OSSTEM IMPLANT

Surgical Manual

OneMS KIT

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

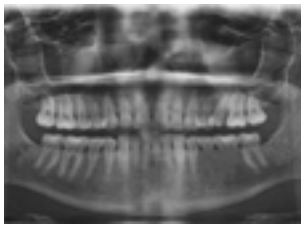
Note: *This brochure is based on the global 2021 Osstem Surgical Manual and has been visually revised and adapted for the European market. Product availability and specifications may vary by country and are subject to change without notice. Images are for illustrative purposes only. For professional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

OneMS KIT

Digital Guided Surgery KIT with high surgical precision in narrow bone cases (precise placement location, direction, and depth)

Diagnostic process

Oral examination

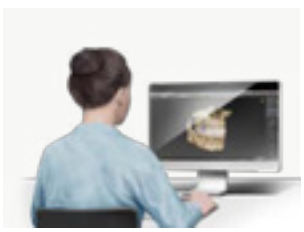


Panorama imaging

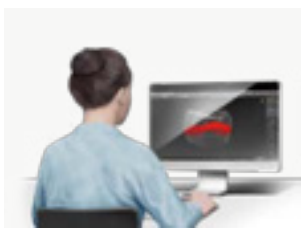
3D oral scanner imaging

3D CT imaging

수술 과정



3D image computer



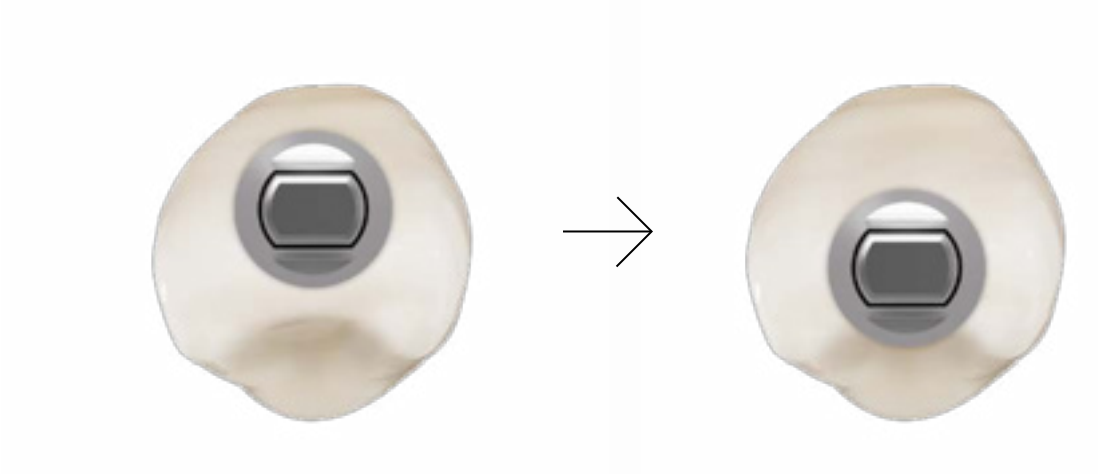
3D simulated surgery

Fabricate surgical template

Perform flapless

1 Indication

A When you wish to place implants in correct position (narrow bone width case).



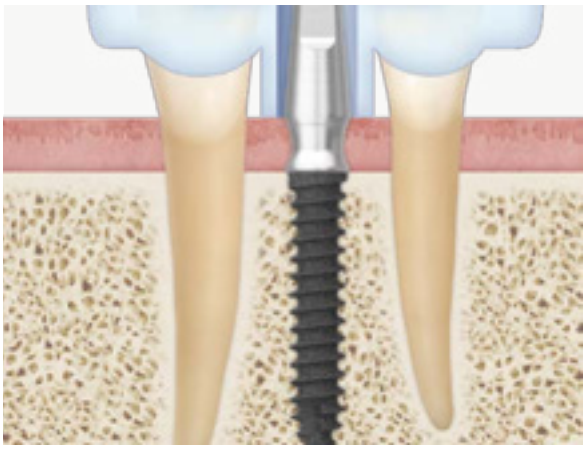
B When you wish to place implants in correct direction (narrow bone width case).

C When you wish to place implants at correct depth (narrow bone width case)

2 Feature

A Possible to place MS Implant with OneGuide in cases where interdental space or bone width is narrow

· Even if the interdental space is narrow or the bone width is narrow, MS Implants can be placed in the correct position with OneGuide

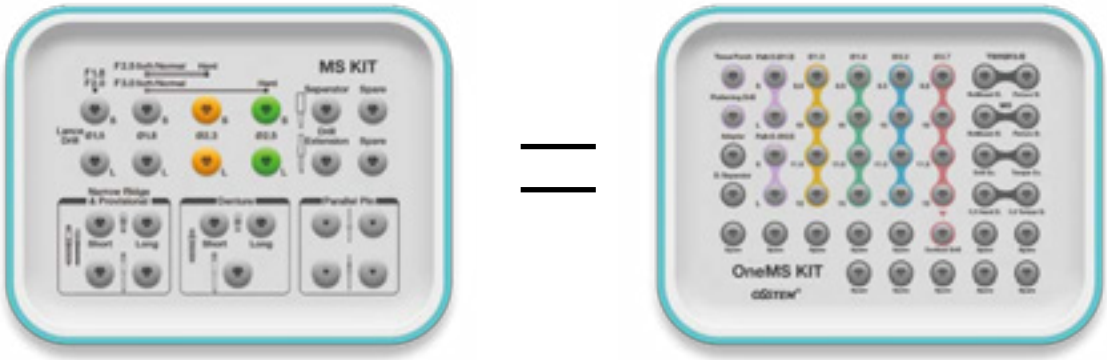


B Implant surgery for all MS Implant specifications and TS III Ø3.0 Implant is possible with just the OneMS KIT

· Implant surgery for all MS Implant specifications and TS III Ø3.0 Implant is possible in narrow bone width with just the OneMS KIT, and the OneGuide KIT is not needed.

C User guide similar to the existing MS KIT

· Convenient and familiar drilling sequence



3 Tools of KIT

OneMS KIT

Drilling tool (1~6)

Implant placement tool (7~14)

1 Tissue Punch

2 Flattening Drill

3 OneMS Drill

4 Cortical Drill

5 Drill Extension

6 Path Drill

7 NoMount Driver

8 Implant Driver

9 Torque Extension

10 Adapter

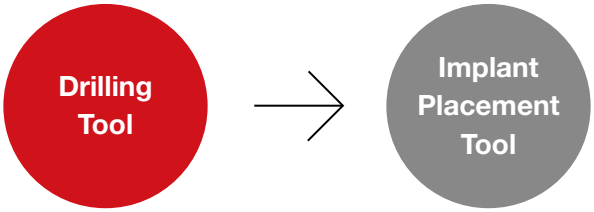
11 Driver Separator

12 1.2 Hex Hand Driver

13 1.2 Hex Torque Driver

14 Torque Wrench

4 User guide for KIT



Includes tools for cutting a hole into the gingiva at the location where the implant will be placed and tools for drilling.

1 Tissue punch

2 Flattening drill

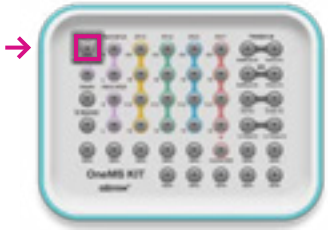
3 OneMS drill

4 Cortical drill

5 Drill extension

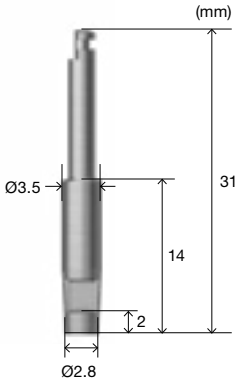
❶ Tissue punch

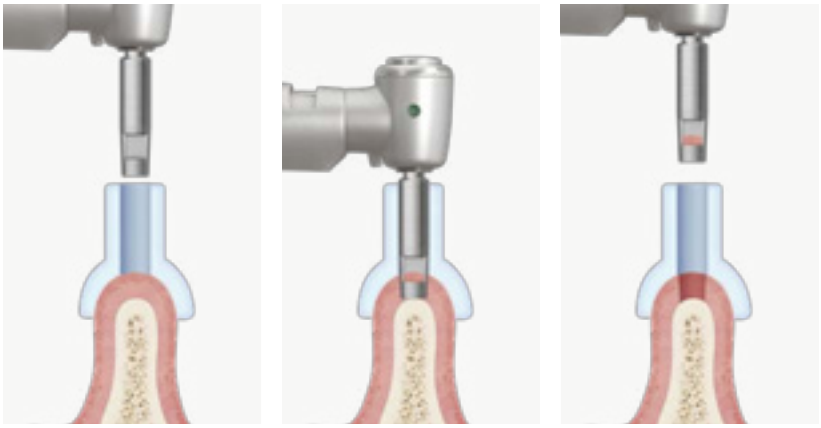
Cuts a hole into the gingiva at the position where the implant will be placed.



User guide

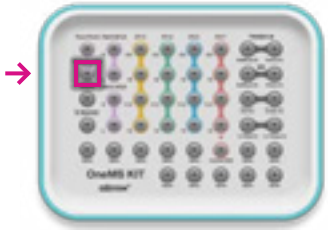
· Select a tissue punch and connect it to the handpiece, then drill at 800~1,200rpm.





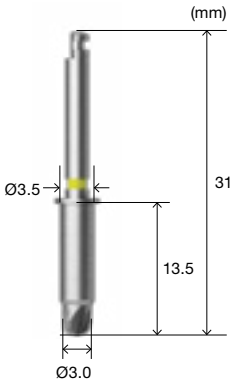
❷ Flattening drill

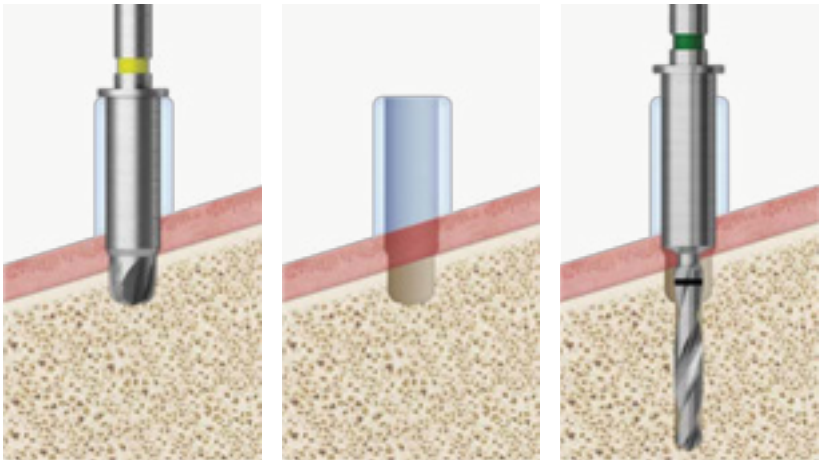
Used for making the bone shape flat in order to prevent the initial drill from slipping.



User guide

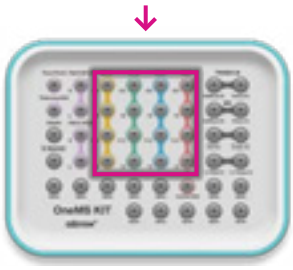
· Select a flattening drill and connect it to the handpiece, then drill at 800~1,200rpm.





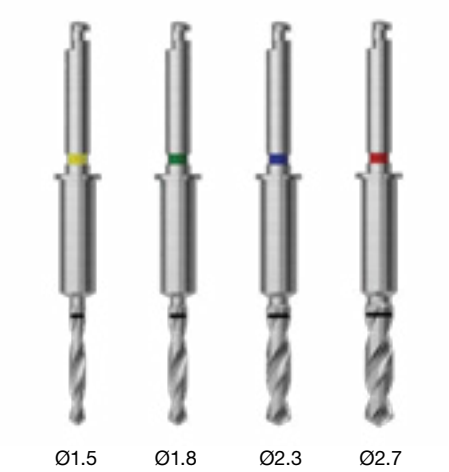
❸ OneMS drill

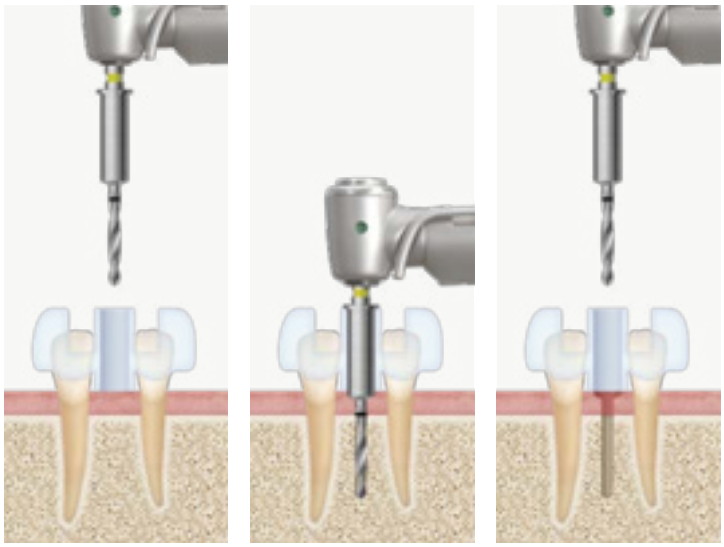
Used for forming holes for placing MS Narrow Ridge, MS Denture, TSIII Ø3.0 Implant



User guide

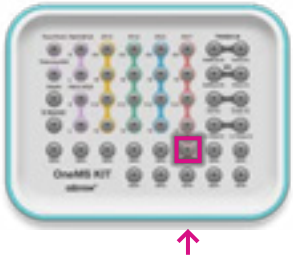
· Connect the OneMS drill to the handpiece.
· Since the drills are longer than the OneGuide drills, and the offset of the template is also longer, ensure sufficient irrigation and drill at 800~1,200rpm





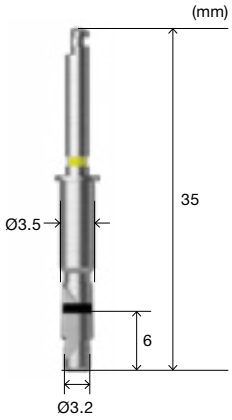
❹ Cortical drill

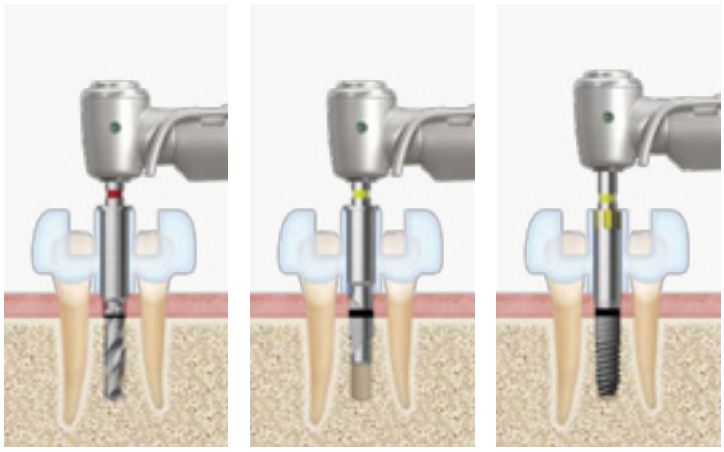
Used for placing TS III Ø3.0 Implant in Hard Bone.



User guide

· Select Cortical drill and connect it to the handpiece, then drill at 800~1,200rpm.



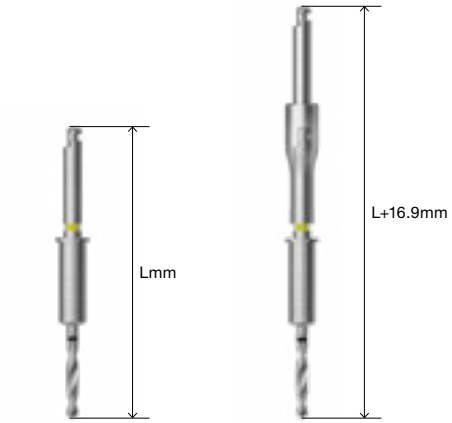


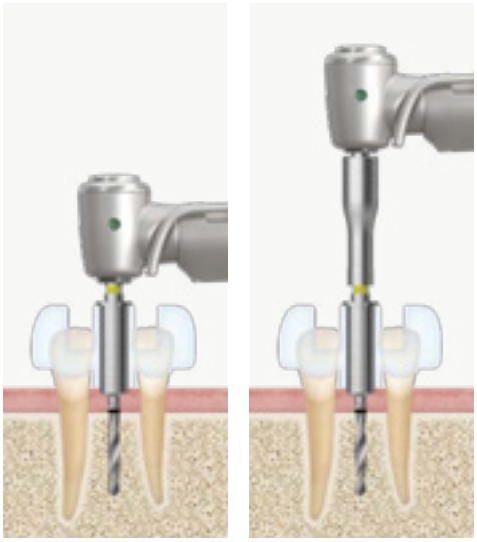
❺ Drill extension

Used for extending the length of drills and other handpiece tools when the short length becomes an obstacle to adjacent teeth

User guide

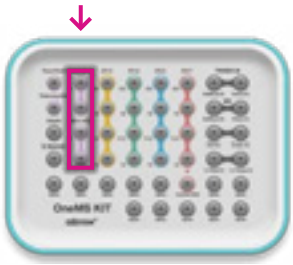
· Connect the drill extension to the handpiece, and the drill to the drill extension.
· If strong force is applied when Drill extension is not properly connected, there is a risk of bending or fracture.
· When using a drill extension, the length of the drill is extended by 16.9mm.





❻ OneMS Path Drill (optional, sold separately)

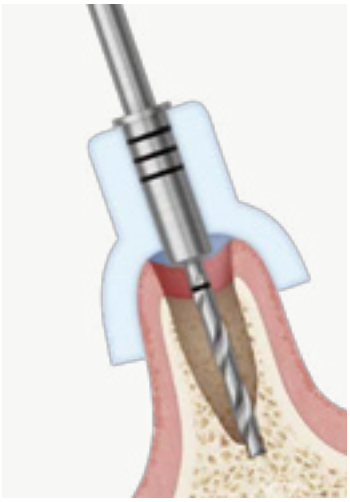
Drill for preventing path deviation caused by slipping on inclined bone.



User guide

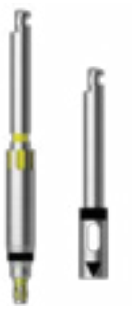
· This drill is used in immediate implantation after extraction cases when the drills can encounter inclined and hard bone.
· Select a path drill and connect it to the handpiece, then drill at 1,200~1,500rpm.
· There are a total of 4 types of specifications (diameter (D) Ø1.5/Ø2.0, length (L) 7mm/13mm). All specifications are sold separately.
· Use a 7mm drill first, then use the 13mm drill in order to gain double contact.

Diameter (D)	Length (L)	Narrow Hole(Ø3.6)
Ø1.5	7mm	Sold separately
	13mm	Sold separately
Ø2.0	7mm	Sold separately
	13mm	Sold separately



Drilling Tool → Implant Placement Tool

Includes tools for placing the implant after drilling, a tool for separating tools that got stuck and jammed together, drivers, and tools for placing suprastructures.



7 NoMount driver

8 Implant driver

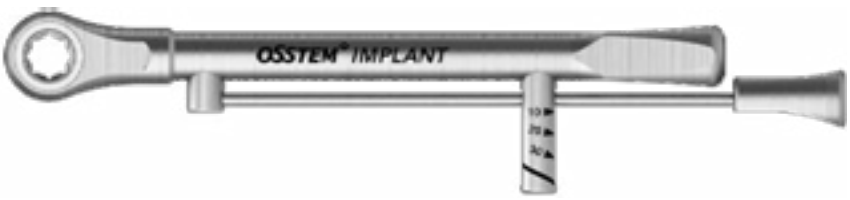
9 Torque extension

10 Adapter

11 Driver separator

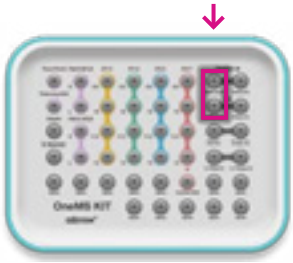
12 1.2 Hex hand Driver

13 1.2 Hex torque Driver



14 Torque wrench

❼ Nomount driver



Used when placing implants with an engine.

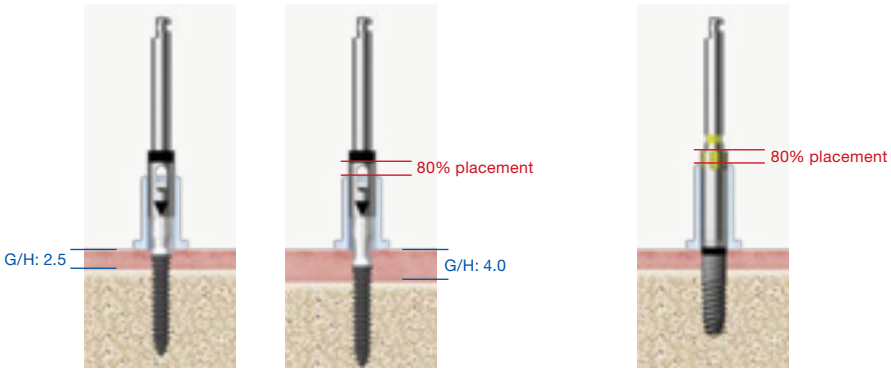
User guide

MS Narrow Ridge Case

· Connect the MS narrow ridge nomount driver to the handpiece.
· Connect the MS narrow ridge implant to the nomount driver.
· Place the implant in the drill hole at 50 rpm up to 80% of the implantation target depth.

TSⅢ Ø3.0 Case

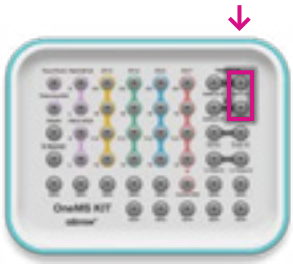
· Connect the TSIII 3.0 dedicated nomount driver to the handpiece.
· Connect the TS III 3.0 implant to the nomount driver.
· Place the implant in the drillhole at 50 rpm up to 80% of the implantation target depth.



G/H: 2.5 placement G/H: 4.0 placement
MS Narrow Ridge

TSⅢ Ø3.0

❽ Implant driver



Is connected to Torque Wrench in order to finalize and adjust placement depth

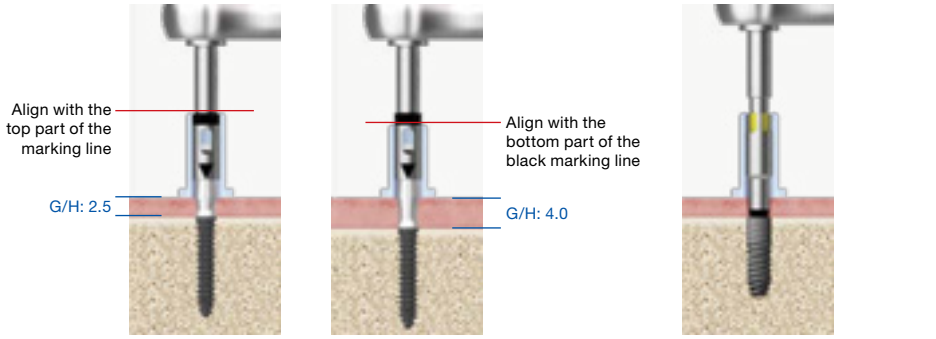
User guide

MS Narrow Ridge Case

· Connect the implant driver to the MS narrow ridge implant that was placed with the nomount driver.
· Connect the torque wrench to the implant driver.
· Turn the torque wrench clockwise until the black marking line of the implant driver (G/H 2.5 is the top, G/H is the bottom) and the top of the template match.

TSⅢ Ø3.0 Case

· Connect the implant driver to the TSIII 3.0 implant that was placed with the nomount driver.
· Connect the torque wrench to the implant driver.
· Turn the torque wrench clockwise until the implant driver's top part of the guide body is at same level with the top of the template.
· To align the hex, make sure a yellow indicator is matched with the groove of the template.

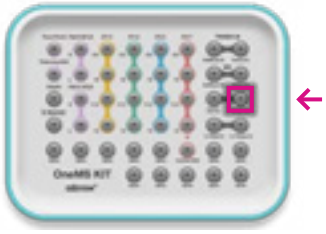


MS Narrow Ridge

TSⅢ Ø3.0

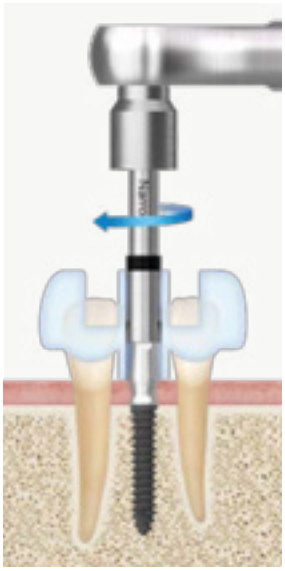
❾ Torque Extension

Tool that extends the length of the instruments by 10mm that are connected to the torque wrench



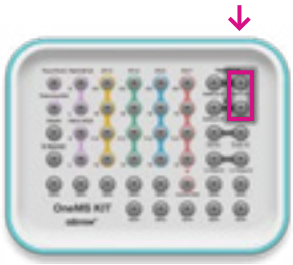
User guide

· If the torque wrench gets interference from adjacent teeth,
connect the torque extension to with the implant driver.
· Connect the torque wrench to the torque extension and turn it clockwise.



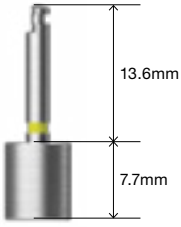
❿ Adapter

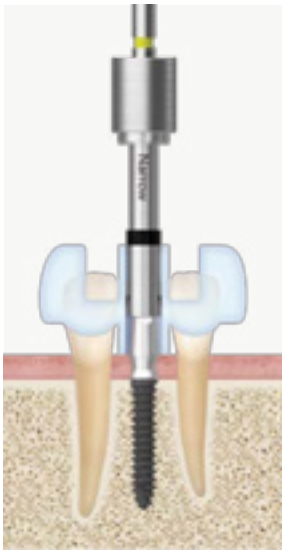
Tool that allows the implant driver to be installed with an engine rather than a torque wrench



User guide

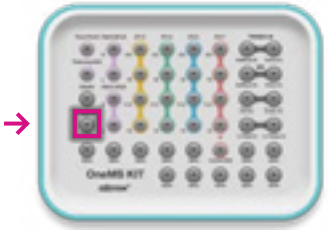
· Connect the adapter to the handpiece.
· Connect the square part of the implant driver to the octagonal part of the adapter.
· Place the implant.





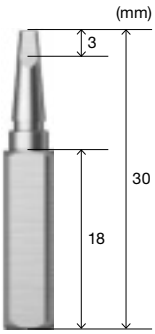
⓫ Driver Separator

Tool for separating jammed implant and torque driver by inserting the driver separator into the driver groove.



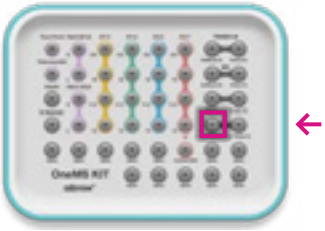
User guide

· If the implant and torque driver jams, insert the driver separator into the implant driver's window and lift the body up to separate the tools.



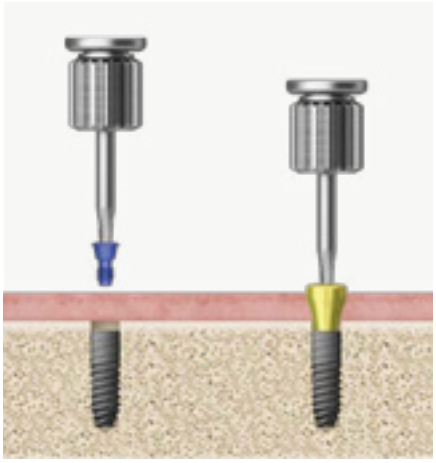
⓬ 1.2 Hex hand Driver

Driver used for tightening or loosening manually cover screws or healing abutments or abutment screws after installation of a TSØ3.0 III implant



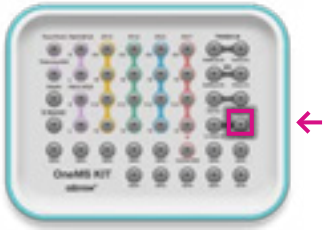
User guide

· Place the hand driver hex in` the cover screw hex or healing abutment hex.
· Put the components into the implant, then fasten (torque: 5~8Ncm) in a clockwise direction.
· To loosen, turn counterclockwise..
· If excessive force (above 20Ncm) is applied, the tip of the driver or the screw head may damage the hex groove. Be careful of over-torque.



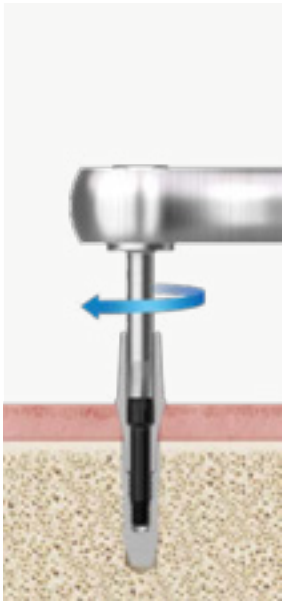
⓭ 1.2 Hex Torque Driver

Driver used for tightening or loosening the abutment screw with a torque wrench.



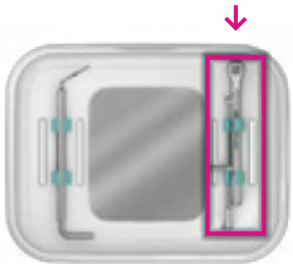
User guide

· Place the torque driver into the abutment screw hex.
· Connect the torque wrench to the torque driver.
· To tighten, turn clockwise at 20Ncm.
· To loosen, turn counterclockwise.



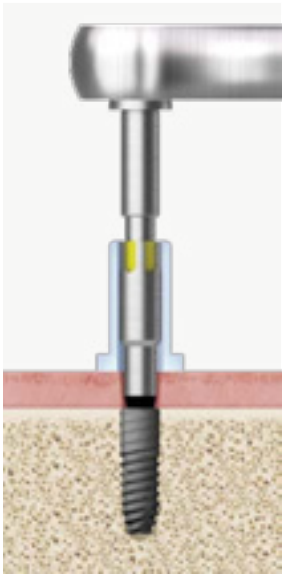
⓮ Torque Wrench

Wrench used for adjusting the implant placement position or for tightening the abutment screw with constant torque.



User guide

· Pull the bar to match the bar with the torque value you wish to apply, and rotate clockwise for torque application.
· Torque of 10, 20, and 30Ncm can be applied.




OSSTEM
IMPLANT

5 KIT sequence

Hard bone **#41 (MS Narrow Ridge Ø2.5×13mm (G/H 4mm))** Ⓝ: Tool number

1

Preparation for surgery

· Check surgical report which includes treatment plan.
· Confirm the diameter and length specifications of implants for each treatment area.
· Sterilize at low temperature before placing OneGuide Template in oral cavity.
  - Plasma sterilization
  - Immerse in 0.2% Chlorhexidine Solution (e.g. hexamidine) for 5 minutes.

2

Placement of guide

· Place the guide in the oral cavity, then check the fit through the window (tooth and gingival surface).

3

Make gingival incision (Tissue punch)

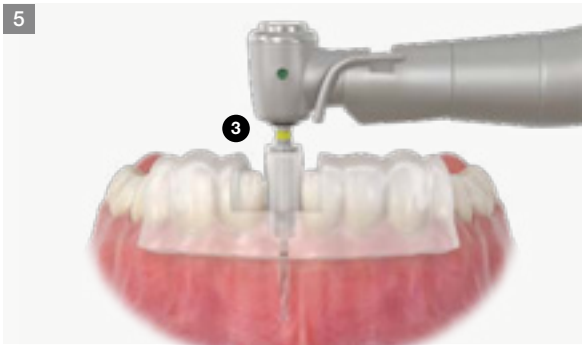
· Recommended RPM: 800~1,200rpm

4

Drilling: Ø1.8 OneMS Drill, 8.5mm

· Recommended RPM: 800~1,200rpm

5



Drilling: Ø1.8 OneMS Drill, 13mm

· Recommended RPM: 800~1,200rpm

6

Drilling: Ø2.3 OneMS drill, 8.5mm

· Recommended RPM: 800~1,200rpm

7

Drilling: Ø2.3 OneMS drill, 13mm

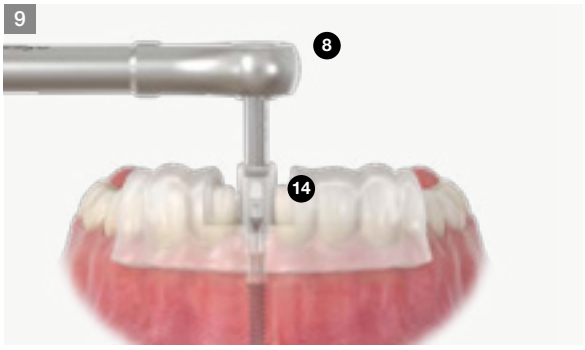
· Recommended RPM: 800~1,200rpm

8

Place implant: MS Narrow Ridge Ø2.5×13mm (G/H 4mm)

· Place up to 80% with a NoMount driver.

9



Place implant: MS Narrow Ridge Ø2.5×13mm (G/H 4mm)

· Place 100% with an implant driver.

10

Remove template

Hard bone #41 (TSIII Ø3.0×10mm placement)

Ⓝ: Tool number

1

Preparation for surgery

· Check surgical report which includes treatment plan.
· Confirm the diameter and length specifications of implants for each treatment area.
· Sterilize at low temperature before placing OneGuide Template in oral cavity.
  - Plasma sterilization
  - Immerse in 0.2% Chlorhexidine Solution (e.g. hexamidine) for 5 minutes.

2

Placement of guide

· Place the guide in the oral cavity, then check the fit through the window (tooth and gingival surface).

3

Make gingival incision (Tissue punch)

· Use a tissue punch with a Ø0.7~1.5 smaller diameter than the healing abutment.

4

Drilling: Ø2.3 OneMS drill, 8.5mm

· Recommended RPM: 800~1,200rpm

5

Drilling: Ø2.3 OneMS drill, 10mm

· Recommended RPM: 800~1,200rpm

6

Drilling: Ø2.7 OneMS drill, 8.5mm

· Recommended RPM: 800~1,200rpm

7

Drilling: Ø2.7 OneMS drill, 10mm

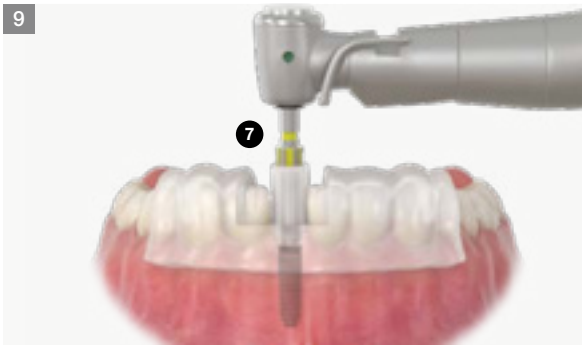
· Recommended RPM: 800~1,200rpm

8

Drilling: F3.0 Cortical drill

· Recommended RPM: 1,200~1,500rpm

9



Place implant: TSIII Ø3.0×10mm

· Place up to 80% with NoMount driver.

10

Place implant: TSIII Ø3.0×10mm

· Place 100% with an implant driver.

11

Remove template

12

Finish surgery

· Immediate loading: place transfer abutment or custom abutment, then seat provisional prosthesis.
· Delayed loading: Place Cover screw or Healing abutment

How to take care of the KITS

1

Soak (saline/distilled water)

· Soak the surgical instruments in saline or distilled water

2

Drying (remove moisture)

· Completely dry all drills, drivers, tools, etc by using a towel or fan.

3

First wash

· After surgery, immediately separate and wash all the used instruments.

4

Organize instruments in the KIT

· Place the completely dried instruments in the KIT
· Make sure they are properly placed in the correct location
· Refer to the color coding for reference

5

Second wash

· Thoroughly wash with distilled water or running water to avoid remnants of blood or foreign debris.

6

Sterilization and storage at room temperature

· Wrap clean kit in a sterilization wrap or pouch and place into sterilizer.
· Sterilize temperature - 121°C to 132°C, time duration 15 - 30 minutes, dried and stored at room temperature.
· KIT re-sterilization is recommended immediately before surgery.
· Before and after sterilization, thoroughly dry (the drills will corrode if not fully dried after sterilization)

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 products are tools and instruments for surgical placement of Osstem implant fixtures. The drill is used to make implant sites. The cortical drill and tap removes cortical bones or forms threads on bone for the purpose of preventing excessive torque generated when implanting a fixture on hard bone. The drivers are for the placement of the fixture, and the prosthesis is used for setting. In addition, other instruments and tools will be used as aids in the Implant procedure.

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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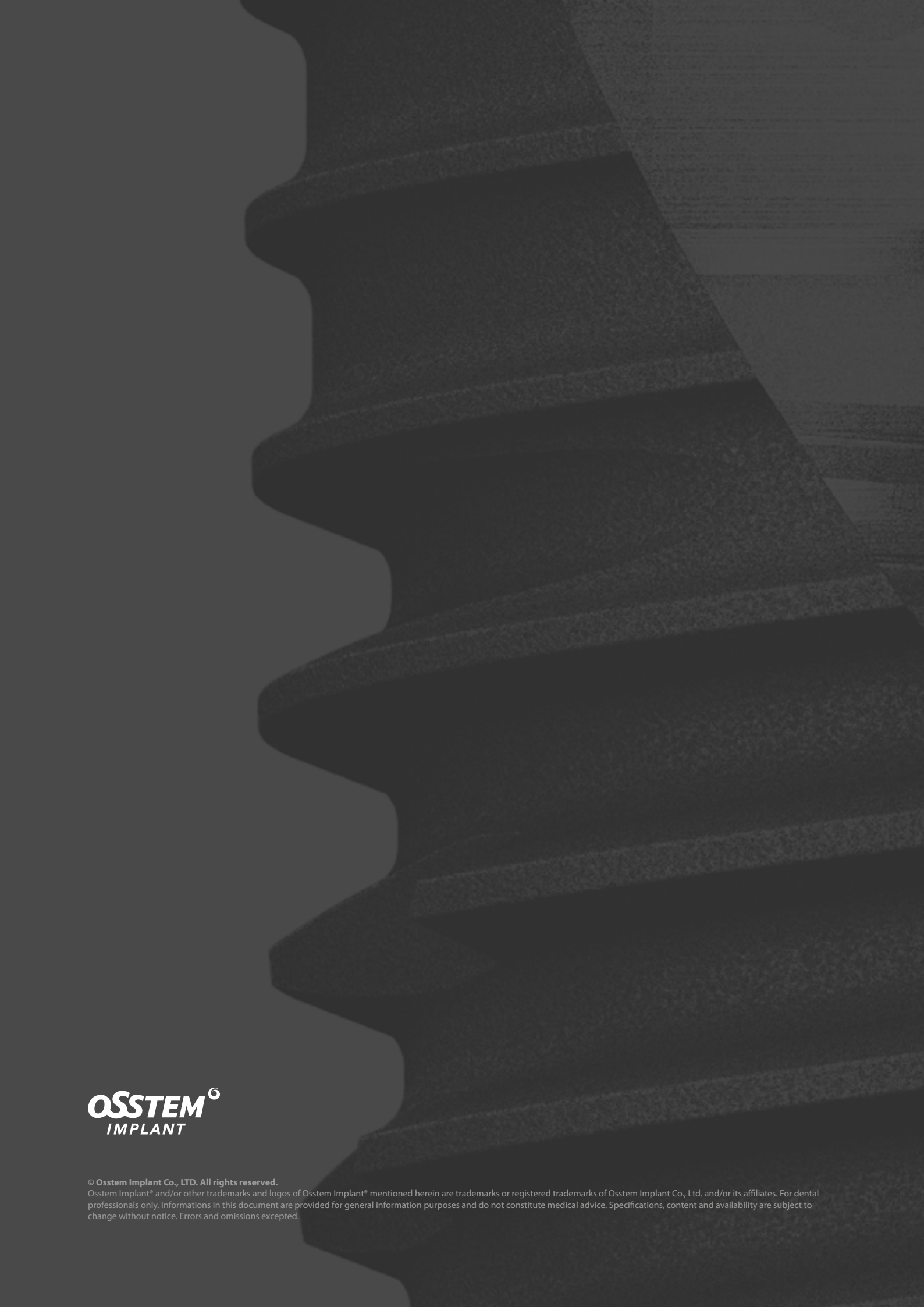

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