"Osstem - Future Technology and Superior Quality"

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

We deeply appreciate all of our customers who use our products.

With population aging, rising incomes, and increased interest in health and aesthetics, implants have become an essential treatment in dentistry around the world.

Today, implants are well-known as a safe and effective treatment option, and the leading treatment option for patients with no teeth.

To satisfy this global trend, Osstem has invested heavily in R&D and continuously promotes innovative products, resulting in it becoming a global leader in technology and product quality.

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

TSIII CA in particular is expected to become a leading product in the global implant market after launching as a groundbreaking product with superior hydrophilic properties capable of at least 30% greater fusion than ordinary SA products due to its calcium ion solution encapsulation.

Also, to improve our customers’ convenience and foster reasonable purchasing, we have opened an online store, DenALL (www.denall.com), where dentistry materials can be purchased affordably and conveniently. Osstem leads the way in superior product quality and exports to over 50 countries including the USA, China, Japan, Germany, and India, and is the first company in Korea to record implant sales of over 30 million products and overseas subsidiary sales of over 100 billion won.

Osstem Implant CEO
Gyu-ok Choi (DDS, Ph.D)
Osstem Implant, the leader in popularizing implants in Korea! We stand out with our passion for strategic R&D and best products, creating globally trend-setting implants.

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

- Connection type and color - Mini/Regular
- Corkscrew thread & cutting edge
  - Easy path adjustment through a superior self-threading effect
  - Acquires insertion torque with an increase in soft bone initial stability and without deviation according to the drill diameters
- The various body shape options are available according to the bone and patient’s clinical condition
  - TSII (straight body): Easily adjustable insertion depth
  - TSIII (1.5 taper body): Able to acquire the initial stability needed for immediate loading even in soft bone
  - TSIV (6 taper body): Able to acquire superior initial stability only in maxillary sinus and soft bone
- Applied Surface - SA/CA/BA/HA

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

- Connection type and color - Regular/Wide
- Corkscrew thread & cutting edge
  - Easy path adjustment through a superior self-threading effect
  - Acquires insertion torque with an increase in soft bone initial stability and without deviation according to the drill diameters
- The various body shape options are available according to the bone and patient’s clinical condition
  - SSII (straight body): Easily adjustable insertion depth
  - SSIII (1.5 taper body): Able to acquire the initial stability needed for immediate loading even in soft bone
  - SSIV (6 taper body): Able to acquire superior initial stability only in maxillary sinus and soft bone
- Applied Surface - SA/CA/HA

**Submerged type implant with an external hex connection structure**

- Connection type and color - Mini/Regular/Wide/Wide PS
- Corkscrew thread & cutting edge
  - Easy path adjustment through a superior self-threading effect
  - Acquires insertion torque with an increase in soft bone initial stability and without deviation according to the drill diameters
- The various body shape options are available according to the bone and patient’s clinical condition
  - USII (straight body): Easily adjustable insertion depth
  - USIII (1.5 taper body): Able to acquire the initial stability needed for immediate loading even in soft bone
  - USIV (6 taper body): Able to acquire superior initial stability only in maxillary sinus and soft bone
- Applied Surface - SA
Osstem Implant provides world-class surface technologies in surface treatment, the core implant technology for fast and safe procedures.

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

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

- Superhydrophilic SA surface encapsulated in calcium solution
  - Maintains optimum surface identical to SA surface
  - Surface activity maximized after encapsulated in calcium (CaCl₂) solution
  - Increased ossification surface area through excellent blood wettability
  - Improved bone reaction performance in the early osseointegration stage compared to SA surface

- Bone reaction performance (in-vitro and in-vivo)
  - 3x increase in protein, cell adhesion compared to SA
  - 15% increase in initial cell separation (7 days) compared to SA
  - 34% improvement in initial stability (RT, 2 weeks) compared to SA
  - 26% improvement in ossification (BIC, 2 weeks) compared to SA

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

- Bone reaction performance (in-vitro and in-vivo)
  - Excellent biocompatibility in HA that is similar to bone
  - 3x improvement in osteoblast osseous formation (5 days) compared to SA
  - 40% improvement in initial stability (RT, 4 weeks) in animal models compared to SA
  - Suitable for weak bone tissue, or tooth extraction or implant insertion

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

- Premium surface coated with high crystalline HA
  - High crystalline HA coating 30~40μm thickness
  - HA coating on RBM surface (Ra 3.0~3.5μm)
  - Achieved at least 98% HA high crystallization
  - Solves problem of interbody fusion in low crystalline HA

- Bone reaction performance (in-vitro and in-vivo)
  - 2x improvement in osteoblast ossification (5 days) compared to SA
  - 40% improvement in initial stability (RT, 4 weeks) in animal models compared to SA
  - Suitable for weak bone tissue, or tooth extraction or implant insertion

- Bone reaction performance (in-vitro and in-vivo)
  - Excellent biocompatibility in HA that is similar to bone
  - 3x improvement in osteoblast osseous formation (5 days) compared to SA
  - 40% improvement in initial stability (RT, 4 weeks) in animal models compared to SA
  - Suitable for weak bone tissue, or tooth extraction or implant insertion
**FIXTURE COMPONENTS**

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

**COMPONENTS**

028  PROSTHETIC FLOW DIAGRAM 1
030  Solid Abutment
033  Excellent Solid Abutment
038  PROSTHETIC FLOW DIAGRAM 2
039  ComOcta Abutment
040  ComOcta Plus Abutment
041  ComOcta Milling Abutment
042  ComOcta Gold Abutment
043  ComOcta NP-Cast Abutment
044  ComOcta Temporary Abutment
045  SmartFit Abutment
046  ComOcta Angled Abutment
049  Hanaro Abutment
050  PROSTHETIC FLOW DIAGRAM 3
051  Octa Abutment
056  PROSTHETIC FLOW DIAGRAM 4
057  O-ring Abutment
059  Locator' Abutment
Non-submerged implants based on one-stage surgery with internal octa and 8° taper connections

Optimum screw thread design for optimum SA surface

Straight body design for easy adjustment of insertion depth

Powerful self-threading effect using cork-cork thread

Recommended insertion torque: 40Ncm or lower

In single implant cases for posterior region, use of fixture at least 4.5mm in diameter is recommended

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

Pre-Mounted fixture order code (fixture + simple mount + cover screw):
A + fixture product code (ex: A000411518)

D Ø 5.0
P Ø 0.6

D Ø 4.0
P Ø 0.8

D Ø 4.5
P Ø 0.8

D Ø 4.5
P Ø 0.6

G/H

L

6
7
8.5
10
11.5
13

2.0

SS2W506S20
SS2W507S20
SS2W508S20
SS2W5010S20
SS2W5011S20
SS2W5013S20

SS2R4508S18
SS2R4508S28
SS2R4510S18
SS2R4510S28
SS2R4511S18
SS2R4511S28
SS2R4513S18
SS2R4513S28

Short

D Ø 5.0
G/H

L

1.8
2.8

SS2R4007S18
SS2R4008S18
SS2R4010S18
SS2R4011S18
SS2R4013S18

SS2R4008S28
SS2R4010S28
SS2R4011S28
SS2R4013S28

D Ø 4.0
G/H

L

1.8
2.8

SS2R4507S18
SS2R4508S18
SS2R4510S18
SS2R4511S18
SS2R4513S18

SS2R4508S28
SS2R4510S28
SS2R4511S28
SS2R4513S28

D Ø 4.5
G/H

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SS2R4507S20
SS2R4508S20
SS2R4510S20
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Non-submerged implants based on one-stage surgery with internal octa and 8° taper connections
- Optimum screw thread design for optimum SA surface
- Taper body design with superior initial stability
- Powerful self-threading effect using corkscrew thread
- Acquires the initial stability needed in immediate loading even in soft bone

Ultra-wide
- Immediate placement in tooth extraction case and useful in exchanging a failed implant
- With its optimized apex design, capable of obtaining stable initial stability in the cases of tooth extraction and at the bottom 3mm
- Recommended insertion torque: 40Ncm or lower

In single implant cases for posterior region, use of fixture at least 4.5mm in diameter is recommended

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

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

D Ø4.5 P Ø6.0
G/H \ L
2.0
SSW4507S20
SSW4508S20
SSW4510S20
SSW4511S20
SSW4513S20

D Ø5.0 P Ø6.0
G/H \ L
2.0
SSW5007S20
SSW5008S20
SSW5010S20
SSW5011S20
SSW5013S20

Ultra-wide

D Ø6.0 P Ø6.0
G/H \ L
2.0
SSW6006S20
SSW6007S20
SSW6008S20
SSW6010S20
SSW6011S20
SSW6013S20

D Ø7.0 P Ø6.0
G/H \ L
2.0
SSW7006S20
SSW7007S20
SSW7008S20
SSW7010S20
SSW7011S20
SSW7013S20

G/H \ L
D Ø3.5 P Ø4.8
1.8
2.8
SSW3508S18
SSW3510S18
SSW3511S18
SSW3513S18

D Ø4.0 P Ø4.8
1.8
2.8
SSW4008S18
SSW4010S18
SSW4011S18
SSW4013S18

D Ø4.5 P Ø4.8
1.8
2.8
SSW4507S18
SSW4508S18
SSW4510S18
SSW4511S18
SSW4513S18

Hex 1.2
Non-submerged implants based on one-stage surgery with internal octa and 8° taper connections
- Superior hydrophilic SA surface encapsulated in calcium solution
- Taper body design with superior initial stability
- Powerfull self-threading effect using corkscrew thread
- Acquires the initial stability needed in immediate loading even in soft bone

Ultra-wide
- Immediate placement in tooth extraction case and useful in exchanging a failed implant
- With its optimized apex design, capable to obtain stable initial stability in the cases of tooth extraction and at the bottom 3mm
- Recommended insertion torque: 40Ncm or lower

In single implant cases for posterior region, use of fixture at least 4.5mm in diameter is recommended

NoMoun fixture order code
: fixture product code (ex : SS3R4011C18)
SSIII HA Fixture

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

Pre-Mounted fixture order code (fixture + simple mount + cover screw)
- A + fixture product code (ex: ASS3R4011H18)

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Mount & Screw

Simple Mount
- Hex driver: 1.2
- Recommended tightening torque: 8~10Ncm
- Packing unit: mount + mount screw
- C = Connection
  R Regular
  W Wide

Cover Screw
- Hex driver: 0.9(mini), 1.2(regular/wide)
- Recommended tightening torque: 5~8Ncm
- C = Connection
  M Mini
  R Regular
  W Wide

Headless Cover Screw
- Used when adjacent space is limited or there is insufficient gum tissue in the suture area
- Hex driver: 0.9(mini)
- Recommended tightening torque: 5~8Ncm
- C = Connection
  M Mini
  R Regular
  W Wide

Closing Screw
- Used when adjacent space is limited or there is insufficient gum tissue in the suture area
- Hex driver: 1.2
- Recommended tightening torque: 5~8Ncm
- C = Connection
  R Regular
  W Wide
Healing Abutment

- Hex driver : 1.2
- Recommended tightening torque : 5~8Nm

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### Solid Abutment

- Used in producing ordinary cement type prosthetics
- Ø 4.8: solid abutment driver (243p)
- Ø 6.0: 1.2 hex driver
- Recommended tightening torque: 30Ncm
- Packing unit: abutment + protect cap

Abutment + protect cap order code:
: product code + P (ex: SSS485P)

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**D Ø 4.8**

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**D Ø 6.0**

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Solid Abutment Components

Solid Protect Cap
- Used when protecting a solid abutment in the oral cavity and minimizing foreign body sensation in the patient
- Able to be applied in lower structure of a temporary prosthesis
- Regular: 4.0, 5.5, 7.0
- Wide: 6.0

Solid Retraction Cap
- Accurate margin impression function when taking impression directly from a solid abutment
- Regular: 4.0, 5.5, 7.0
- Wide: 6.0

Solid Positioning Cylinder
- Used in taking impressions when solid impression cap is attached
- Regular: 4.0, 5.5, 7.0
- Wide: 6.0

Solid Impression Coping
- Used in taking impressions
- Unification of existing positioning cylinder and impression cap
- Regular: 4.0, 5.5, 7.0
- Wide: 6.0

Solid Lab Analog
- Achieves solid abutment of the oral cavity on a working model
- Achieves small groove for G/H identification
- Regular: 4.0, 5.5, 7.0
- Wide: 6.0

Solid Burn-out Cylinder
- Used as a prosthetic framework when solid lab analog is attached
- After casting a prosthesis, margin area is adjusted using specialized reamer
- Regular: 4.0, 5.5, 7.0
- Wide: 6.0
### Solid Abutment Components

#### Solid Impression Cap
- Component for impression used when removing solid abutment
- Used when solid shoulder analog is attached

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#### Solid Shoulder Analog
- Component for impression used when removing solid abutment
- Achieves fixture platform in working model
- Used with excellent solid shoulder analogs

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#### Solid Shoulder Analog Pin
- Component for impression used when removing solid abutment
- Used when solid shoulder analog is attached
- Prosthetic component for preventing fractures in working models
- Used with excellent solid shoulder analog pins

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### Excellent Solid Abutment
- Advantageous when altering abutments to be larger than solid abutments
- Ø 4.8: excellent solid abutment driver or 1.2 hex driver
- Ø 6.0: 1.2 hex driver
- Recommended tightening torque: 30Ncm
- Packing unit: abutment + protect cap

- Abutment + protect cap order code
  - Product code + P (ex: SSE485P)

![Excellent Solid Abutment](image)
Excellent Solid Abutment Components

Excellent Solid Protect Cap
- Used when protecting an excellent solid abutment in the oral cavity and minimizing foreign body sensation in the patient
- Able to be applied in lower structure of a temporary prosthesis

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Excellent Solid Retraction Cap
- Able to take an impression with an accurate margin when taking a direct impression from an excellent solid abutment

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<td>SSERC607</td>
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</table>

Excellent Solid Positioning Cylinder
- Used when taking an impression while excellent solid impression cap is attached

<table>
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<tr>
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<th>H</th>
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</table>

Excellent Solid Impression Coping
- Used in taking impressions
- Unification of existing positioning cylinder and impression cap

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</table>

Excellent Solid Burn-out Cylinder
- Used as a prosthetic framework when excellent solid lab analog is attached
- After casting a prosthesis, margin area is adjusted using specialized reamer

<table>
<thead>
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Excellent Solid Lab Analog
- Achieves an excellent solid abutment of the oral cavity on a working model
- Achieves small groove for G/H identification

<table>
<thead>
<tr>
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</table>
Excellent Solid Abutment Components

Excellent Solid Impression Cap
- Component for impression to be used when removing an excellent solid abutment
- Attach excellent solid shoulder analog and use

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</table>

Excellent Solid Shoulder Analog
- Component for impression to be used when removing an excellent solid abutment
- Achieves fixture platform in working model
- Used with solid shoulder analog

<table>
<thead>
<tr>
<th>Size</th>
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<th>Ø 6.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>SSELA 480</td>
<td>SSELA 600</td>
</tr>
</tbody>
</table>

Excellent Solid Shoulder Analog Pin
- Component for impression to be used when removing an excellent solid abutment
- Attach excellent solid shoulder analog and use
- Prosthetic component for preventing fractures in working model
- Used with solid shoulder analog pin

<table>
<thead>
<tr>
<th>Size</th>
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<th>Ø 6.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>SSSAP 480</td>
<td></td>
</tr>
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</table>
**ComOcta Abutment**

+ Used in producing ordinary cement type prosthetics
+ 1.2 hex driver
+ Recommended tightening torque: 30 Ncm
+ Packing unit: abutment + Ti screw

**Abutment + Ti screw order code**
: product code + TH (ex.: SSCA485TH)

**D Ø 4.8**

<table>
<thead>
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**D Ø 6.0**

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**SSC SYSTEM**
## ComOcta Plus Abutment

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

### Abutment + Ti screw order code
- Product code + TH (ex: SSCAP4826C TH)

### Ti Screw
- ASR200

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<thead>
<tr>
<th>D Ø4.8</th>
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<th>1.0</th>
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</tbody>
</table>

## ComOcta Milling Abutment

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

### Abutment + Ti screw order code
- Product code + TH (ex: SSCMA4830 TH)

### Ti Screw
- ASR200

<table>
<thead>
<tr>
<th>D Ø4.8</th>
<th>G/H</th>
<th>1.0</th>
<th>2.0</th>
<th>3.0</th>
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</thead>
<tbody>
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<table>
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<tr>
<td>Octa</td>
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</table>
ComOcta Gold Abutment

- Used when path, aesthetics, or space have limitations
- Shoulder contact with fixture platform region
- Prosthetic must be produced by casting dental-grade gold alloy
- Abutment region fusion range: 1400°C–1450°C
- Casting with non-precious metal alloys is incompatible
- 1.2 hex driver
- Recommended tightening torque: 30 Ncm
- Packing unit: abutment + Ti screw

Abutment + Ti screw order code:
product code + TH (ex: COG480STH)

ComOcta NP-Cast Abutment

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

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

- Used in producing temporary prosthetics (Material: Ti Gr-3)
- Structure enabling easy customization and minimizing indication restrictions
- 1.2 hex driver
- Recommended tightening torque: 20Ncm
- Packing unit: abutment + Ti screw

Abutment + Ti screw order code:
- product code + TH (ex: SSTAO480TH)

SmartFit Abutment

- CAD/CAM abutment
- 1.2 hex driver
- Recommended tightening torque: 20Ncm(mini), 30Ncm(regular)

Recommended clinical case:
- Case where implant insertion area or angle is incorrect (max 30°)
- Multiple cases requiring consistent path and stable support
- Anterior case where aesthetic design is required
- Irregular or exceedingly deep gingiva case

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

### D Ø 4.8

<table>
<thead>
<tr>
<th>Type</th>
<th>Octa</th>
<th>Non-Octa</th>
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<tbody>
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### D Ø 6.0

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<tr>
<td>G/H 2.0</td>
<td>SSTAO602</td>
<td>SSTAN602</td>
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</table>
### ComOcta Angled Abutment

- Used when adjusting path of prosthesis is necessary
- Stable connection with g° morse taper structure
- 1.2 hex driver
- Recommended tightening torque: 30 Ncm
- Packing unit: abutment + Ti screw

**Abutment + Ti screw order code**
- Product code + TH (ex: SSA4815TH)

### ComOcta Abutment Components

#### ComOcta Retraction Cap
- Able to take an accurate margin impression when taking an impression directly from a ComOcta abutment

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<td>Ø6.0</td>
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</tbody>
</table>

**Regular**

**Wide**

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

<table>
<thead>
<tr>
<th>D\L</th>
<th>5</th>
<th>10</th>
<th>10</th>
<th>Guide Pin</th>
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<td>SSICA600N</td>
<td>SSICA600</td>
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</table>

#### Diagrams
- **D Ø4.8**
  - Octa: SSA4815, SSA4820, SSA4815N, SSA4820N
  - Non-Octa: SSA4815, SSA4820, SSA4815N, SSA4820N

- **D Ø6.0**
  - Octa: SSA4815, SSA4820, SSA4815N, SSA4820N
  - Non-Octa: SSA4815, SSA4820, SSA4815N, SSA4820N
ComOcta Abutment Components

**Fixture Transfer Impression Coping**
- Takes impression using closed tray
- Increased popularity after creating impression with gemstone-shaped structure
- Packing unit: octa - Impression coping + guide pin
  non-octa - Impression coping

<table>
<thead>
<tr>
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<td>Ø 6.0</td>
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</table>

**Fixture Lab Analog**
- Achieves a fixture of the oral cavity on a working model
- Achieves small groove for G/H identification

<table>
<thead>
<tr>
<th>Type</th>
<th>Ø 4.8</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>Wide</td>
<td>SSSF480</td>
<td>SSSF4600</td>
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</table>

Hanaro Abutment

- Has three functions: fixture mount, transfer impression coping, abutment
- Must use specialized screw when using as an abutment
- Shoulder contact with fixture platform region
- Gold coloring for aesthetics
- 1.2 hex driver
- Recommended tightening torque: 30 Ncm
- Packing unit: abutment + Ti screw + mount screw

**Order made**
Abutment + Ti screw + mount screw order code: product code + TH (ex.: SSHM480C/TH)

Ti screw

<table>
<thead>
<tr>
<th>Ø 4.8</th>
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<th>Ø 6.0</th>
<th>DØ6.0</th>
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<tbody>
<tr>
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<td>SSHM480C</td>
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<tr>
<td>W Wide</td>
<td>SSHM480C</td>
<td>SSHM600C</td>
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</table>
Octa Abutment

- Used in producing a screw-maintained prosthesis in bridge cases where path is not aligned
- Octa abutment driver (244p)
- Recommended tightening torque: 30Nm

Octa Combination Cylinder
Octa Gold Cylinder
Octa Plastic Cylinder
Octa Temporary Cylinder

Octa Lab Analog

Octa Pick-up Impression Coping
Octa Transfer Impression Coping

Octa Driver

Cover Screw
Closing Screw
Healing Abutment

1.2 Hex Driver
Octa Protect Cap
- Used when protecting an octa abutment in the oral cavity and minimizing foreign body sensation in the patient
- 1.2 hex driver
- Recommended tightening torque: 20 Ncm
- Packing unit: protect cap + Ti screw

Protect cap + Ti screw order code: product code + TH (e.g., SSHC480/TH)
- Regular
- Wide

Octa Gold Cylinder
- Prosthetic must be produced by casting dental-grade gold alloy
- Cylinder region fusion range: 1400°C~1450°C
  (casting with non-precious metal alloys is incompatible)
- 1.2 hex driver
- Recommended tightening torque: 20 Ncm
- Packing unit: cylinder + Ti screw

Cylinder + Ti screw order code: product code + TH (e.g., SSGCO480/TH)
- Regular
- Wide

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

Cylinder + Ti screw order code: product code + TH (e.g., SSOCO480/TH)
- Regular
- Wide

Octa Temporary Cylinder
- Used in producing temporary prosthetics (Material: Ti Gr-3)
- Structure enabling easy customization and minimizing indication restrictions
- Inherent connection structure with two octa/non-octa advantages (max 60° path compensation)
- 1.2 hex driver
- Recommended tightening torque: 20 Ncm
- Packing unit: cylinder + Ti screw

Cylinder + Ti screw order code: product code + TH (e.g., SSTCO480/TH)
- Regular
- Wide

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

Cylinder + Ti screw order code: product code + TH (e.g., SSPSO480/TH)
- Regular
- Wide
## Octa Abutment Components

### Octa Pick-up Impression Coping
- Takes impression using open tray
- Superior impression stability with holonone structure
- 1.2 hex driver
- *Label is basic packaging specification
- Packing unit: impression coping body + guide pin

<table>
<thead>
<tr>
<th>Octa</th>
<th>Non-Octa</th>
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### Octa Transfer Impression Coping
- Takes impression using closed tray
- Packing unit: impression coping body + guide pin

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### Octa Lab Analog
- Achieves octa abutment of the oral cavity on a working model
- Achieves small groove for G/H identification

<table>
<thead>
<tr>
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<th>Guide Pin</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>Ø 6.0</td>
<td>SSLA1600</td>
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</table>
**O-ring Abutment**

- Used in creating stud type overdenture prosthetics
- Compensates the path up to 20°
- O-ring abutment driver® AORD (AORD)
- Recommended tightening torque: 30Ncm

**PROSTHETIC FLOW DIAGRAM 4**

O-ring / Locator®
Overdenture

D Ø4.8

- Cover Screw 024p
- Closing Screw 025p
- Healing Abutment 026p
- Multi Tool 062p
- O-ring Abutment Driver 057p
- O-ring Lab Analog 058p
- O-ring System 058p
- O-ring / Locator® Abutment 061p
- O-ring / Lab Analog 061p
- O-ring / Impression Coping 061p
- O-ring Abutment 060p
- Spacer & Male Cap 060p
- Male 060p
- Extended Male 060p
- Cap Type
- Open Type
- O-ring System
- O-ring / Locator® Abutment
- O-ring / Impression Coping
- O-ring Abutment Driver
- O-ring System
- O-ring / Locator® Abutment
- O-ring / Impression Coping
- O-ring Abutment Driver
- O-ring System
- O-ring / Locator® Abutment
- O-ring / Impression Coping
- O-ring Abutment Driver

**SS SYSTEM**

- SSII SA 016p
- SSII SA 018p
- SSII CA 020p
- SSII HA 022p
- SSRA 000
- SSRA 200
- SSRA 400

**G/H**

- 0
- 2
- 4

- 3.4
- G/H

- Fixture level

- 1.2 Hex Driver

- O-ring System

- O-ring / Locator® Abutment

- O-ring / Impression Coping
O-ring Abutment Components

O-ring Retainer Cap Set
- Used in creating stud type overdenture prosthetics
- Packing unit: retainer cap + o-ring

O-ring Retainer Set
- Advantageous when occlusal clearance is low compared to retainer cap
- Packing unit: retainer + o-ring

O-ring Set
- Packing unit: Seal

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

Locator® Abutment

- Achieves low vertical dimension, stability, and various attachments with retention
- Possible path compensation up to 40° (two implant standard)
- Tightening by using a locator torque driver
- Recommended tightening torque: 30Ncm

D Ø 4.8

G/H 0.7 2.0 3.0 4.0

HSLOA4810R HSLOA4820R HSLOA4830R HSLOA4840R

Fixation level

D = 4.8 mm
**Locator® Abutment Components**

**Locator® Male Processing Kit**
- Component
  - Block out spacer / denture cap connected black processing male
  - Replacement male blue/pink/clear
- Used after selecting retention males that are appropriate for the case
- Exchanged with male using a locator core tool
- Packing unit : 2set

**Locator® Replacement Male**
- Retention: Approximately 6N
  - 0° - 20° paths (two implant standard)
  - Packing unit : blue replacement male 4ea

- Retention: Approximately 12N
  - 0° - 20° paths (two implant standard)
  - Packing unit : pink replacement male 4ea

- Retention: Approximately 22N
  - 0° - 20° paths (two implant standard)
  - Packing unit : clear replacement male 4ea

**Locator® Extended Replacement Male**
- Retention: Approximately 6N
  - 20° - 40° paths (two implant standard)
  - Packing unit : red extended replacement male 4ea

- Retention: Approximately 12N
  - 20° - 40° paths (two implant standard)
  - Packing unit : green extended replacement male 4ea

**Locator® Black Processing Male**
- Used in lab. process
- Packing unit : 4ea

**Locator® Block Out Spacers**
- Gap sealing component between denture cap and abutment
- Packing unit : 20ea

**Locator® Impression Coping**
- Used in taking impressions after attaching locator abutment
- Packing unit : 4ea

**Locator® Lab Analog**
- Achieves locator abutment on the model
- Packing unit : 4ea
Locator® Abutment Components

Locator® Core Tool
- Used in attaching and changing replacement males

Locator® Torque Driver
- Used in locator abutment tightening

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<thead>
<tr>
<th>Type</th>
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<td>TWLD LK</td>
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## Osstem Implant Key References

<table>
<thead>
<tr>
<th>No.</th>
<th>Clinic</th>
<th>Title</th>
<th>Reference / Author</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Retrospective clinical study of new tapered design implants in maxillary posterior areas</td>
<td>Oral Biology Research. 2013; 370(105-111) / Young-Kyun Kim et al.</td>
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<tr>
<td>14</td>
<td>Short-term, multi-center prospective clinical study of short implants measuring less than 7mm</td>
<td>J Kor Dent Sci. 2010;30(2):11-6 / Young-Kyun Kim et al.</td>
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## Biology

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<th>No.</th>
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<tr>
<td>2</td>
<td>Experimental study about the bony healing of hydroxyapatite coating implants</td>
<td>J Kor Oral Med. 2011;26:299-300 / Young-Kyun Kim et al.</td>
</tr>
</tbody>
</table>
Osstem Implant product information

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

Sterility

Packaging, case over and healing abutments are cleaned and gamma-sterilized. These products are disposable sterile medical appliances, and must be used in a sterile field. If the packaging has been 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 (25°C). Avoid direct sunlight.

General precautions

Dental implant surgery require proper and formal training and education.

Cautions before dental implant surgery

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

Cautions during dental implant surgery

Osstem Implant System are for single or two stage dental implant procedures. In order to minimize damages to the patient’s bone, special attention to temperatures, surgical lesions and contagious and infection are needed. Any deviation from the standard surgical protocol may increase the risk of failure. When inserting the dental implant, sufficient cooling must be introduced under a high and proper torque greater than 20Ncm can result in dental implant fracture or possibly bone necrosis. Posing dental implants greater than 300 Ncm 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 angulated abutments. If consisting of an Ultra-wide dental implant, proper radiographic evaluation must be made to determine the bone mass and potential anatomic restrictions. Short dental implants diameter greater than 5mm and shorter than 10mm are only used for the posterior region. The clinician must thoroughly evaluate the patient’s condition and recognize the following issues: 1) bone loss due to peri-implant, 2) changes to the dental implant condition, 3) poor bone integration determined by a low loading. If there is more than 50% of bone loss or bone loss more than 50%, removing the dental implant should be a course of action. Wide diameter implants should to be performed as a two stage surgery. Sufficient healing time must be given before splinting with other implants or crowns. Immediate loading is not recommended.

Take care when placing dental implant with HA coating. The coating can cracks or fracturing under high torque, therefore hard bone should be avoided and be inserted under 35Ncm of force. CA and SOI treated dental implants are encased in a solution to prevent the chemically treated surface from reacting with air. After removing the CA or SOI 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 purposes other than prescribed and must not be alter in any shape or form. Implant movement, bone loss, and clinical infection 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 mandibular alveolar bone and after full osseointegration can be restored prosthodontically. Osstem Implant Systems offer both therapeutic and prosthodontic therapy and can be related by cement, screws or overdentures or fixed bridges.

Side effects

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

Contraindications

Patients with tattooing or skin alterations are not eligible for dental implants.

- Patients with blood clotting issues or issues with wound healing.
- Diabetic patients.
- Patients that smoke or drink excessively.
- Patients with compromised immune systems due diseases or chronic infections.
- Patients with oral infections or inflammation (prosthetic or intra oral teeth grinding).
- Patients with an unsuitable mucosal condition/implant site and insufficient space.