

English

Caution
Please read all information contained in this insert. Incorrect handling and care as well as misuse can lead to premature wear or risks for the patient and user.

1 Scope

These operating instructions are applicable for DEWIMED O.S.A.S.-Screws (product group 2BG1) of the risk class IIb:

REF 25-16XXX, 25M-16XXX, SA-0912-XX.

2 Material

DEWIMED implants are manufactured from selected raw materials and in compliance with the highest quality standards. Only material approved for medical purposes is used: Titanium Ti6Al4V according to standard ASTM F136 and ISO 5832-3.

3 Intended use

O.S.A.S.-Screws act as implants for the temporary skeletal anchorage of orthodontic equipment in the treatment of orthodontic malposition of teeth. Additionally the O.S.A.S. 2.1-Screws can be used as a temporary implant as basis for a provisional tooth. Responsibility for the correct selection of suitable patients to which the O.S.A.S.-Anchorage Screws will be implanted lies only with the surgeon/dentist.


4 Indication

Anchorage of orthodontic devices in the treatment of the malposition of the teeth. Additional indication for O.S.A.S. 2.1 Screws: Temporary basis for dental prosthesis.

5 Contraindication


- Patients who unwilling or unable to understand or follow instructions due to their intellectual/mental status.
- Patients with hypersensitivity to metals.
- Patients with infections.
- Patients with liver cirrhosis.
- Patients with rheumatic diseases.
- Patients with blood clotting disorders.
- Patients with recurrent oral mucosal diseases.
- Patients with tissue damaged by radiation.
- Patients with no or insufficient bone supply in the area selected for insertion.

6 Normal use

 Implants are intended for single use only. Reuse is not permitted, even if the products seem to allow reusability after use, because damage to the implants on removal cannot be excluded.

Inserting implants

All O.S.A.S. screws have self-tapping threads. However, we recommend pre-drilling at the planned area of insertion.

 Pre-drilling is generally necessary when using O. S. A. S. mini screws. Only use original DEWIMED instruments for inserting.

When handling the screws, always ensure that the thread is not contaminated, by wearing sterile gloves and picking up the implant at the screw head using sterile tweezers.

Removal of implants

Loosen all connections (e.g. wires) of the system before removing the implants. Ensure the correct fit of the screwdriver blade and remove the screws by turning them counterclockwise. Removed implants must be discarded. Reconditioning and reuse is not permitted. Only use original DEWIMED instruments for removal.

Use of original products

Implants and instruments have been developed, manufactured and coordinated to be used together. The use of products from other manufacturers may involve incalculable risks. The use of products or parts from other manufacturers is therefore not permitted.

7 Liability / Warranty Claim

DEWIMED Medizintechnik GmbH as manufacturer and seller of these products assumes no liability for immediate or ensuing damages resulting from improper use or handling, especially due to failure to use as directed or improper processing and service.

If non-authorized persons undertake repairs, alterations of the products, or combination of DEWIMED products with the products of other manufacturer - the manufacturer cannot be held liable; furthermore all right of guarantee are forfeited.

8 Safety notice

WARNINGS AND PRECAUTIONS!

Responsibility for the selection of suitable patients and the suitable implants and for the appropriate training of the treating team lies with the surgeon/dentist. They also must have the necessary experience in the selection and placement of implants and the decision if/when to remove implants postoperatively. The surgeon/dentist should discuss with the patient their expectations regarding the outcome of the intervention as well as the use and the application of the product in detail. Very important are the postoperative discussion and the periodic medical follow-up after treatment. It is absolutely essential to choose the right product. The product must be implanted in the correct anatomical location. Careful handling and storage of the products is essential. Scratching and scraping at individual parts or bending of individual components may damage the product and lead to material fatigue. Implants of different materials may not be combined, i.e. they must not be used and implanted together. The patient must be told to immediately inform their doctor/dentist of all unusual changes in the treated area. Should there be any changes, the patient must be closely monitored.

Warning

Carefully inspect the implants for damage prior to use. Damaged implants must not be implanted!

WARNINGS FOR THE PATIENT:

Postoperative follow-up and monitoring, as well as a reduction in physical activity after surgery and during the healing process are extremely important for the successful outcome of the treatment. Strain can cause implants to loosen, shift, bend or break. The treating doctor decides on the type, duration and intensity of physical activities after the procedure. The patient is to be informed that disregarding the instructions of the medical practitioner may lead to the above or other, also unforeseeable, complications. This applies in particular should the patient manipulate the implant or the implant system themselves. In the event that the patient could be exposed to magnetic fields and/or external electrical influences under reasonably foreseeable environmental conditions, the patient must be informed of the precautions to be taken.


9 Possible side effects


- Hypersensitivity or allergic reaction to the implant material.
- Pain, discomfort or abnormal sensations caused by the implant.
- Surgery trauma, permanent or temporary damage to nerves, heart, lungs or other organs, structures or tissues of the body.
- Skin irritation, infections. Inflammation soft tissue irritation.
- Fracture, breakage, shifting, loosening or mobility of the implant.

10 Life Cycle

The life cycle of the implanted O.S.A.S. screw is about 18 months, depending on the duration of treatment.

11 Storage / Packaging

 Implants and instruments must be stored in a dry location, protected from dust and sunlight at a moderate temperature in the range of 5°C to 40°C. The original packaging protects implant and instruments from damage and contamination. If the packaging is damaged, the product must be carefully inspected for damage and, where in doubt, put aside for disposal.

 The implants were delivered from DEWIMED nonsterile. The original packaging must be removed prior to cleaning, disinfection and sterilization.

12 Reprocessing

The nonsterile delivered implants must be cleaned, disinfected and sterilized before implantation. This should only be done by qualified personnel and in compliance with the applicable regulations.

REPROCESSING INSTRUCTIONS

Transportation

Safe storage and transportation of the implants in a closed container to the reprocessing area to avoid any damage and contamination to the environment. For cleaning, the products are to be placed in a suitable, closed wire basket which is highly permeable (miniature tray).

AUTOMATED CLEANING PROCESS

Validation report no.: 06512.

Manual Pre-Cleaning

- Immerse the implants in cold tap water for at least 5 minutes.
- Then placed the implants in an ultrasonic bath with 0,5% alkaline cleaning solution neodisher MediClean (Dr. Weigert, Hamburg) and treated for 5 min at 40°C. Avoid sonic shadow.
- At the end the implants have to thoroughly rinsed under tap water for approximately 15 seconds.

Automated Cleaning

For automated cleaning the screws in the miniature tray were placed in an instrument rack in the washer-disinfector: Miele G 7735 CD. A general purpose cleaning program (vario TD) was used for cleaning. The following steps were performed:

Step	Time (min)	Process	Eagents	Temp (°C)
1	2	Pre-cleaning	Tap water	cold
2		Drain		
3	5	Cleaning	Tap water with 0,5% of (neodisher MediClean, Dr. Weigert Hamburg)	55
4		Drain		
5	3	Rinsing and neutralization	Deionized water	cold
6		Drain		
7	2	Final rinse	Deionized water	cold
8		Drain		

Automated Disinfection

Automated Thermal Disinfection in washer/disinfector under consideration of national requirements in regards to A0-Value (see ISO 15883).

Drying

Drying of the implants through drying cycle of washer/disinfector.

Packaging

After the drying process, the products must be inspected and immediately placed in soft packaging suitable for sterilisation in line with ISO 11607 and EN 868 and shrink-wrapped.

STERILIZATION

Validation Report No.: 08912.

Sterilization of the implants by applying a fractionated pre-vacuum process (according. ISO 13060 / ISO 17665) under consideration of the respective country requirements. Parameters for the pre-vacuum cycle:

1. 3 prevacuum phases with at least 60 milli bar
2. Heat up to a minimum sterilization temperature of 132°C; maximum temperature 137°C
3. Minimum Holding time: 3 min (full cycle)
4. Drying time: minimum 1min

MANUAL REPROCESSING

Validation Report No.: 15812.

Pre-Cleaning

Immerse the implants into cold tap water for at least 10 minutes. Then flush the screws with a water jet pistol for minimum 20 seconds.

Ultrasonics

Immerse the screws completely into an ultrasonic bath with enzymatic detergent (0,8%) and treat with ultrasonic (frequency 35 kHz) for at least 10 minutes at 45°C. Avoid sonic shadow.

- Parameters:
- 45°C
 - 10 min.
 - 0,8 % cleaning solution
 - 35 kHz

The implants are taken out of the bath and flushed with a water jet pistol for minimum 20 seconds.

Ultrasonic bath: Bandelin Sonorex RK 1028 H

Detergent: Cidezime/Enzol of Company ASP (enzymatic)

Manual Chemical Disinfection

Validation Report No.: 26913.


Immerse the screws completely into a 4%-Mucocit-T solution (Company Merz Hygiene GmbH) at room temperature as specified by the manufacturer for 10 minutes.

Drying


Manual drying is carried out using sterile compressed air.

Packaging, Sterilization

As described in the above section "AUTOMATED CLEANING PROCESS".










 If the chemicals and machines described before are not available, the user is obliged to validate the process used.

13 Disposal

 Implant screws and the packaging material must be disposed of in accordance with the regulations and laws specific to the country in which they are used.

14 About this Instruction for Use

Throughout the period of use of medical devices, the Instructions for Use must be kept freely accessible for every user.

	Note accompanying documents Warning: Failure to comply could result in death or injury		Protect from moisture
	Follow instructions for use		Keep away from sunlight
REF	Article number (see label)	LOT	Batch code (see label)
	Non-sterile		Manufacturer
	CE-Mark of the notified body mdc medical device certification GmbH, Stuttgart		Not for reuse
	Do not dispose of residual waste		