

Dental Implant, Abutments, TruAbutment DS

EN

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TruAbutment Inc. 17742 Cowan, Irvine, CA 92614, USA Phone: +1 714 956 1488 Fax: +1 714 956 1491 www.truabutment.com www.urisimplants.com

General Description

The TruAbutment DS system includes custom abutments which are placed into the dental implant to provide support for a prosthetic restoration. The subject abutments are indicated for cemented or screw- retained restorations. The custom abutment and abutment screw are made of Titanium grade Ti-6A1-4V ELI (meets ASTM Standard F-136). Each custom abutment is supplied with two identical screws which are used for:

- (1) For fixing into the endosseous implant
- (2) For dental laboratory use during construction of related restoration.

The abutment is placed over the implant shoulder and mounted into the implant with the provided screw. The design and manufacturing of the custom abutments take into consideration the shape of final prosthesis based on the patient's intra-oral indications using CAD/CAM system during the manufacturing. All manufacturing processes of TruAbutment DS are conducted at the TruAbutment milling center and provided to the authorized end-user as a final patient-specific abutment.

Mechanical resistance of the implant-abutment connection is essential to ensure correct long-term functional performance of the complete dental restoration. Dimensional compatibility and mechanical performance of bases and screws together with the underlying implant are of primary importance. These concepts are the basis upon which the system design characteristics and functional performance are established.

Indication for Use

TThe TruAbutment DS is a patient-specific CAD/CAM custom abutment, directly connected to endosseous dental implants and is intended for use as an aid in prosthetic rehabilitation.

Cautions before use

- Abutment is a prosthetic component directly connected to the endosseous dental implant and is intended for use as an aid in prosthetic rehabilitation.
- 2) Before using the product clinically, dentists must fully familiarize themselves with the product and obtain full informed consent from the patient by reviewing both advantages and limitations of implants. For their part, patients must clearly understand the function and aesthetical limitations of implants.
- 3) We are under no obligation to replace our products or give a refund in case any defect or problems arise from the use of non-TruAbutment products (i.e. using our abutments with different screws).
- 4) Since the design of abutments is an important factor affecting the service life of the dental prosthesis, it is imperative that the design of the abutment has been reviewed prior to submission for milling. In the case that TruAbutment does the designing, the responsibility lies with the Dental Laboratory to request and review the design(s) for approval. If no such request is received, it will be considered an implied consent to proceed to milling.
- Before selecting an abutment for a patient, their oral condition must be checked. A restorative plan is to be established based on thorough analysis.
- 6) Once the product has been used on a patient, all efforts should be made to prevent the patient from aspirating or ingesting the product.

How to use the product

- 1) After osseointegration has been successfully achieved for the fixture, design an appropriate CAD/CAM custom abutment suitable to the oral environment.
- 2) Reproduce the configuration of the oral cavity of the patient through impression taking and send the impression to a dental laboratory to fabricate the final prosthesis. Once the final prosthesis fabrication is completed, deliver it to the patient to improve their masticating and aesthetic functions.
- 3) When affixing an abutment onto a fixture, the recommended torque value is equivalent to the manufacturers' value for the respective implant system. The torque value should be determined based on the clinical assessment of the bone quality, fixture dimensions, and prosthesis type, etc.

Cautions when using the product

 The product must be used by an appropriately trained professional. Damaged tools should not be used. Arbitrarily changing or modifying the product is not-recommended and will void the lifetime warranty of the abutments.

- 2) Prior to fabrication and delivery of prosthesis, confirm osseointegration of the implants by utilizing X-ray imaging and percussion testing.
- 3) A working model is produced after obtaining impressions. The working model should be carefully utilized during the laboratory process, together with the appropriate prosthetic components, in order to achieve functional occlusal surfaces between the upper and lower jaw.
- Temporary prosthesis should be carefully adjusted for the condition of the patient's oral cavity, especially until the implants prove to be osseointegrated.
- No cement should be applied to the Morse taper area between fixtures and abutments.

Risks and Side Effects

Below is a list of conditions that bear higher risks of implant surgeries but specialists should examine the patient case by case and plan accordingly.

- 1) Metabolic disorders such as diabetes and etc.
- Endocrine disorders such as hypothyroidism, hyperthyroidism, adrenal gland disorders, and etc.
- Circulatory disorders such as angina pectoris, myocardial infarction, congestive heart failure, chronic valvular heart disease, high and low blood pressure, and etc.
- 4) Respiratory disorders such as asthma and etc.
- 5) Kidney and blood-related disorders.
- 6) Bone disorders such as osteoporosis, osteomalacia, Behcet's disease, and etc.
- 7) Collagen disease.

Contraindications

- 1) Severe intraoral infections.
- 2) Impacted tooth, cysts, tumors, etc.
- 3) Unclear medical history.
- 4) Lack of alveolar bone.
- 5) Poor health of alveolar bone
- (i.e. osteoporosis, osteomalacia, and Behcet's disease).
- Not enough space of alveolus membrane.
- 7) Unhealthy adjacent tooth.
- Do not use these components if the patient has a known hypersensitivity to titanium, titanium alloy.

Proper storage and care

After sterilization, place the devices in a dry dark place such as a closed cupboard or drawer.

Follow the instructions of the manufacturer of the FDA-cleared pouches regarding storage conditions and expiration date of sterilized goods.



End-user Sterilization Information

TruAbutment DS is for one-time use only and provided non-sterile therefore must be sterilized prior to use. All TruAbutment DS components are cleaned using multiple sessions of ultrasonic baths to remove contaminants from the milling process.

1. First session

Immerse finished products into trichloroethylene at 30° C (86° F), running the process for 15 minutes.

2. Second session

Immerse products into ethanol at 30° C (86° F), running the process for 15 minutes.

3. Third session

Immerse products into distilled water at 30° C (86° F), running the process for 15 minutes.

 Place cleaned products into a dryer then run at 120° C (248°F) for 10 minutes using hot air.

If modifications have been made to the custom abutment, clean the abutments prior to sterilization using either an ultrasonic bath with instrument detergent concentrate and water or by manual washing using lukewarm water and detergent solutions (at temperatures optimally in the range of 27°C to 44°C [80°F to 110°F].

Rinsing:

Whether mechanical or manual cleaning has been performed, the device should be thoroughly rinsed to ensure that loosened debris and detergents are adequately removed. Tap water can be used for rinsing to ensure that copious volumes are used but since the quality of tap water varies considerably by region, the final rinse should be performed with treated water that is of a quality that does not contribute to staining or contamination.

Recommended validated sterilization parameters for wrapped devices:

Method	Moist heat sterilization
Cycle	Pre-vacuum
Temperature	270°F (132°C)
Temperature max	279°F (137°C)
Exposure time	4 minutes
Drying time	20 minutes in chamber

(Source: ANSI/AAMI ST79 Table 5)

Wraps made by Kimberly-Clark Corp is used during sterilization. All autoclaves/sterilizers should comply with the requirements of, and be validated, maintained and checked in accordance with EN 285/EN 13060, EN ISO 17665, ANSI AAMI ST79.

According to EN ISO 17665, the final responsibility for validation of cleaning, disinfection and sterilization techniques and equipment lies directly with the end user. To ensure optimal processing, all cycles and methods should be validated.

Storage:

Follow the instructions of the manufacturer of the FDA-cleared pouches regarding storage conditions and expiration date of sterilized goods.

Warning

The TruAbutment DS has not been evaluated for safety and compatibility in the MR environment. It has not been tested for heating, migration, or image artifact in the MR environment. The safety of TruAbutment DS in the MR environment is unknown. Scanning a patient who has this device may result in patient injury. Federal law restricts the sale of this device to or on the order of licensed dentists.

LABELING SYMBOLS

Symbols may be used on some international package labeling for easy identification.

8	Do not reuse
Ω	Use by date
LOT	Batch code
<u>~</u>	Date of manufacture
	Non-Sterile
REF	Catalogue number
\triangle	Caution, consult accompanying documents
<u>m</u>	Manufacturer
Ĩ	Consult instructions for use
8	Do not use if package is damaged
Rx Only	Prescription only

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