base for CAD/CAM designed and milled Zirconia custom abutment
- Use Osstem's official Implant Library
- Fixture level impression
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)
- Packing unit : abutment + EbonyGold screw + scan body

Abutment + EbonyGold screw + scan body order code
: product code + **WH** (ex : TSPTB431R**WH**)



D ø4.0

M

EbonyGold screw
: GSABSM

G/H / Type		1.0	2.0
Hex	3.0	TSPTB**431M**	TSPTB**432M**
	5.0	TSPTB**451M**	TSPTB**452M**
Non-Hex	3.0	TSPTB**431MN**	TSPTB**432MN**
	5.0	TSPTB**451MN**	TSPTB**452MN**

D ø4.5

R

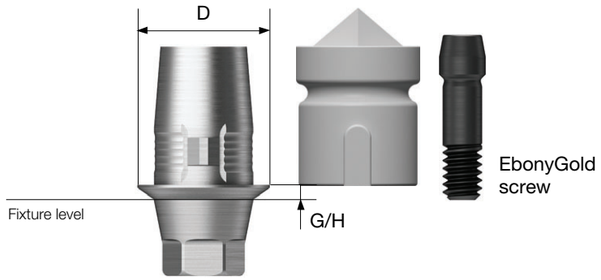
EbonyGold screw
: GSABSS

G/H / Type		1.0	2.0
Hex	3.0	TSPTB**431R**	TSPTB**432R**
	5.0	TSPTB**451R**	TSPTB**452R**
Non-Hex	3.0	TSPTB**431RN**	TSPTB**432RN**
	5.0	TSPTB**451RN**	TSPTB**452RN**

Link Abutment for Cerec

- Cement/combination/screw-retained prosthesis
- Titanium base for CEREC™ CAD/CAM designed and milled Zirconia custom abutment
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)

Abutment + EbonyGold screw + scan body order code
: product code + **WH** (ex : TSCTBR**WH**)



M

EbonyGold screw
: GSABSM

Type	Hex	Non-Hex
		
	TSCT**BM**	TSCT**BMN**

R

EbonyGold screw
: GSABSS

Type	Hex	Non-Hex
		
	TSCT**BR**	TSCT**BRN**

Scan Post

- Special post used to scan the position of the implant where space is limited (i.e. thick soft tissue, deeply inserted fixture).
- Connect scan body before scanning
- Use a 1.2 hex driver (toruqe manually)
- Packing unit : scan post + Ti screw

Scan body + Screw order code
: product code + **TH** (ex : TSCSPR**TH**)

M Mini

R Regular

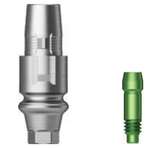
M

Yellow anodizing screw
: GSABSML

TSCSPM

R

Green anodizing screw
: GSABSSL



TSCSPR

Scan Body

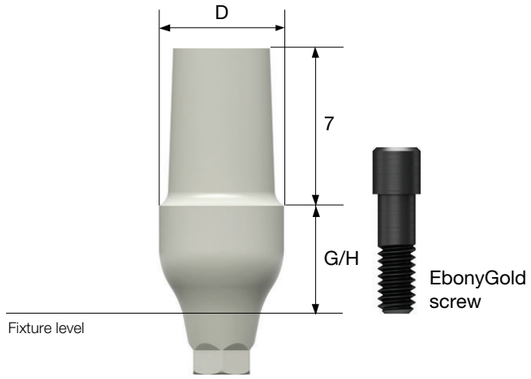
- Scan after connecting to a link abutment for CEREC™, or a scan post.
- Packing unit : scan body x 10ea

TSCSBS

ZioCera Abutment

- Cement/combination/screw-retained prosthesis
- Zirconium abutment for an all ceramic prostheses ideal for anterior - esthetic zone.
- Fixture level impression
- Use a 1.2 hex driver
- Abutment screw included
- Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)
- Packing unit : abutment + EbonyGold screw

Abutment + EbonyGold screw order code
: product code + **WH** (ex : GSZAS5535N**WH**)



D ø4.5

M

EbonyGold screw
: GSASM

G/H	3.5		5.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSZAM**4535**	GSZAM**4535N**	GSZAM**4550**	GSZAM**4550N**

D ø4.5

R

EbonyGold screw
: GSASR

G/H	3.5		5.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSZAS**4535**	GSZAS**4535N**	GSZAS**4550**	GSZAS**4550N**

D ø5.5

R

EbonyGold screw
: GSASR

G/H	3.5		5.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSZAS**5535**	GSZAS**5535N**	GSZAS**5550**	GSZAS**5550N**

D ø6.5

R

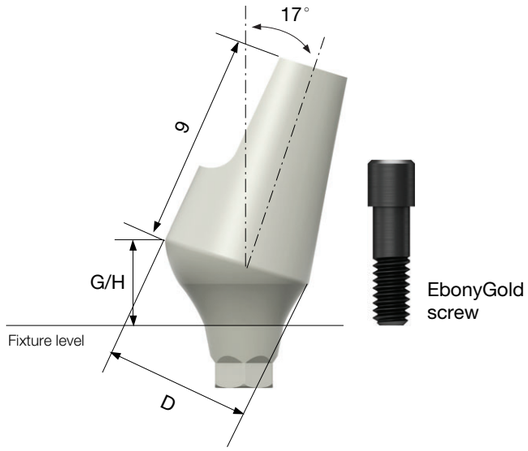
EbonyGold screw
: GSASR

G/H	3.5		5.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSZAS**6535**	GSZAS**6535N**	GSZAS**6550**	GSZAS**6550N**

ZioCera Angled Abutment

- Cement/combination/screw-retained prosthesis
- Zirconium abutment for an all ceramic prostheses ideal for anterior - esthetic zone.
- Angle compensation up to 23° without the need for additional adjustment
- Fixture level impression
- Use a 1.2 hex driver
- Abutment screw included
- Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)
- Packing unit : abutment + EbonyGold screw

Abutment + EbonyGold screw order code
: product code + **WH** (ex : GS17ZAS5530N**WH**)



D ø5.5

EbonyGold screw
: GSASR

G/H	3.0	
Type	Hex	Non-Hex
	GS17ZAS**5530**	GS17ZAS**5530N**

D ø6.5

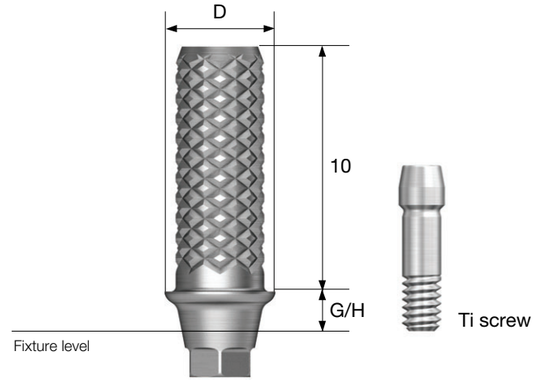
EbonyGold screw
: GSASR

G/H	4.0	
Type	Hex	Non-Hex
	GS17ZAS**6540**	GS17ZAS**6540N**

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 (mini/regular)
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code
: product code + **TH** (ex : GSTTA4510**TH**)



D ø4.0

Ti screw
: GSABSMT

G/H	1.0		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSTTA**4010**	GSTTA**4010N**	GSTTA**4030**	GSTTA**4030N**

D ø4.5

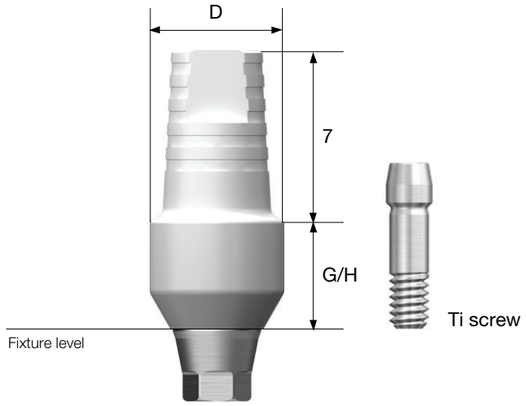
Ti screw
: GSABSST

G/H	1.0		3.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	GSTTA**4510**	GSTTA**4510N**	GSTTA**4530**	GSTTA**4530N**

Quick Temporary Abutment

- Cement/screw-retained prosthesis
- A provisional prostheses for immediate loading
- Prep able and resin friendly
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm (mini/regular)
- Packing unit : abutment + Ti screw

Abutment + Ti screw order code
: product code + **TH** (ex : TSQTA5550**TH**)



D ø4.0

M

Ti screw
: GSABSMT

G/H	1.5		5.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	TSQTA**4015M**	TSQTA**4015MN**	TSQTA**4050M**	TSQTA**4050MN**

D ø4.5

M

Ti screw
: GSABSMT

G/H	1.5		5.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	-	-	TSQTA**4550**	TSQTA**4550N**

D ø4.5

R

Ti screw
: GSABSST

G/H	1.5		5.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	TSQTA**4515R**	TSQTA**4515RN**	TSQTA**4550R**	TSQTA**4550RN**

D ø5.5

R

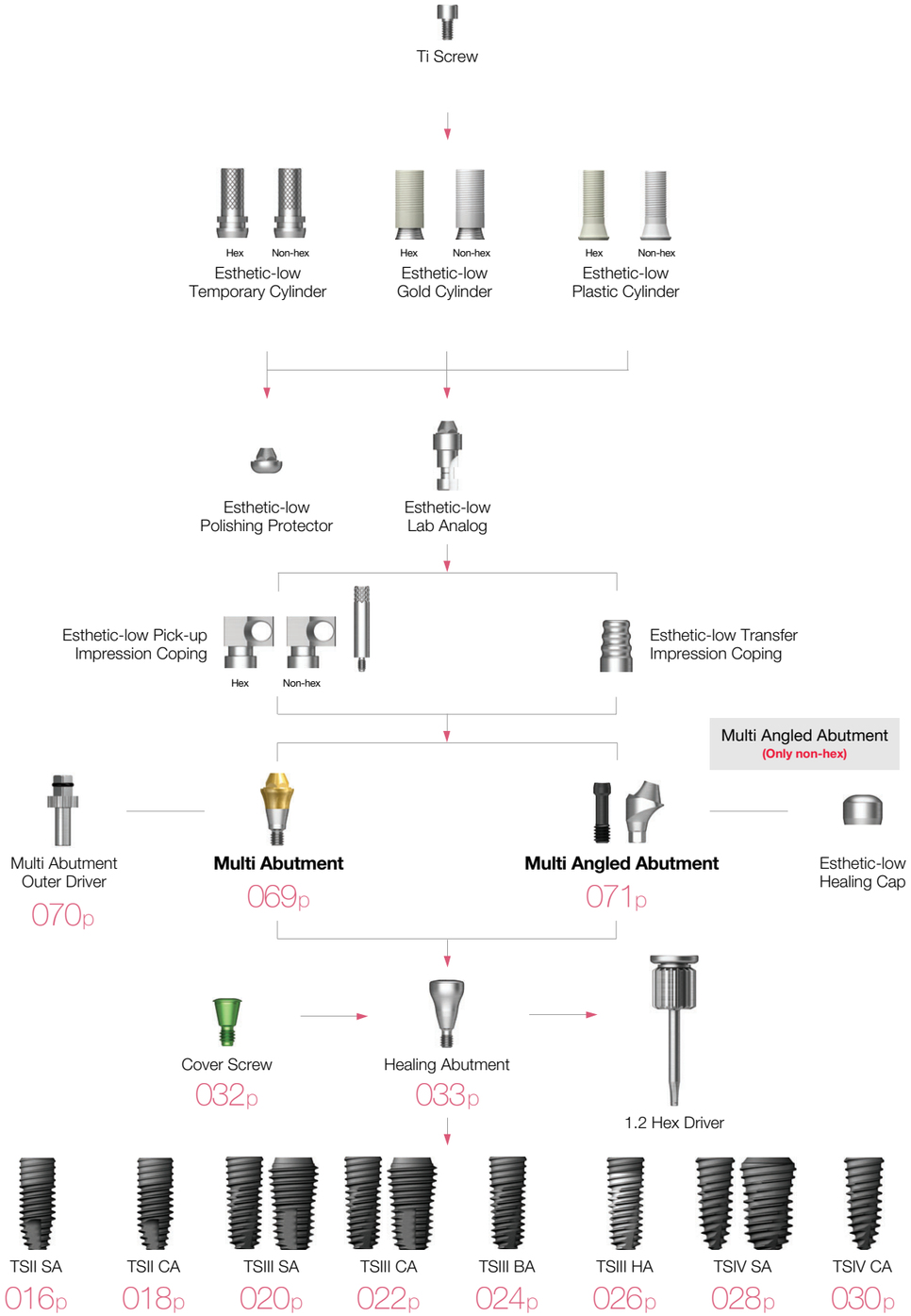
Ti screw
: GSABSST

G/H	1.5		5.0	
Type	Hex	Non-Hex	Hex	Non-Hex
	-	-	TSQTA**5550**	TSQTA**5550N**

PROSTHETIC FLOW DIAGRAM 4

Multi / Multi Angled

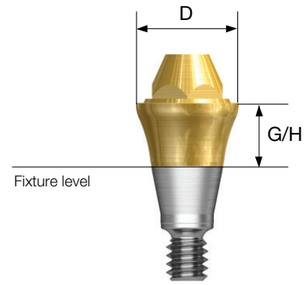
Abutment Level Impression



Multi Abutment

- Screw-retained prosthesis for multiple prosthetic options
- Same platform as the multi angled abutment
- Restorative Components: US Esthetic Low Cylinder (regular/non-hex)
- Torque using Multi Abutment Outer Driver (code: MAOD)
- Recommended tightening torque: 30Ncm (mini/regular)
- Packing unit : abutment + carrier

Abutment + carrier order code
: product code + **P** (ex : TSMA5030**P**)



D ø4.8

M

G/H	1.0	2.0	3.0	4.0	5.0
	TSMA**5010M**	TSMA**5020M**	TSMA**5030M**	TSMA**5040M**	TSMA**5050M**

D ø4.8

R

G/H	1.0	2.0	3.0	4.0	5.0
	TSMA**5010**	TSMA**5020**	TSMA**5030**	TSMA**5040**	TSMA**5050**

Multi Abutment Components

Multi Abutment Outer Driver

• Multi Abutment torque driver

MAOD

Multi Abutment Machine Driver

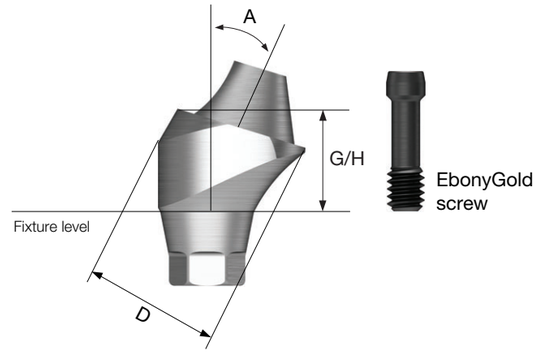
• Multi Abutment machine driver

MAMD

Multi Angled Abutment

• Screw-retained prosthesis for multiple prosthetic options
• Same platform as the multi angled abutment
• Angle compensation up to 108°
• Restorative Components: US Esthetic Low Cylinder (regular/non-hex)
• Abutment screw included
• Use a 1.2 hex driver
• Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)
• Packing unit : abutment + EbonyGold screw

Abutment + EbonyGold screw order code
: product code + **WH** (ex : GS17MAS4840**WH**)



D ø4.8

M

EbonyGold screw
: GSMABSM

Angle \ G/H	2.5	3.0	4.0
17°	GS17MAM**4820**	GS17MAM**4830**	GS17MAM**4840**

Angle \ G/H	3.5	4.0	5.0
30°	GS30MAM**4830**	GS30MAM**4840**	GS30MAM**4850**

D ø4.8

R

EbonyGold screw
: GSMABSS

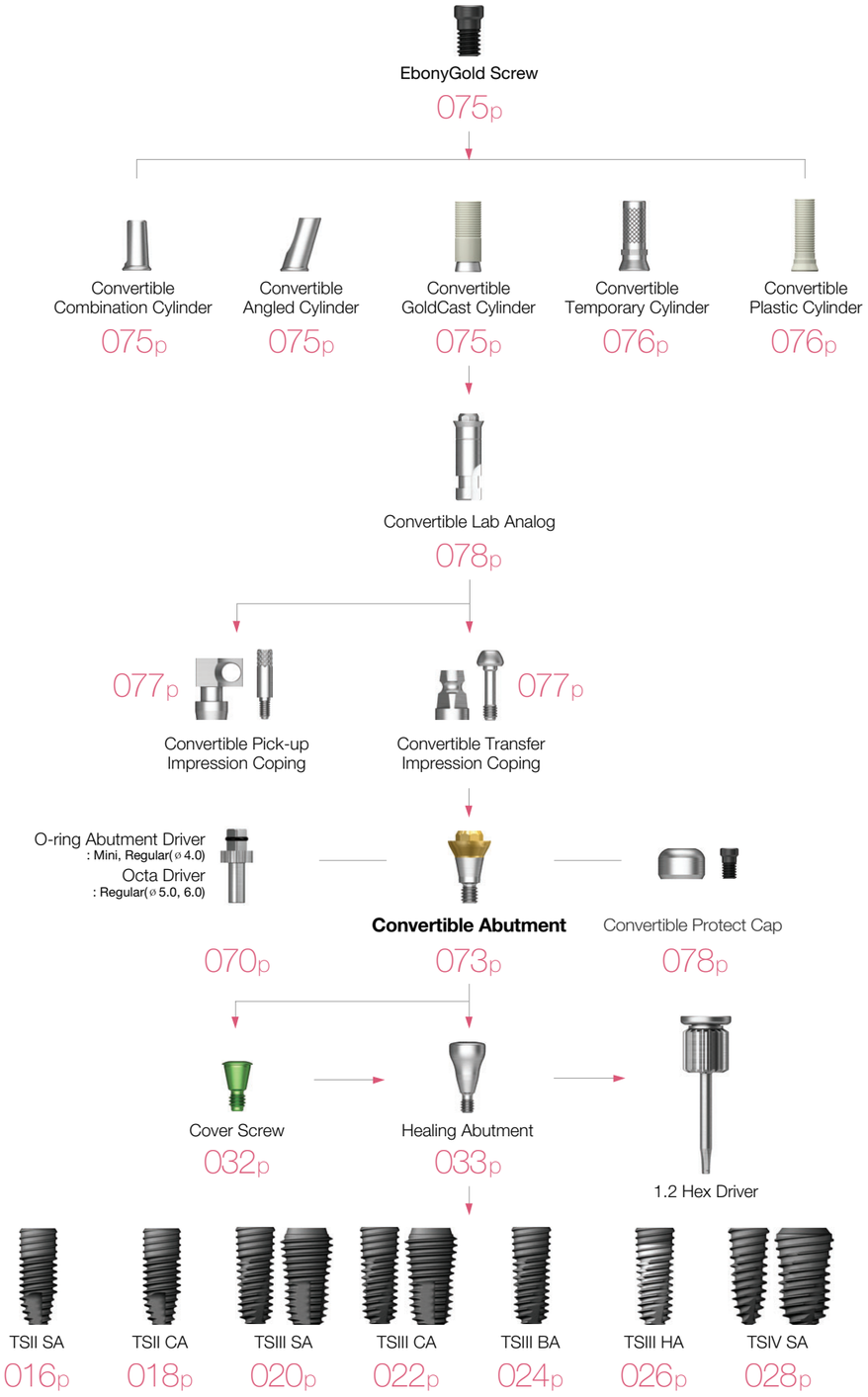
Angle \ G/H	2.5	3.0	4.0
17°	GS17MAS**4820**	GS17MAS**4830**	GS17MAS**4840**

Angle \ G/H	3.5	4.0	5.0
30°	GS30MAS**4830**	GS30MAS**4840**	GS30MAS**4850**

PROSTHETIC FLOW DIAGRAM 5

Convertible

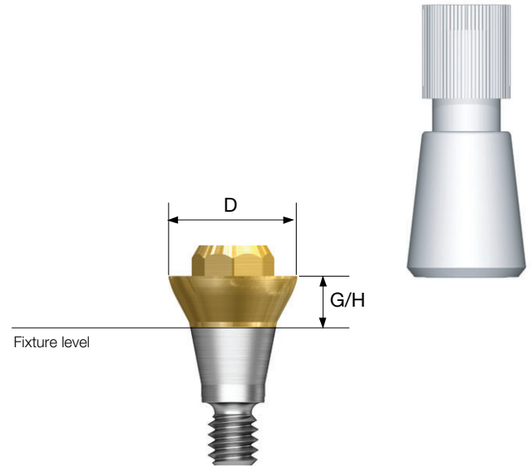
Abutment Level Impression



Convertible Abutment

- Screw-retained prosthesis in multiple scenarios
- Angle compensation up to 60°
- Torque using Convertible Abutment Outer Driver
  - ø4.0: Torque using o-ring abutment driver (code: AORD)
  - ø5.0 and ø6.0: Torque using octa abutment driver (code: ODSL/ODSS)
- Recommended tightening torque: 30Ncm (mini/regular)
- Packing unit : abutment + carrier

Abutment + carrier order code
: product code + **P** (ex : GSCA5030**P**)



D ø4.0

M

G/H	1.0	2.0	3.0	4.0	5.0
	GSCA**4010**	GSCA**4020**	GSCA**4030**	GSCA**4040**	-

D ø4.0

R

G/H	1.0	2.0	3.0	4.0	5.0
	GSCAS**4010**	GSCAS**4020**	GSCAS**4030**	GSCAS**4040**	-

Convertible Abutment

D ø5.0

R

G/H	1.0	2.0	3.0	4.0	5.0
					
	GSCA**5010**	GSCA**5020**	GSCA**5030**	GSCA**5040**	GSCA**5050**

D ø6.0

R

G/H	1.0	2.0	3.0	4.0	5.0
					
	GSCA**6010**	GSCA**6020**	GSCA**6030**	GSCA**6040**	GSCA**6050**

Convertible Abutment Components

Convertible Combination Cylinder

- Combination-retained prostheses possible
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm
- Packing unit : cylinder + EbonyGold cylinder screw

Abutment + EbonyGold screw order code
: product code + **WH** (ex : GSCC5070T**WH**)

M Mini

R Regular

D \ H / Type	7.0 Hex	7.0 Non-Hex	7.0 Octa
			
ø 4.0 / ø 4.0	GSCC**4070T**	GSCC**4070TN**	-
ø 5.0	-	-	GSCC**5070T**
ø 6.0	-	-	GSCC**6070T**

EbonyGold screw
: GSFSM **(Ø 4.0 / Ø 4.0)**
: GSFSR **(Ø 5.0 / Ø 6.0)**

Convertible Angled Cylinder

- Combination-retained prosthesis possible
- Angle compensation up to 17°
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm
- Packing unit : cylinder + EbonyGold cylinder screw

Abutment + EbonyGold screw order code
: product code + **WH** (ex : GSAC5080T**WH**)

M Mini

R Regular

D \ H / Type	8.0 Hex	8.0 Non-Hex	8.0 Octa
			
ø 4.0 / ø 4.0	GSAC**4080T**	GSAC**4080TN**	-
ø 5.0	-	-	GSAC**5080T**
ø 6.0	-	-	GSAC**6080T**

EbonyGold screw
: GSFSM **(Ø 4.0 / Ø 4.0)**
: GSFSR **(Ø 5.0 / Ø 6.0)**

Convertible GoldCast Cylinder

- Screw-retained prosthesis
- Customized prosthesis cast with gold alloy
- Cylinder melting point: 1400 to 1450°C
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm
- Packing unit : cylinder + EbonyGold cylinder screw

Abutment + EbonyGold screw order code
: product code + **WH** (ex : GSGC500**WH**)

M Mini

R Regular

D \ H / Type	12 Hex	12 Non-Hex	12 Octa
			
ø 4.0 / ø 4.0	GSGC**400**	GSGC**400N**	-
ø 5.0	-	-	GSGC**500**
ø 6.0	-	-	GSGC**600**

EbonyGold screw
: GSFSM **(Ø 4.0 / Ø 4.0)**
: GSFSR **(Ø 5.0 / Ø 6.0)**

Convertible Abutment Components

Convertible Temporary Cylinder

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

Abutment + Ti screw order code
: product code + **TH** (ex : GSCTC500T**TH**)

M Mini
R Regular

D \ H / Type	12 Hex	12 Non-Hex	12 Octa
Ø 4.0 / Ø 4.0	GSCTC**400T**	GSCTC**400TN**	-
Ø 5.0	-	-	GSCTC**500T**
Ø 6.0	-	-	GSCTC**600T**

EbonyGold screw
: GSFSMT **(Ø 4.0 / Ø 4.0)**
: GSFSRT **(Ø 5.0 / Ø 6.0)**

Convertible 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 + EbonyGold cylinder screw

Abutment + EbonyGold screw order code
: product code + **WH** (ex : GSCPL500**WH**)

M Mini
R Regular

D \ H / Type	12 Hex	12 Non-Hex	12 Octa
Ø 4.0 / Ø 4.0	GSCPL**400**	GSCPL**400N**	-
Ø 5.0	-	-	GSCPL**500**
Ø 6.0	-	-	GSCPL**600**

EbonyGold screw
: GSFSM **(Ø 4.0 / Ø 4.0)**
: GSFSR **(Ø 5.0 / Ø 6.0)**

Convertible Pick-up Impression Coping

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

M Mini
R Regular

D		Guide Pin 0	Guide Pin 5.0
Ø 4.0 / Ø 4.0	GSPIC**400** (Hex / Yellow)	GSCGP**400S**	GSCGP**400L***
Ø 5.0	GSPIC**500** (Octa / Silver)	GSCGP**500S**	GSCGP**500L***
Ø 6.0	GSPIC**600** (Octa / Blue)		

Convertible Transfer Impression Coping

- Transfer impression coping
- Use a 1.2 hex driver (torque manually)
- Packing unit : impression coping body + guide pin

M Mini
R Regular

D	
Ø 4.0 / Ø 4.0	GSTIC**400** (Hex / Yellow)
Ø 5.0	GSTIC**500** (Octa / Silver)
Ø 6.0	GSTIC**600** (Octa / Blue)

Convertible Abutment Components

Convertible Protect Cap

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

Abutment + EbonyGold screw order code
: product code + **WH** (ex : GSCHC500**WH**)

M Mini
R Regular

D

Ø 4.0 / Ø 4.0	GSCHC**400** (Hex)	-	-
Ø 5.0	-	GSCHC**500** (Non-Octa)	-
Ø 6.0	-	-	GSCHC**600** (Non-Octa)

EbonyGold screw
: GSFSM **(Ø 4.0 / Ø 4.0)**
: GSFSR **(Ø 5.0 / Ø 6.0)**

Convertible Lab Analog

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

M Mini
R Regular

D

Ø 4.0 / Ø 4.0	GSCLA**400** (Hex)	-	-
Ø 5.0	-	GSCLA**500** (Octa)	-
Ø 6.0	-	-	GSCLA**600** (Octa)

Convertible Polishing Protector

- Protects GoldCast/Plastic Cylinder joints during polishing process
- Use a 1.2 hex driver (torque manually)

M Mini
R Regular

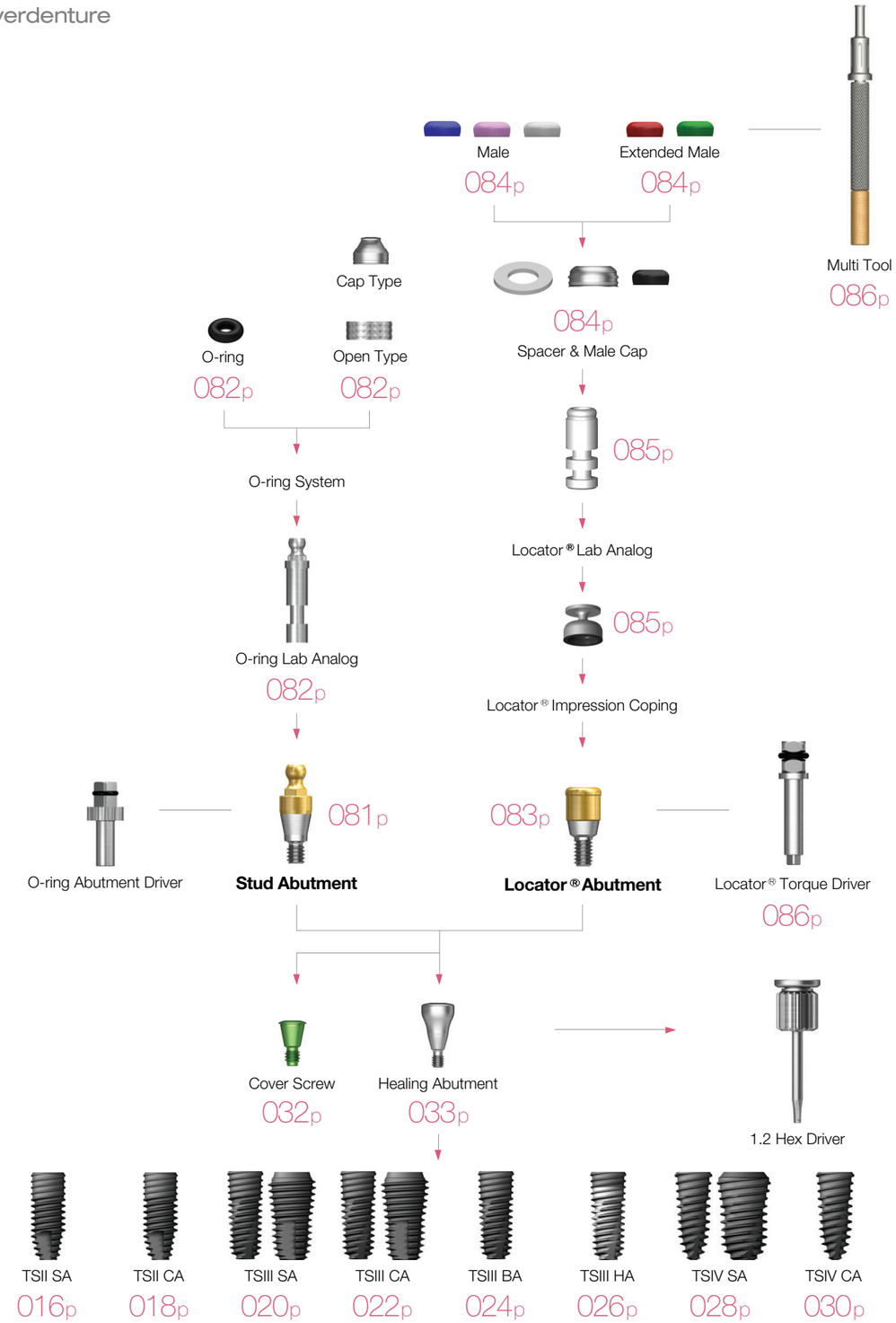
D

Ø 4.0 / Ø 4.0	GSCPC**400** (Hex)	-	-
Ø 5.0	-	GSCPC**500** (Octa)	-
Ø 6.0	-	-	GSCPC**600** (Octa)

PROSTHETIC FLOW DIAGRAM 6

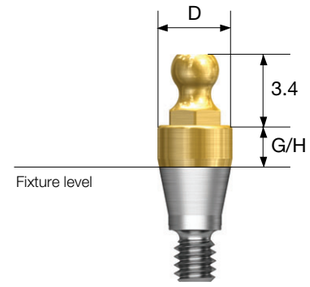
Stud / Locator®

Overdenture



Stud Abutment

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



D ø3.5

M

G/H	1.0	2.0	3.0	4.0	5.0	6.0
	GSSAM**3510**	GSSAM**3520**	GSSAM**3530**	GSSAM**3540**	GSSAM**3550**	GSSAM**3560**

D ø3.5

R

G/H	1.0	2.0	3.0	4.0	5.0	6.0
	GSSA**3510**	GSSA**3520**	GSSA**3530**	GSSA**3540**	GSSA**3550**	GSSA**3560**

Stud Abutment Components

O-ring Retainer Cap Set

- O-ring housing
- Place 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

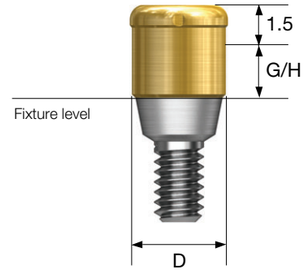
O-ring Lab Analog

- A lab analog
- Packing unit : o-ring x 5ea

OAL

Locator® Abutment

- Genuine Zest Anchors abutment
- Angle compensation 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 ø3.7

M

G/H	1.0	2.0	3.0	4.0	5.0
					
	HGLCA**3510M**	HGLCA**3520M**	HGLCA**3530M**	HGLCA**3540M**	HGLCA**3550M**

D ø3.7

R

G/H	1.0	2.0	3.0	4.0	5.0
					
	HGLCA**4010S**	HGLCA**4020S**	HGLCA**4030S**	HGLCA**4040S**	HGLCA**4050S**

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: 2 sets

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

LAL40S

Locator® Abutment Components

Locator® Core Tool

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

LCCT

Locator® Torque Driver

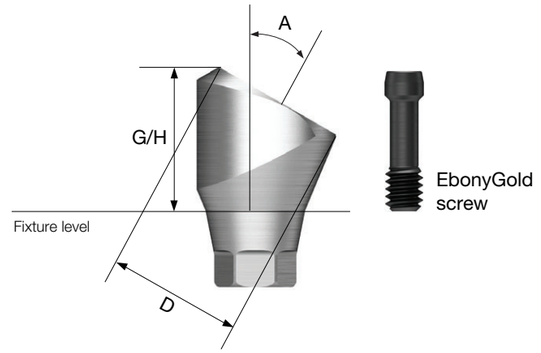
- A torque driver

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

Port Angled Abutment

- Abutment level impression
- Angle compensation up to 60˚
- Use a 1.2 hex driver
- Recommended tightening torque: 20Ncm (mini), 30Ncm (regular)
- Packing unit : abutment + EbonyGold screw

Abutment + EbonyGold screw order code
: product code + **WH** (ex : TS30PA455R**WH**)



D ø4.6

M

EbonyGold screw
: GSMABSM

Angle \ G/H	4.0	5.0
17°	 TS17PM**454M**	 TS17PM**455M**
30°	 TS30PM**454M**	 TS30PM**455M**

D ø4.6

R

EbonyGold screw
: GSMABSS

Angle \ G/H	4.0	5.0
17°	 TS17PA**454R**	 TS17PA**455R**
30°	 TS30PA**454R**	 TS30PA**455R**

Port Angled Abutment Components

Port Angled Abutment Head

- Torque using a locator torque driver
- Recommended tightening torque: 20Ncm
- Packing unit : abutment head + carrier

PTAAH450P

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

0434

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

Do not resterilize

Caution, Consult accompanying documents

OSSTEM IMPLANT