OSSTEM IMPLANT

Surgical Manual

SS Implant System

Introduction

Welcome,

and thank you for choosing Osstem Implant products. This catalogue is designed to support dental professionals with product information, clinical workflows, and practical guidance for daily use. It is important to inform patients about the option of dental implant treatment and the potential benefits it may provide. For further information, please contact your local Osstem representative.

Important Notice

This document is provided for **informational and educational purposes only** and does not replace the applicable product label, the current product-specific Instructions for Use (IFU), formal clinical training, or independent professional judgment. All product information, specifications, and protocols are subject to change without notice. Not all products may be approved, cleared, released, licensed, or available in all markets. Product illustrations are not shown to scale. Despite careful preparation of this catalogue, typographical, editorial, translation, or printing errors may occur. **All critical information must be verified against the current product-specific IFU and product label before use.**

Electronic IFU (per (EU) 2021/2226)

- Surgical Drill & KIT System is eligible for provision of electronic instructions for use (e-IFU) under Regulation (EU) 2021/2226 for professional users.
- e-IFUs are available at [website URL: ifu.osstem.com] in the official languages required by the Member State(s) where the device is placed on the market.
- The e-IFU content is consistent with the paper version; all updates are promptly reflected in both versions.
- If requested, a paper copy of the IFU will be supplied free of charge, within 7 calendar days.
- The e-IFU website maintains historical versions for traceability of all previously applicable instructions.
- Labeling on the product/package indicates the provision of e-IFU and how to access it online.

Surgical Manual | English Edition

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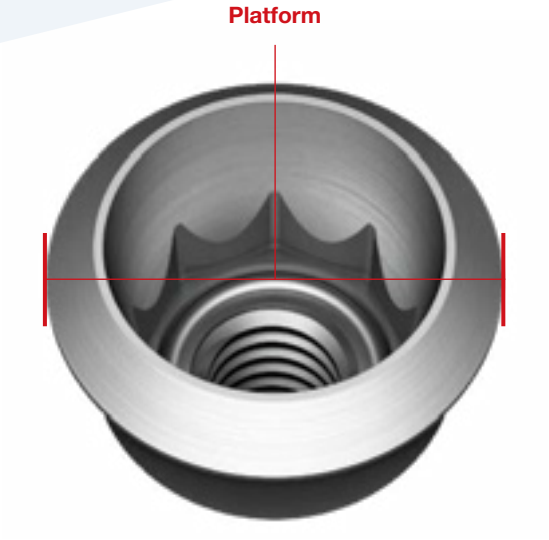
158 00 Prague, Czech Republic

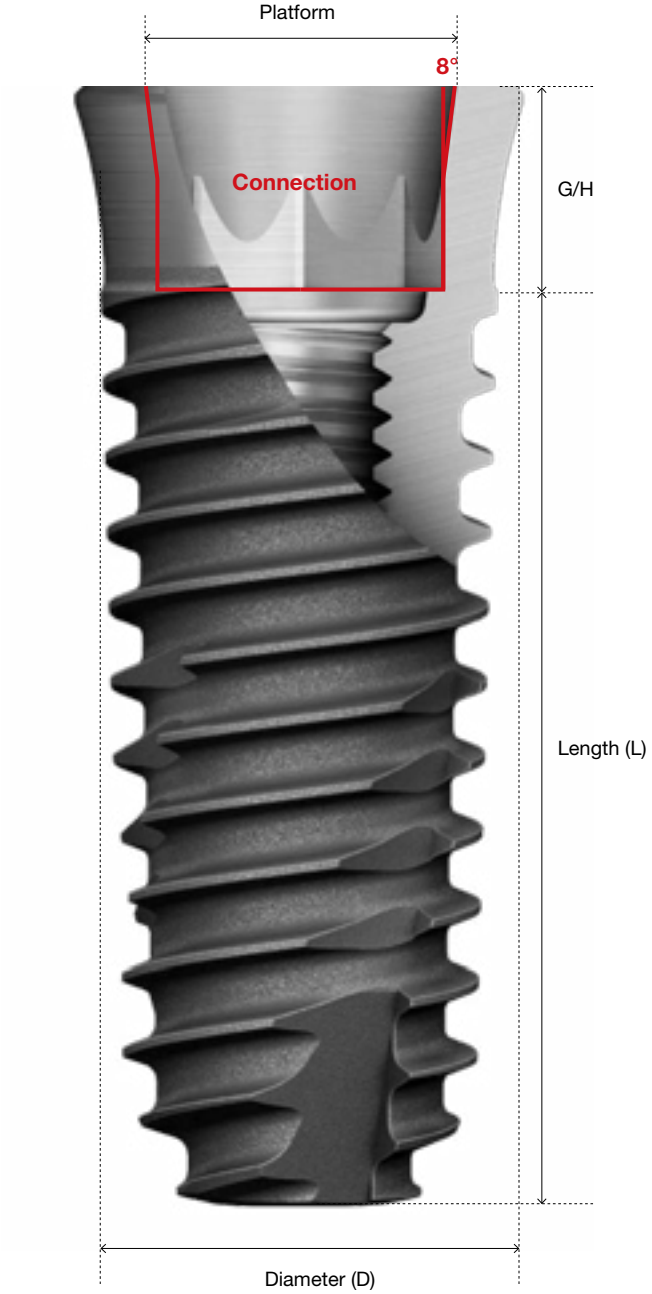
Note: *This brochure is based on the global 2021 Osstem Surgical Manual and has been visually revised and adapted for the European market. Product availability and specifications may vary by country and are subject to change without notice. Images are for illustrative purposes only. For professional use only.*

SS Implant

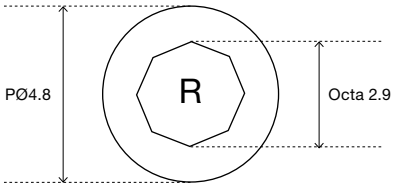


Concept

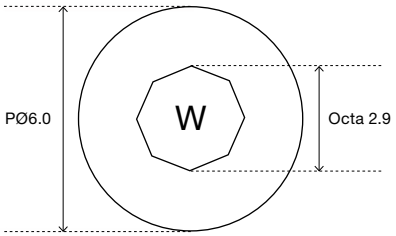
- Internal octa
- 8° morse taper
- Non-submerged type
- 1-stage surgery possible
- Advantageous for single case in the posterior
- Tissue level placement



Platform



Regular Ø4.8, Octa 2.9



Wide Ø6.0, Octa 2.9

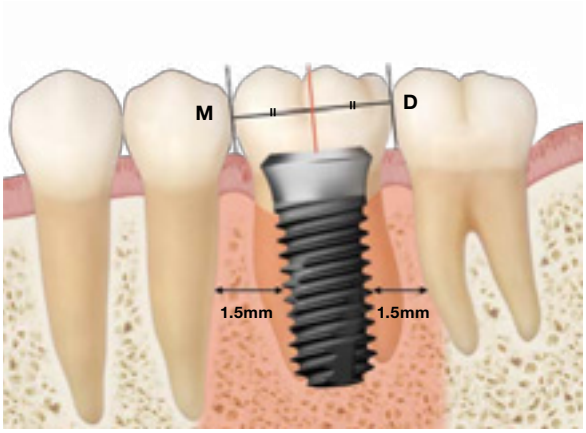
1 SS Implant placement protocol

A Placement position

Mesio-distal position

· Place at the center of the mesiodistal width of the crown

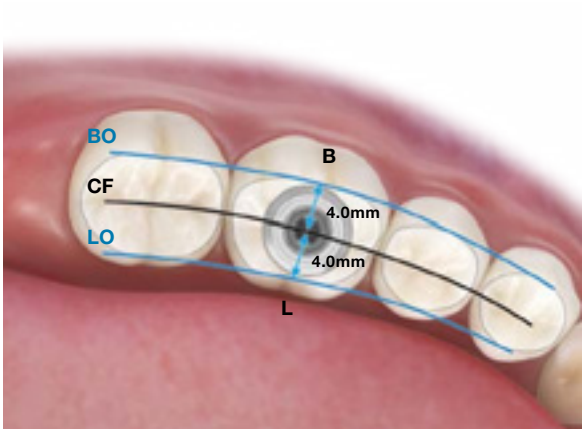
· Distance between natural teeth and implant:
Min. 1.5mm Placement position p.8



Bucco-lingual position

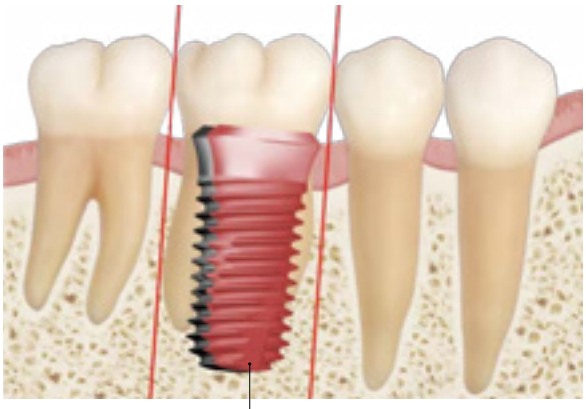
· Place implant at the center of the permanent prosthesis

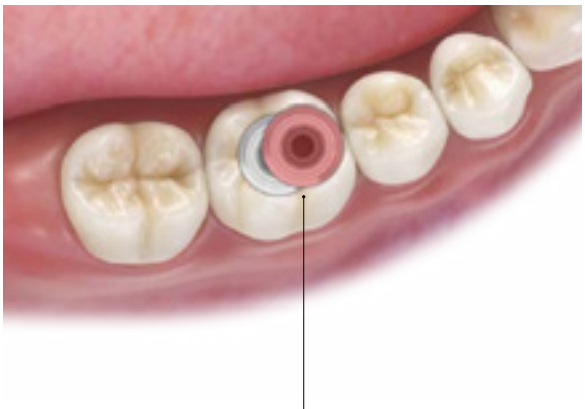
· Here, since the screw hole is positioned at the center, a screw-type or ER-type prosthesis can be fabricated.



Common mistakes

· Mesial bias (from the center of the tooth) during placement





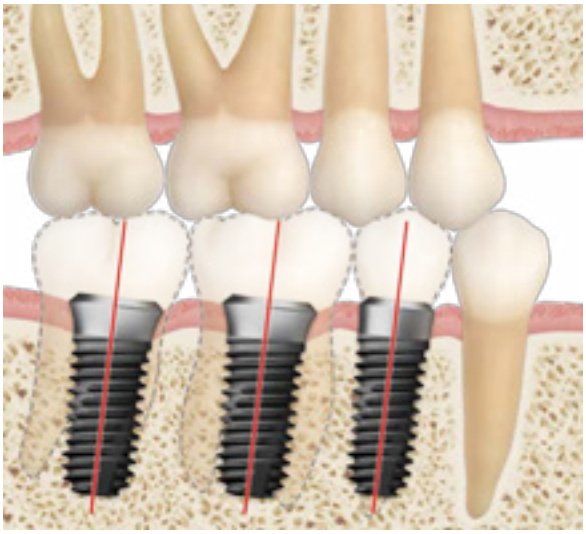
Mesial bias during placement

B Placement direction

Mesio-distal angle

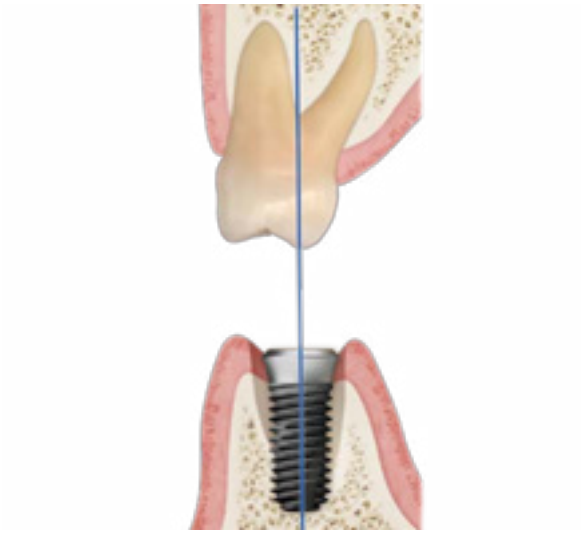
· Place implant so that its central axis is pointing towards the interdental area of the antagonist teeth.

Placement direction : p.16



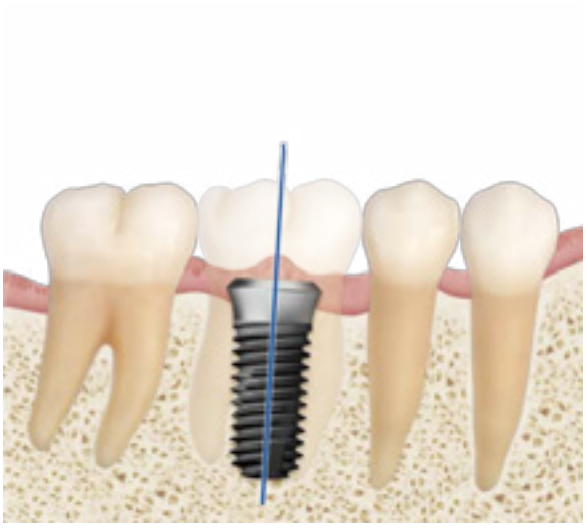
Buccolingual direction

· Place implant so that its central axis is pointing towards the cusp of the antagonist teeth.

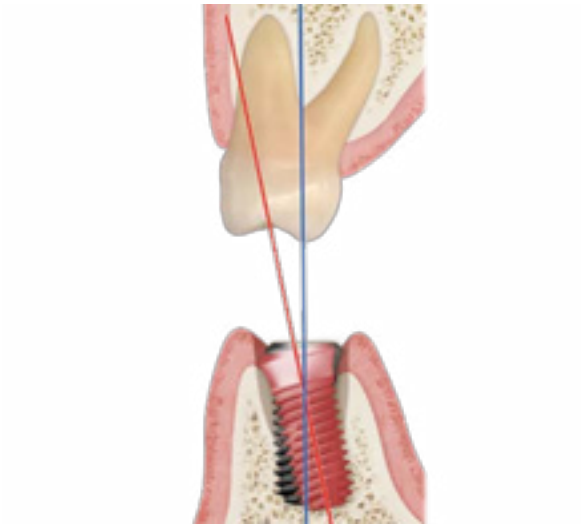


Common mistakes

· In the Panorama, the implant appears to have been placed correctly, but the apex has a lingual bias.



Appears correct in the Panorama

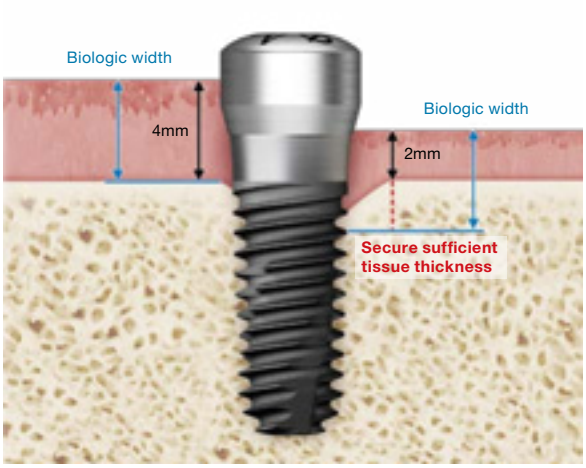


Viewing from a buccolingual direction, the apex has a lingual bias

C Placement depth

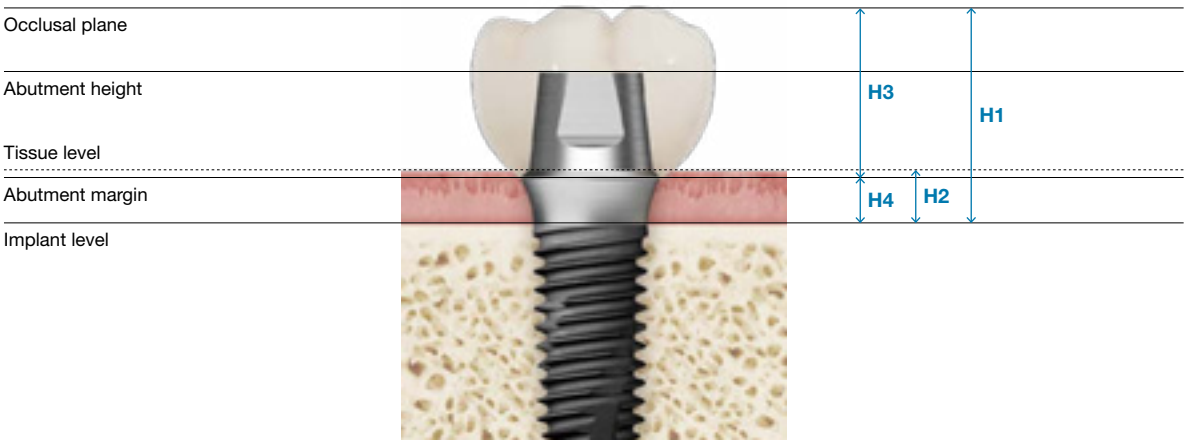
· Placement depth considering the biological width: Secure primary stability and adjust placement depth considering the biological width Biological width p.26

If thickness is sufficient at 3~4mm, additional bone resorption does not occur.



When the thickness of the peri-implant mucosa decreases, maintain the mucosal dimension by inducing a resorption of the upper alveolar bone to protect the underlying tissue.

· Impant placement depth taking prosthesis into consideration: The prosthetic plan after implant placement should be implemented in case of loading prosthesis in the wrong location, angle and depth of the implant. Therefore, there might be restriction in selecting type, material, shape of prosthesis.

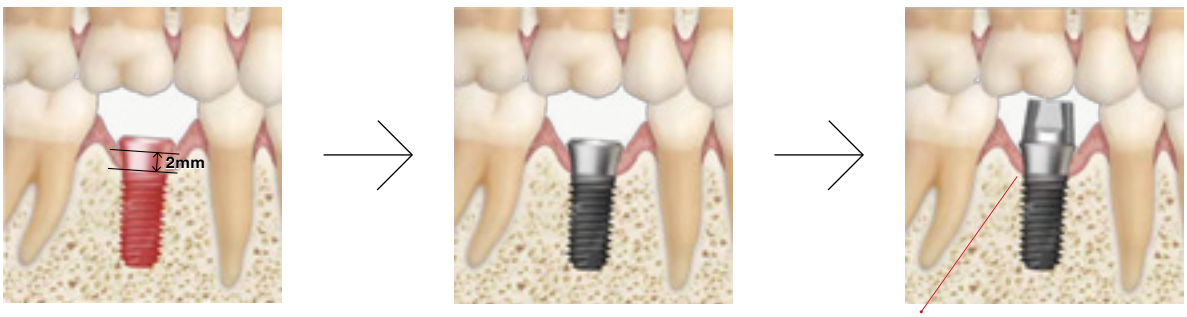


Implant Crown length Placement depth considering the prosthesis p.27

H1 Appropriate distance from implant level to occlusal plane: Posterior 8mm
H2 Distance from implant level to tissue level
H3 Distance from the abutment margin to occlusal plane: Min. 6mm
H4 Distance from implant level to abutment margin: Min. 2mm

Common mistakes

· Using an implant that has tall G/H(2.8mm) spacification without considering the height of the gingiva.



The G/H specification of the implant is taller than the gingiva.

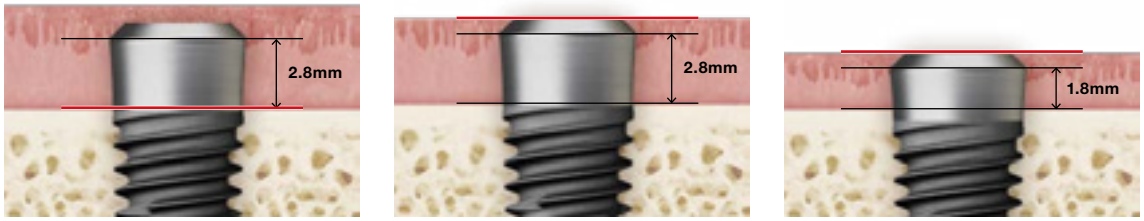
The collar part of the implant is exposed outside the gingiva

Unesthetic due to implant exposure

SS implant G/H specification selection according to soft tissue thickness

· SS implant G/H specifications are 1.8 and 2.8
· G/H specifications must be selected according to the thickness of the gingiva, and the implantation depth must be adjusted

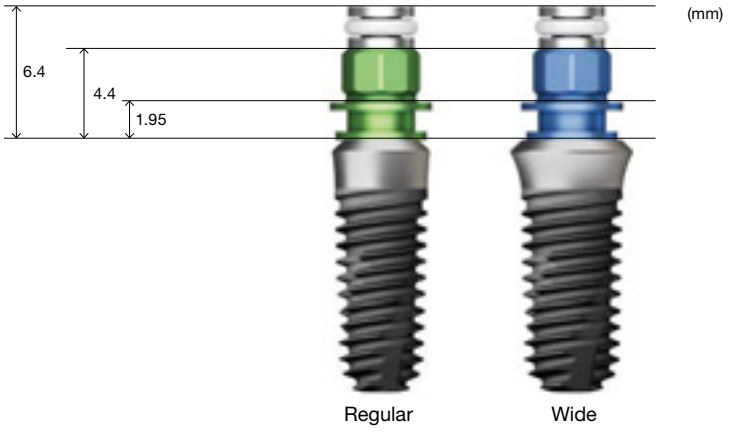
· 3.5mm~: Select the 2.8mm specification and place it according to the bone level
· 3.0mm: Select the 2.8mm specification and place it according to the tissue level
· 2.0mm: Select the 1.8mm specification and place it according to the tissue level

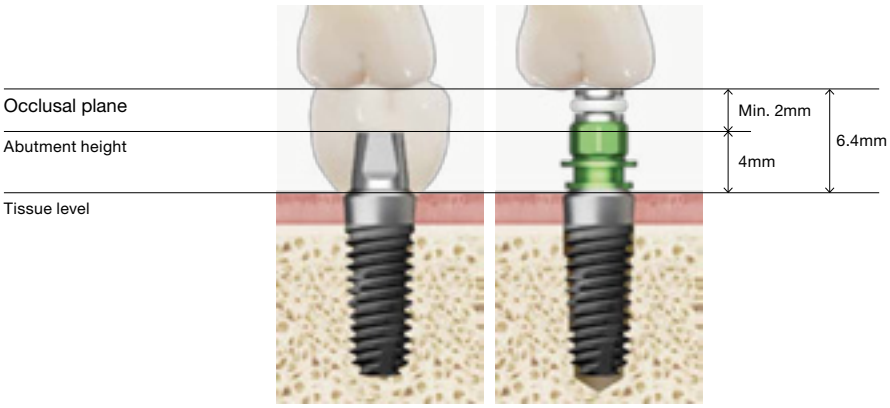


2 Mount

A Check available space for the prosthesis

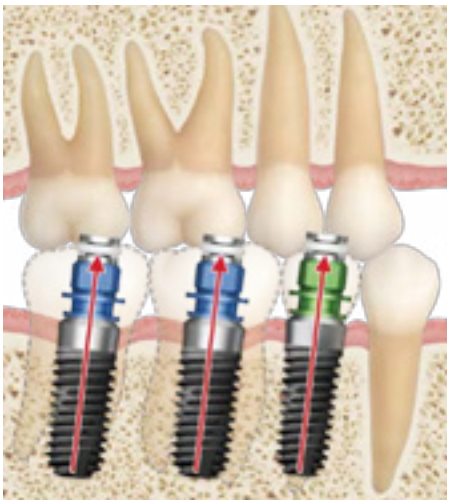
· When placing a pre-mount implant, you can use the mount to check the space available for the prosthesis.
· Be able to check the expected prosthesis space taking the 6.4mm protruding part into cosideration for the SS mount.

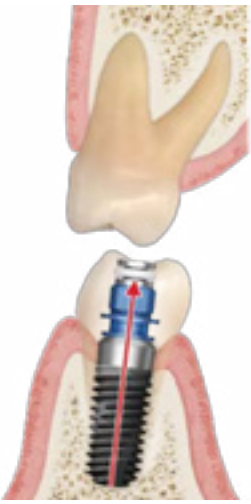




B Check placement direction

· Easy to check the implant angle after placement.
· Check whether the mount angle is headed towards the cental axis and interdental space of the natural antogonist teeth.

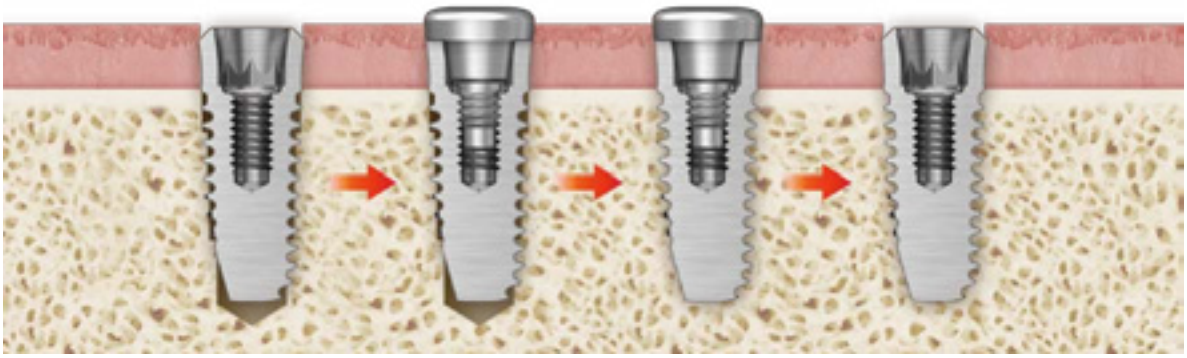




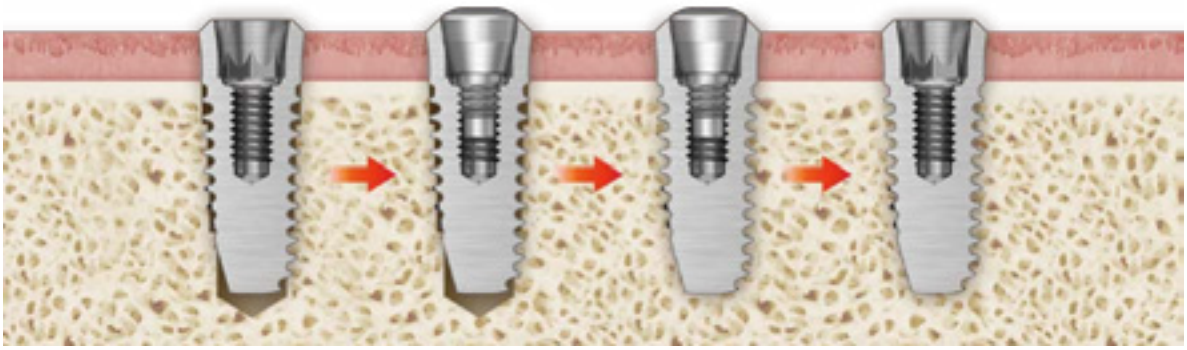
3 Cover screw

A Cover screw & closing screw applications

· In case of placing the SS implant, the cover screw protects the internal structure of the implant in osseointegration period after implant placement.
· Cover screw: Covers the upper bevel of the gingival implant (regular case)
· Closing screw: Use when the upper bevel of the gingival implant is not covered >> Minimize discomfort



Place implant Assemble cover screw Healing Remove cover screw

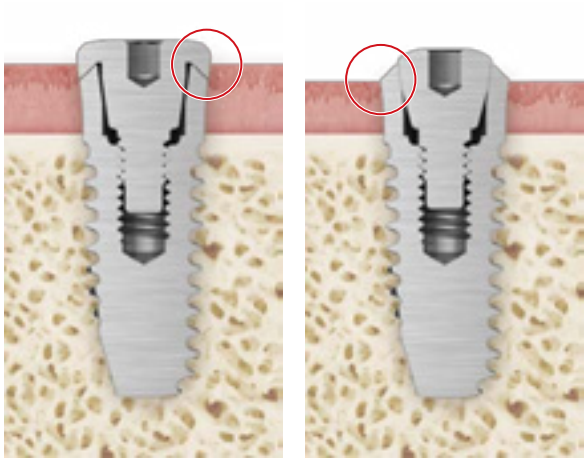


Place implant Assemble closing screw Healing Remove closing screw

B How to select the correct specification

Step 1. Select cover screw, closing screw

· Select cover screw if the top bevel of the implant is covered by the gingiva, otherwise select the closing screw.



Cover screw　　Closing screw

Step 2. Select platform

· Check whether the placed implant is mini or regular.
· Select the cover screw or closing screw of the same platform as the implant installed.

	Regular	Wide
 **Cover screw**		
 **Closing screw**		

4 Healing abutment

A Healing abutment applications

· Use when the implant is deeply placed and the cover screw cannot solve the problem.
· The healing abutment is to promote the healing of soft tissues and generate a transition zone to form the place where the prosthesis will be loaded.
· Transition zone: Space between the implant top and gingival line

B How to select the healing abutment specification

Step 1. Select platform

· Check whether the installed implant is platform regular or wide.
· Select the healing abutment of the same platform as the installed implant.
· For SS implants, the emergence profile of the permanent prosthesis is determined by the diameter of the collar. Therefore, only the Regular (Ø4.8) and Wide (Ø6.0) diameters are available for the healing abutment.

Regular healing abutment

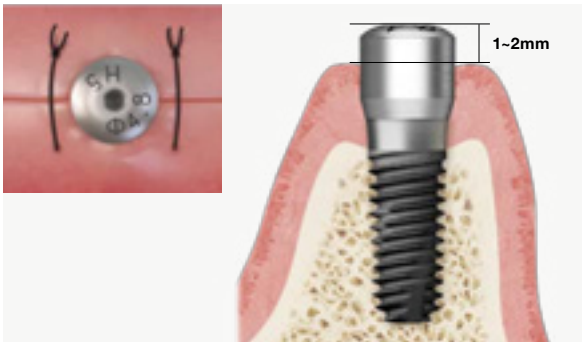
Regular platform Implant

Wide healing abutment

Wide platform Implant

Step 2. Select height

· If the healing abutment is covered with the gingiva, a transition zone cannot be formed, so select it 1~2mm higher than the thickness of the gingiva.



Important Information and Legal Notices 2026.03 ver.1.1

1. IMPORTANT NOTICE

This catalogue is intended solely as an informational and educational guide for trained dental professionals. It does not replace the applicable Instructions for Use (IFU), product labelling, formal clinical training, treatment planning, or independent professional judgment.

All clinical protocols, drilling sequences, cleaning instructions, sterilization requirements, torque recommendations, indications, contraindications, warnings, and procedural steps must be verified against the current product-specific IFU and the applicable product label for the relevant REF/ product code prior to use.

In the event of any discrepancy between this catalogue and the applicable IFU, product labelling, or other official Osstem documentation, the IFU, labelling, and official product documentation shall prevail.

2. PRODUCT INFORMATION, CHANGES, AND AVAILABILITY

All products, specifications, protocols, recommendations, illustrations, and other information contained in this catalogue are subject to change without prior notice.

Not all products may be approved, cleared, released, licensed, or otherwise available in all markets. Product availability, indications, and regulatory status may vary by country. For information on the current product portfolio, approved indications, and local availability, please contact your local Osstem representative or Customer Service and consult the current official Osstem documentation.

3. PROFESSIONAL USE ONLY

Osstem Implant products are intended for use by appropriately trained dental professionals only. Dental implant treatment involves complex professional procedures and requires appropriate education, clinical training, patient selection, treatment planning, and radiographic as well as clinical evaluation.

The suitability of any procedure must be assessed individually for each patient, taking into account anatomy, bone quality and quantity, occlusion, systemic conditions, oral hygiene, compliance, and any other relevant clinical factors.

4. PRODUCT DESCRIPTION AND COMPATIBILITY

Osstem Implant offers implant fixtures, prosthetic components, surgical instruments, and related materials for dental implant treatment. Product codes, specifications, lot numbers, dates of manufacture, and expiration dates, where applicable, must be checked on the product label before use.

Unless expressly stated otherwise in the applicable product documentation, Osstem Implant abutments, prosthetic components, instruments, and related accessories are intended to be used only with compatible Osstem Implant fixtures and components. Use in combination with components or instruments from other manufacturers may result in improper fit, incomplete locking, loosening, fracture, reduced performance, or other clinical complications.

5. STERILITY, CLEANING, REPROCESSING, AND STORAGE

Sterile products supplied in sterile packaging must be used only if the packaging is intact and the expiration date has not passed. If sterile packaging has been opened, damaged, or has expired, the product must not be used.

Single-use products must not be reused, reprocessed, or resterilized.

Reusable instruments must be cleaned, disinfected, inspected, maintained, and sterilized strictly in accordance with the applicable Osstem IFU before reuse.

Products must be stored in accordance with the applicable labelled storage conditions and protected from moisture, contamination, direct sunlight, and other adverse environmental conditions.

6. CLINICAL PROTOCOLS AND PROCEDURAL GUIDANCE

Any surgical, prosthetic, drilling, insertion, loading, cleaning, maintenance, or other procedural guidance shown in this catalogue is provided for general informational purposes only and must be adapted to the individual patient, the specific product, and the current approved IFU.

Clinicians remain solely responsible for selecting the appropriate treatment protocol and for determining whether the intended procedure, component selection, loading protocol, and clinical application are appropriate for the individual case and within the approved indications for the relevant product.

7. WARNINGS, CONTRAINDICATIONS, AND POSSIBLE COMPLICATIONS

Improper patient selection, inadequate treatment planning, non-compliance with the applicable IFU, improper use, off-label use, product modification, poor oral hygiene, infection, insufficient bone quality or quantity, excessive occlusal loading, or other unfavorable clinical conditions may result in complications or treatment failure.

Possible complications and adverse events may include, without limitation, implant instability or failure, loosening, fracture, bone loss, infection, soft- or hard-tissue complications, prosthetic complications, delayed healing, or the need for revision or removal.

Contraindications and precautions must always be assessed in accordance with the applicable Osstem product documentation and accepted professional standards of care.

8. INTENDED PURPOSE

The OSSTEM Implant System is an artificial dental root that has been designed for use in dental implant treatment in order to recover lost teeth. The system is implanted via a surgical method in maxillary or mandibular bone to replace natural dental root. The OSSTEM Implant System is indicated for use in partially or fully edentulous mandibles and maxillae, in support of single or multiple-units restorations including; cemented retained, screw retained, or overdenture restorations, and final or temporary abutment support for fixed bridgework. It is intended for delayed loading. Products with diameter of 3.3 mm or less must be used exclusively for mandibular anterior teeth in order to prevent fracture due to excessive occlusal load. The Ultra-Wide Implants are intended to be used only to replace molar teeth and angled abutments are not to be used with the Ultra-Wide Implants. Evaluate the quantity of bone and radiographs to assess any potential anatomical contraindications to use of the Ultra-Wide Implant. The applicable product-specific IFU must always be consulted to confirm the intended purpose, indications, limitations, and approved clinical applications of the relevant product.

9. ACCURACY OF INFORMATION

Although reasonable care has been taken in preparing this catalogue, typographical, editorial, translation, printing, and formatting errors may occur. Information may also become outdated as a result of product updates, regulatory changes, technical revisions, or clinical developments.

No representation is made that this catalogue is complete, current, or error-free in every respect. Users must verify all critical information against the current IFU, product labels, and other official Osstem documentation before clinical use.

10. ILLUSTRATIONS AND EXAMPLES

Product illustrations, diagrams, radiographic examples, case images, and step-by-step demonstrations are for illustrative purposes only. Unless expressly stated otherwise, they are not shown to scale and do not guarantee any clinical outcome.

Example cases do not constitute a promise or representation of treatment success in any individual case.

11. TRADEMARKS AND COMPANY NAMES

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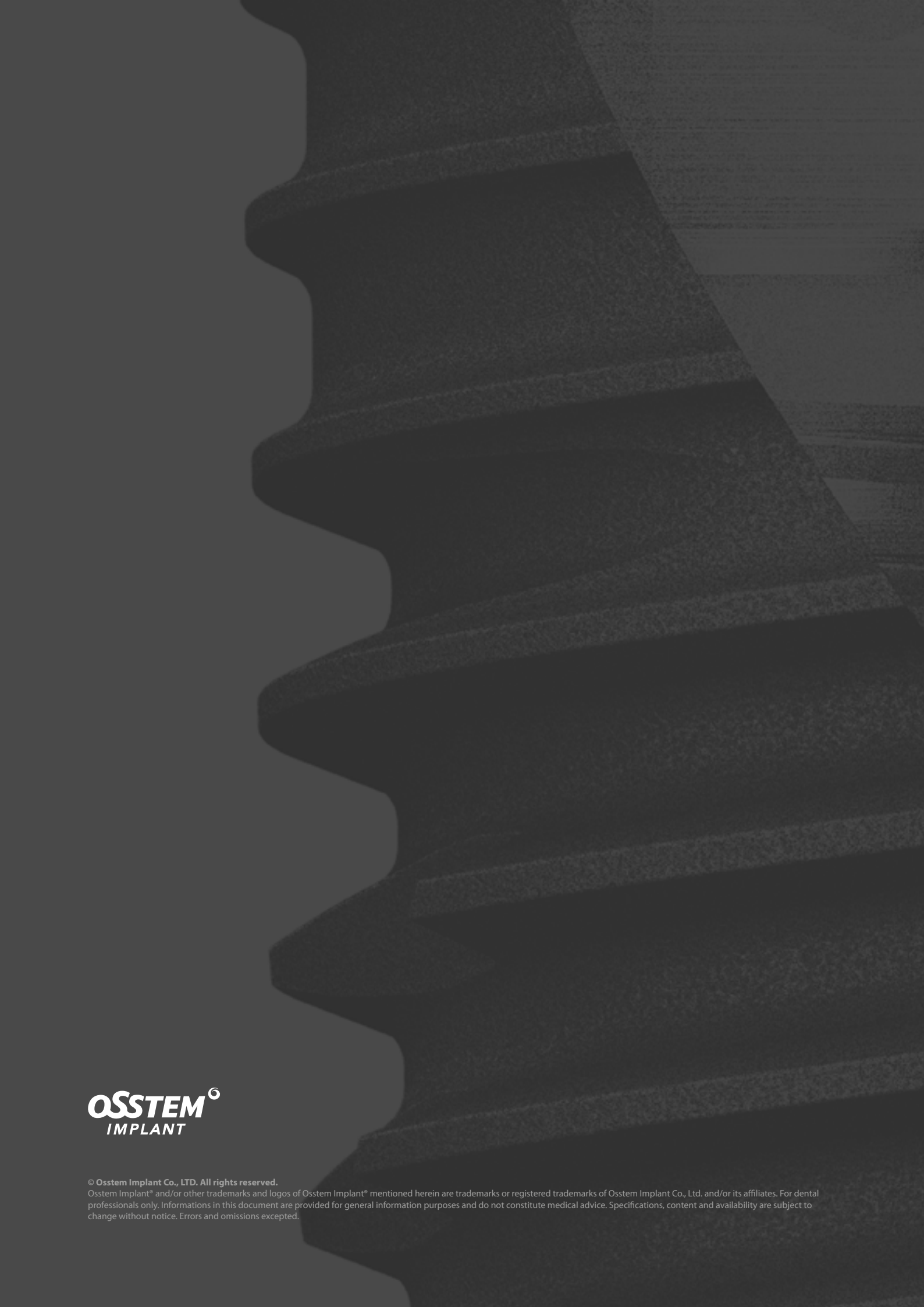

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