

OSSTEM[®]
IMPLANT

Surgical Manual

MS 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

Publication date: April 2026

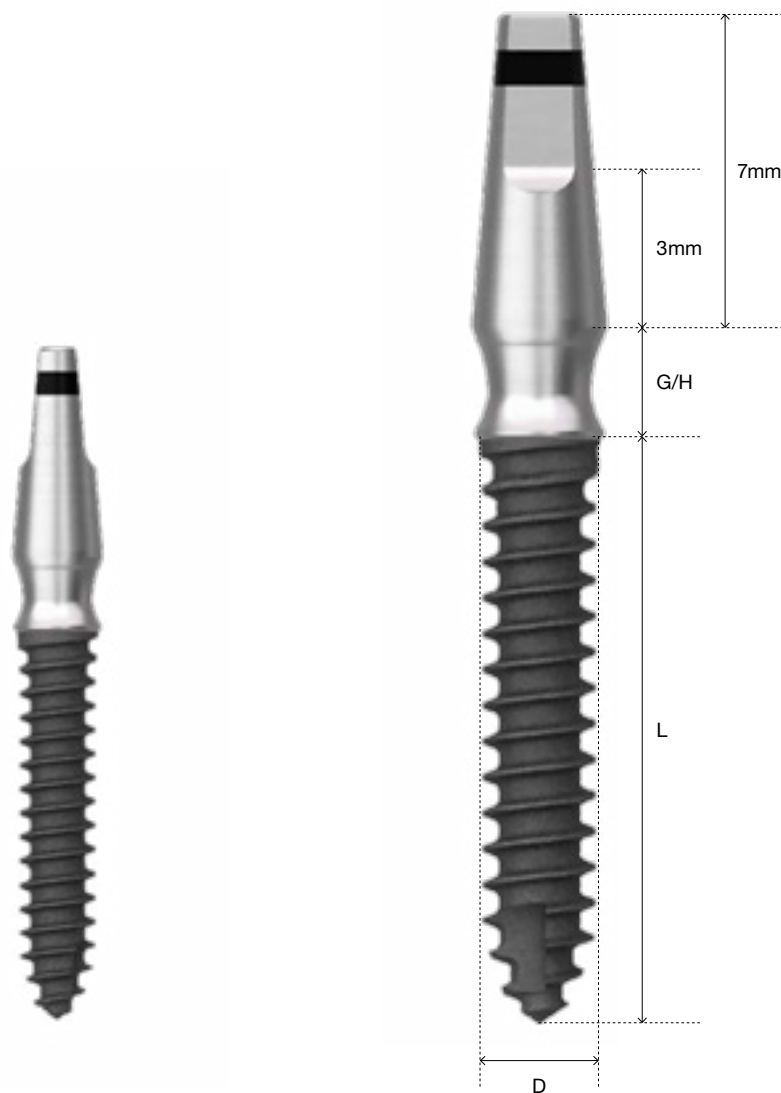
Publisher: Osstem Europe s.r.o.
Radlická 740/113c
158 00 Prague, Czech Republic

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.*

MS Implant

1 MS Implant Narrow Ridge

- One body implant (implant and abutment are integrated)
- Place at bone level
- Recommended placement torque: Max. 30Ncm
- Can be placed using an MS KIT [▶ MS KIT p.410](#)
- SA, RBM surface treatment are applicable

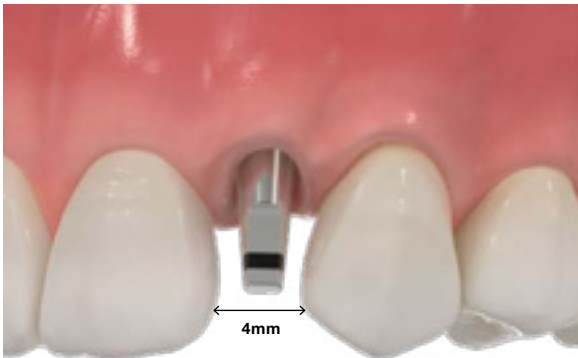


A Indications

- Applicable in case of narrow interdental spacing and narrow bone width in the mandibular anterior region



- Narrow interdental spacing (e.g. maxillary lateral incisor)



- Support long bridge



B Placement protocol



Drilling

- Drill up to the marking line according to the length to be implanted.



Placement

- Set the maximum torque of the engine to 30Ncm.
- Place using an MS Machine driver (leave approx. 1mm of space).
- If you hear a sound from the bone while placing the implant, be sure to rotate the driver in reverse before resuming placement.

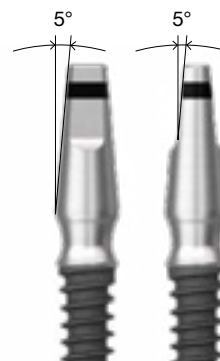
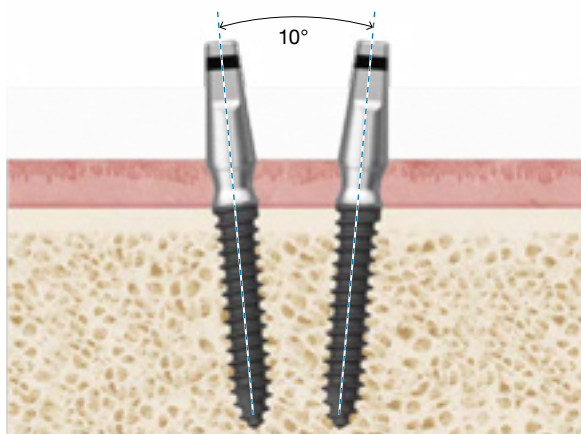


Adjust placement depth

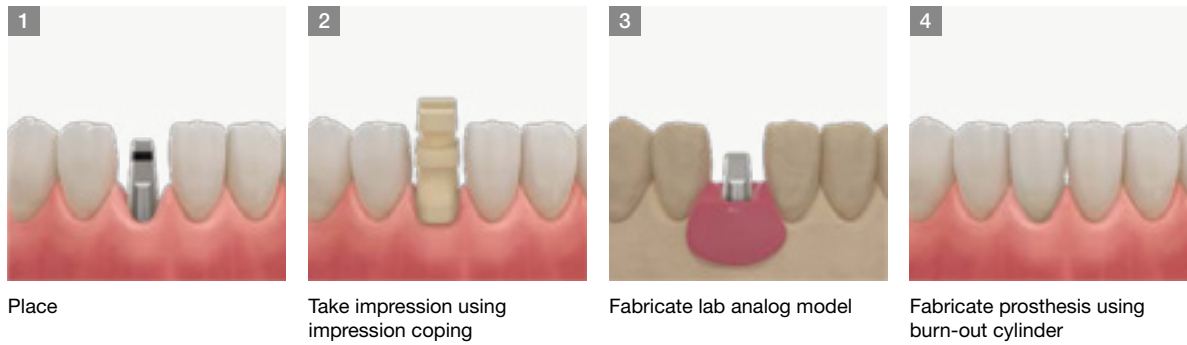
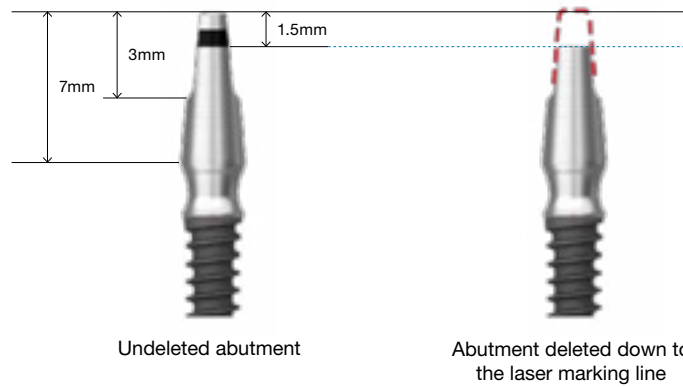
- Upon assembling the MS torque driver to the ratchet wrench, complete placement (remaining 1mm)

C Precautions

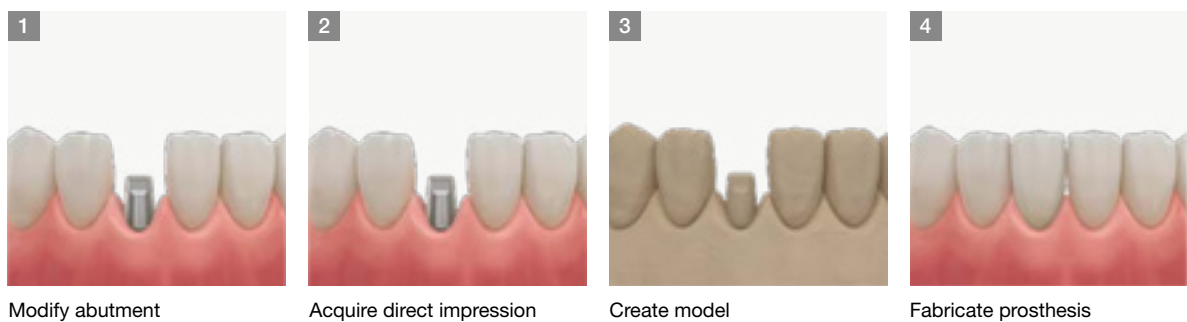
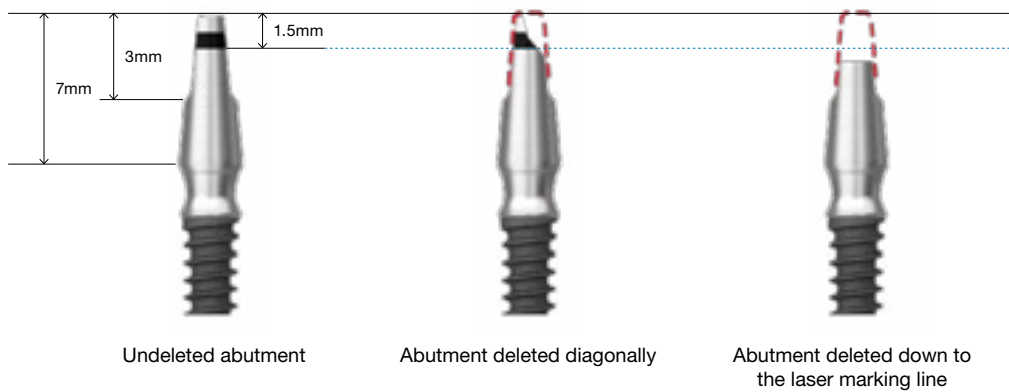
- Implant and abutment are integrated, and path compensation is impossible because it is not bent, so it should be placed as parallel as possible.
- The placement angle between implants is available up to 10°.



- If the depth has to be adjusted after placement, the height can be shortened down to the laser marking line
- Impression can be taken with lab analog if shortened to the laser marking line

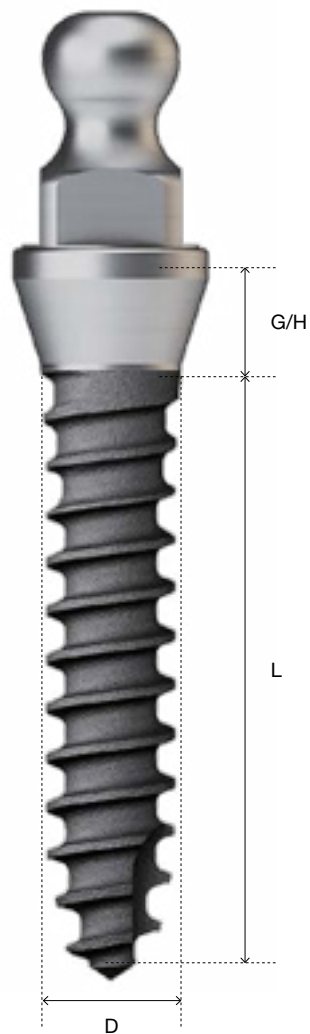


- If the depth has to be adjusted after placement, the height can be shortened down to the laser marking line or diagonally.
- In this case, the prosthesis must be fabricated upon taking an impression directly.



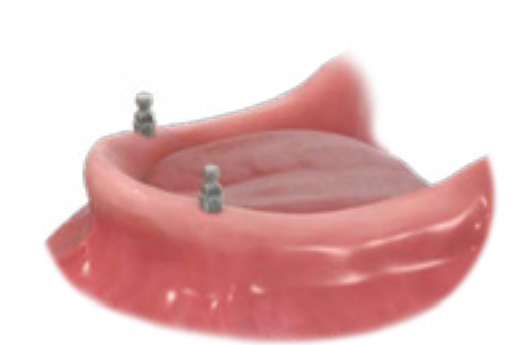
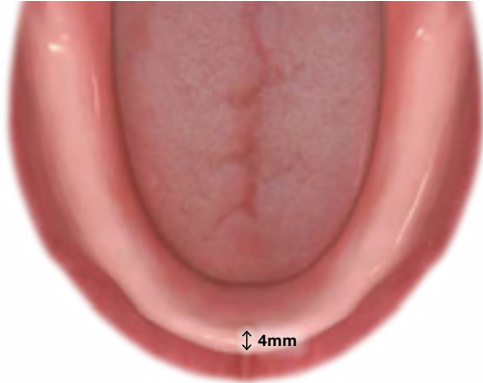
2 MS Implant Denture

- Denture type implant
- Place at bone level
- Ball type structure for O-ring attachment connection
- Easy and convenient to manufacture dentures using retainer and lab analog
- Recommended placement torque: Max. 30Ncm
- Can be placed using an MS KIT [▶ MS KIT p.410](#)
- SA, RBM surface treatment are applicable.



A Indications

- In case of having narrow bone width in complete or partially edentulous patients
- Difficult to place a regular implant in a completely or partially edentulous jaw



B Placement protocol



Drilling

- Drill up to the marking line according to the length to be implanted.



Placement

- Place using an MS Machine driver (leave approx. 1mm of space).



Adjust placement depth

- Upon assembling the MS torque driver to the ratchet wrench, complete placement (remaining 1mm)

C Precautions

- The machine driver and torque driver exclusively for MS denture have grooves.
- The tools for MS Provisional, MS Narrow Ridge and MS Denture are different in shape.



For MS Narrow Ridge, MS Provisional only

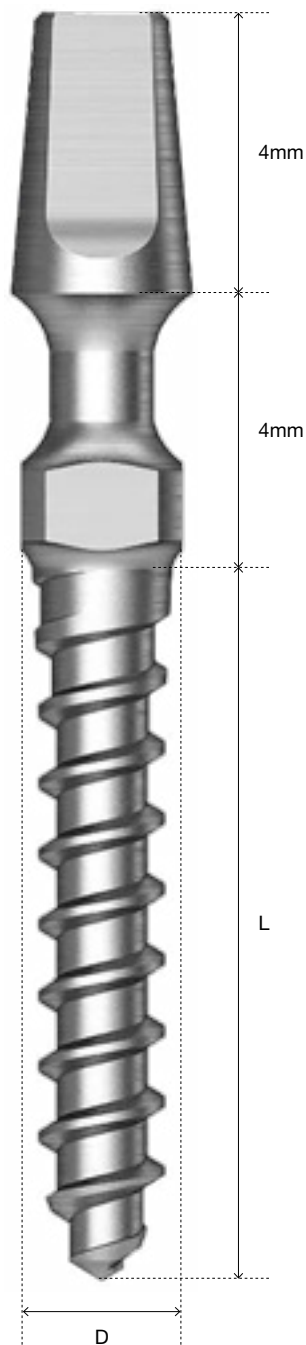
For MS Denture only

- The placement angle between implants is available up to 20°.
- Even within the allowable angle range, the smaller the placement angle, the longer the use.



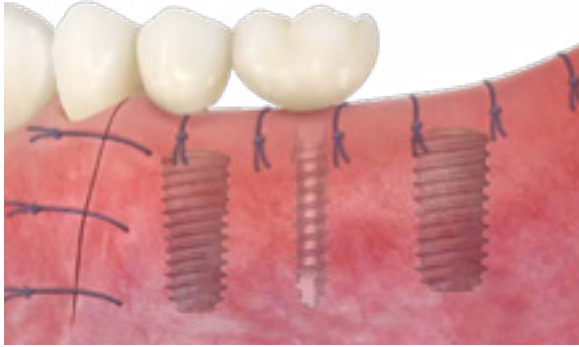
3 MS Implant Provisional

- Implant used as a provisional prosthesis
- Place at bone level
- Be able to modify the implanted angle by bending the neck portion
- Fabricate temporary prosthesis without a separate abutment
- Recommended placement torque: Max. 30Ncm
- Can be placed using an MS KIT [▶ MS KIT p.410](#)

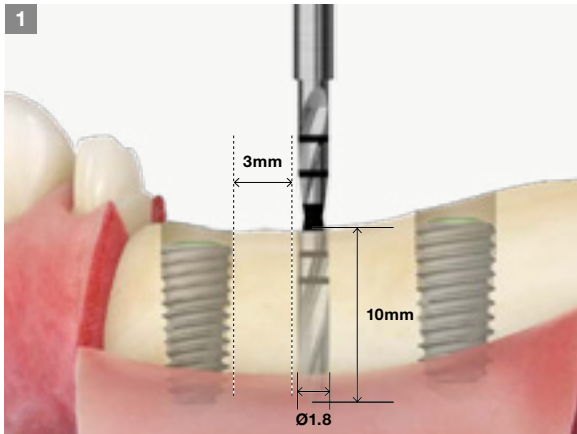


A Indications

- Applicable restrictively in case of having narrow interdental spacing and narrow bone width
- When a temporary prosthesis is placed on a completely or partially edentulous patient
- Supports long bridge of a provisional prosthesis

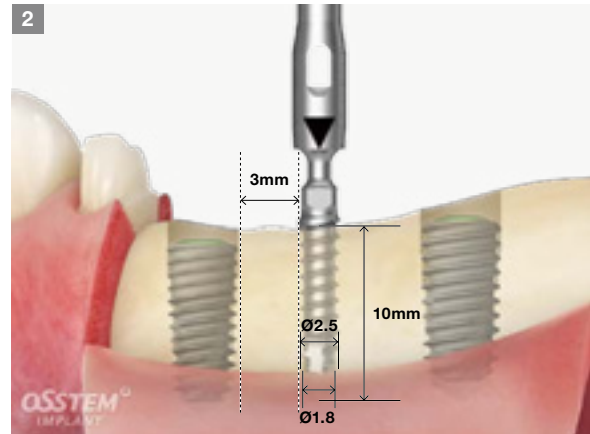


B Placement protocol



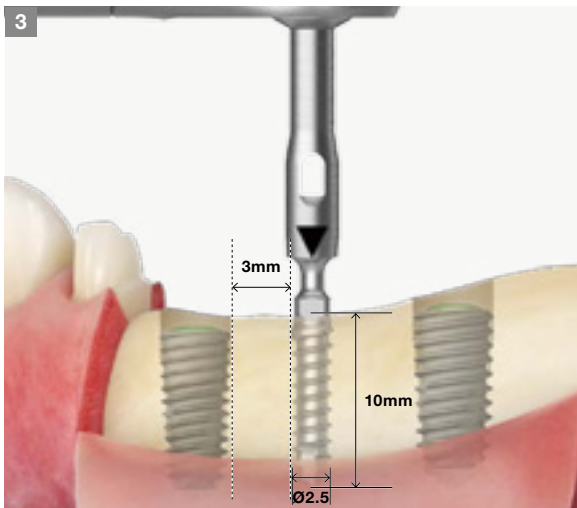
Drilling

- Drill up to the marking line according to the length to be implanted.



Placement

- Place using an MS Machine driver (leave approx. 1mm of space).

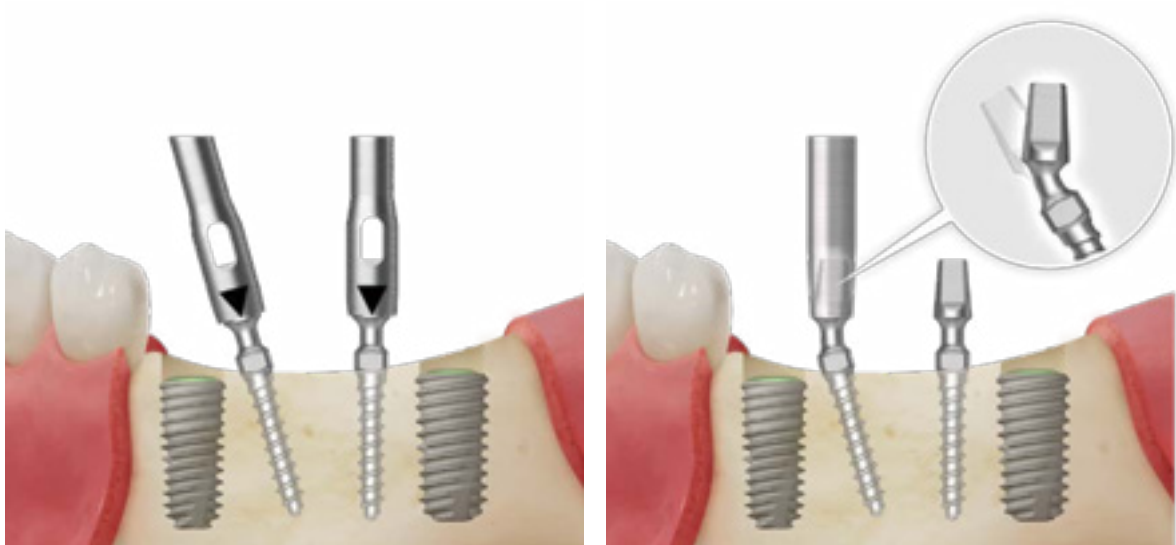


Adjust placement depth

- Upon assembling the MS torque driver to the ratchet wrench, complete placement (remaining 1m

C Precautions

- Can bend within 30° only once with the bending tool of the depth gauge in MS KIT.
- When bending, there is a risk of fracture of the neck part if bending with excessive force



Check path by connecting the driver

Path compensation with depth gauge

- If the neck is fractured, remove it by rotating it counterclockwise after tightening the torque driver for MS Denture.
- The MS-exclusive torque driver has an angle inside, so it can be fastened to a broken MS provisional.



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

MS Denture is intended to be placed in the bone of the upper or lower jaw arches to provide support of the prosthetic devices to restore the patient's chewing function, including the denture stabilization. MS Narrow Ridge is intended to be used in the treatment of missing mandibular central and lateral incisors to support for the prosthetic device, such as artificial teeth, in order to restore chewing function in partially edentulous patients. MS Denture and Narrow Ridge are intended for delayed loading. 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

All trademarks, trade names, product names, brand names, and company names are the property of their respective owners.

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