



IMPLANTS DIFFUSION INTERNATIONAL  
*30 years* OF IMPLANTOLOGY

# SURGICAL MANUAL

## IDCam IMPLANT



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**Caution:** US federal law restricts this product for sale by or on order of a dentist or physician.

**IDCAM** implants with cover screws and healing caps are shipped **sterile**. Abutments with abutment screws are shipped **non sterile** and must be sterilized before use. See sterilization instructions below. IDI abutments are intended to be modified by the user only within the parameters described in the prosthetic manual.

### **Storage and Handling**

Store the devices in a dry, clean and dust free environment in the original packaging at modest temperatures (5°C to 40°C / 41°F to 104°F).

### **MRI Use with IDI Implants**

ID CAM Dental Implants have 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 the IDICAM Dental Implants in the MR environment is unknown. Scanning a patient who has this device may result in patient injury.

### ***Device Description:***

The ID CAM Dental Implant is a tapered conical implant system with three designs. IDCAM with mini-threads, IDCAM S and IDCAM ST. IDCAM S has large flat threads in the straight walled top section and sharp threads on the bottom tapered section. It comes in diameters of 3.7,3.9,4.2 and 5.2mm with a length of 8.5mm IDCAM ST has large flat threads at the top and sharp threads at the bottom and comes in diameters of 3.7, 3.9, 4.2 and 5.2 mm. Lengths of 9.4, 11.4, and 14.4 mm are available. The IDCAM with mini-threads has mini-threads at the top and with sharp threads below. It comes in 4.2, and 5.2 mm



diameter with lengths of 8.5,9.4, 11.4, and 14.4mm. The bottom of all three IDCAM designs is convex.

All implants and abutments are made of ASTM F136 Ti 6Al 4V ELI. The implants have a grit blasted and acid etched surface.

ID CAM abutments for single unit restorations are all attached by Morse taper fit as well as a screw. Morse taper cone straight abutments come in 3.6 and 4.2mm diameter with gingival heights of 1.4, 3, and 5mm.

Morse taper cone shouldered straight abutments come in 5.4mm diameter at the upper platform with a 3.6mm diameter at the platform bottom and gingival heights of 1.3, 2.2, 3.2, and 5mm. Morse taper angled cone abutments come in 7°, 15°, and 23° angles in diameters of 3.6 and 4.2 and gingival heights of 1.4 (7° only) or 1.63 (15° and 23°), 3, and 5mm.

Morse taper angled cones abutments with shoulder come in 7°, 15°, and 23° angles in a diameter of 5.4 at the upper platform with a 3.6mm diameter at platform bottom and gingival heights of 0.9, 3, and 5mm in 7°, and gingival heights of 0.9, 2.35, 3.30, and 5.03mm in 15°, and 23°.

PLAN abutments in 5.4mm diameter at shoulder top with a 3.6mm diameter at shoulder bottom and come in gingival heights of 1.5 and 3mm and there are straight, 15°, and 23° versions. Plan abutments can be used for single or multiple unit restorations but are not used for removable prostheses.

Straight IDUnit abutments, angled IDUnit abutments, IDLoc abutments, and ball attachments are permanent threaded abutments which are for multi-restorations only. IDLOC is 3.6mm diameter at platform and comes in gingival heights of 2.5, 4, 5.5, and 7.5 mm. Ball attachments are in

3.5 diameter and come in gingival heights of 1, 2.5, 4, or 6mm. Straight IDUnits are in 3.6mm diameter with 4.9mm diameter at top



of shoulder and come in gingival heights of 1, 2.5, 4 or 6 mm. 17° angled IDUnits come in 3.6mm diameter with 4.9mm diameter at top of shoulder and in a gingival heights of 1.35,3.02 or 5 mm. 30° angled IDUnits come in 3.6mm diameter with a 4.9mm diameter at top of shoulder and in a gingival heights of 1,3.01 or 5 mm. Straight and angled IDUnit mounted dentures can only be removed by the dentist, but dentures mounted on IDLoc or ball attachments can be removed by the patient.

Provisory abutments are temporary use abutments which allow placement of a temporary restoration. These come in 3.6mm diameter and varieties of nonrotational (4.8mm diameter at top of shoulder, gingival height of 1.5mm and post height of 7.5mm), nonrotational tall (4mm diameter at top of shoulder, gingival height of 1.5mm and post height of 12.5mm), rotational (gingival height of 1.5mm and post height of 7.5mm) and provisory IDUnit (4.9mm diameter at the base and a post height of 10.5mm).

Healing caps are temporary use abutments used during the healing phase which come in different gingival heights shapes in order to account for tissue thickness differences and space differences. Cylindrical shape healing caps come in diameters of 3.2mm with heights of 3.5 and 5mm, 4 &

5 mm with heights of 2, 4, 6, and 8mm. Conical profile healing caps come in 3.6mm diameter at the platform with a 6mm cone top diameter and 4mm gingival height, or a 3.6mm diameter at platform with a 6mm cone top diameter and gingival height of 6mm. There is also a healing cap for the IDUnit.

**Indications for use:** IDCAM Dental Implants are endosseous implants intended to be surgically placed in the upper or lower jaw arches to provide support for prosthetic devices, such as an artificial tooth , in order to restore patients esthetics and chewing function. IDCAM implants are intended for single or multiple unit restorations on splinted or non-splinted applications. They are intended for immediate loading



when good primary stability is achieved, and with appropriate occlusive loading. These implants can also be used for loading after a conventional healing period.

### **Contraindications**

Dental implantation is a surgery operation. Any contraindication that applies to surgery operations also applies to patients subject to a dental implant operation.

Hypersensitivity to components of the implant.

Inadequate bone mass.

### **Warnings**

The implant may be rejected due to the failure of the jawbone to osseointegrate with the implant.

The implant site may become infected due to poor oral hygiene.

There may be swelling in the affected area, but it diminishes within a few days.

There may be pain caused by nerve damage due to the implant being placed very near to or over a nerve. In such a case, the patient should immediately contact the dentist, who may remove the implant and replace it if necessary.

Sinus problems may occur in upper jaw implantation due to the dental implant protruding into one of the sinuses. To address this issue the dentist may replace the implant.

### **Abutments and Instruments**

All abutments and instruments are supplied NON-STERILE.

Step 1- Insert components into an FDA cleared sterilization wrap.

Step 2 - Autoclave sterilize (pre-vacuum) using 132° C (270°F) for 4 minutes



### Step 3 - Dry time is 30 minutes

The validated procedures require the use of FDA-cleared sterilizers, sterilization trays, sterilization wraps, biological indicators, chemical indicators, and other sterilization accessories labeled for the sterilization cycle recommended. The health care facility should monitor the sterilizer for the facility according to an FDA recognized sterility assurance standard such as ANSI/AAMI ST79:2010.





If there is insufficient bone to support the implant, bone grafting will be required.

All sterile implants are for single use only; they should not be re-sterilized. All implants must not be used after the expiration date printed on the product label. Sterile implants must not be used if the package has been damaged or previously opened.

Do not use the contents of the package if there is any observable physical damage to the blister or tube.

Building the crown on top of the implant immediately after implantation may disturb the osseointegration process and cause dental implant failure.

Small diameter implants and angled abutments are not recommended for use in the posterior region of the mouth.

### **Precautions**

Prospective implant candidates must be thoroughly screened, and a systematic and coordinated plan delineating the responsibilities of each member of the operation team should be developed and followed.

The evaluation of implantation patients should include the following steps:

Elicit and record a comprehensive medical and dental history of the patient and consider the relevance of that information to the individual case.





Perform a comprehensive visual inspection as well as panoramic and apical radiographs to determine anatomical landmarks, occlusal conditions, periodontal status, and adequacy of the bone. Lateral cephalometric radiographs and tomograms may also be beneficial in special cases.

During the planning phase it is important to determine the availability of adequate bone mass for implant placement and to confirm that the available occlusal space is sufficient to accommodate the proposed abutment and final restoration. Minimizing the trauma to the host tissue increases the potential for successful osseointegration.

**CAUTION:** Electro-surgery should not be attempted around metal implants, as they are conductive.

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# Summary

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# Planning of the surgical procedure

Ensure the right selection of the dental implant and the desired emergence according to the treatment plan

## Preparation of the surgical environment

- 1) Ensure cleanliness and furniture in the operating room.
- 2) The surgical field must comply with the hygiene and aseptic rules in force (Privilege single-use products)

## Preparation of the patient

Ensure that the patient's preparation, both at the mouth and skin level, complies with the hygienic and aseptic rules in force.

## Preparation of the practitioner

The practitioner and his collaborators will be equipped with sterile surgical gowns (mask, charlotte, over-shoe and sterile gloves without powder)



# Drilling

To avoid contamination of the surgical field, all instruments and materials used must be sterile. To prevent contamination of sterile instruments, use sterile tweezers to remove them from the surgical kit and insert them into the handpiece or ratchet using non-powdered gloves.



**When drilling with the RBS Drill with stopper (Recovery Bone System), make sure that the irrigation jet comes between the stopper and the bone.**

## **Maxilla :**

- 1) First drilling  $\varnothing$ 2 mm **with irrigation** 650 rpm.
- 2) Second and third drilling without irrigation at 150 rpm or with irrigation at 650 rpm (with the RBS® drill)
- 3) Rinse abundantly the socket with an antibiotic (tobramycin type), diluted with physiological serum before implant placement.

NB : For spongy bone, use the final drill of a lower diameter than the diameter of the implant.

For example, to set an IDCam1242 (length 12mm,  $\varnothing$  4,2 mm), do ONLY the 1st ( $\varnothing$  2 mm) and 2nd drilling ( $\varnothing$  3,6 mm).

## **Mandible :**

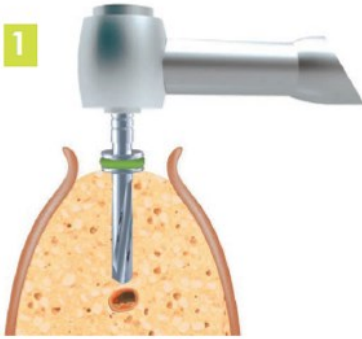
- 1) First drilling  $\varnothing$ 2 mm **with irrigation** 650 rpm.
- 2) Second and third drilling **with irrigation** at 650 rpm.
- 3) Rinse abundantly the socket with an antibiotic (tobramycin type), diluted with physiological serum before implant placement

NB2 : Follow the sequence of drills, from  $\varnothing$ 2mm until the diameter corresponding to the diameter of the implant.

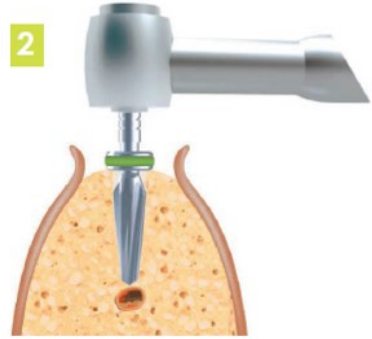


# IDCam drilling and implant placement protocol

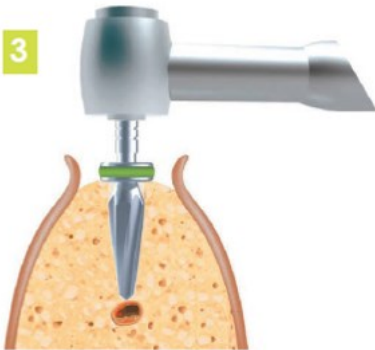
For an IDCam implant  $\varnothing$  4,2



Use the pilot drill  $\varnothing$ 2 mm.  
Drill at 650 rpm **with**  
**ample irrigation.**

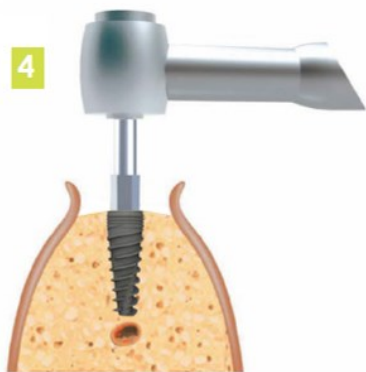


Drill at 150 rpm without **irrigation**  
or at 650 rpm **with irrigation.** Use the drill  $\varnothing$  3,6 mm.



Drill at 150 rpm without  
irrigation or at 650 rpm  
with irrigation. Use the drill  
 $\varnothing$  4,2 mm.

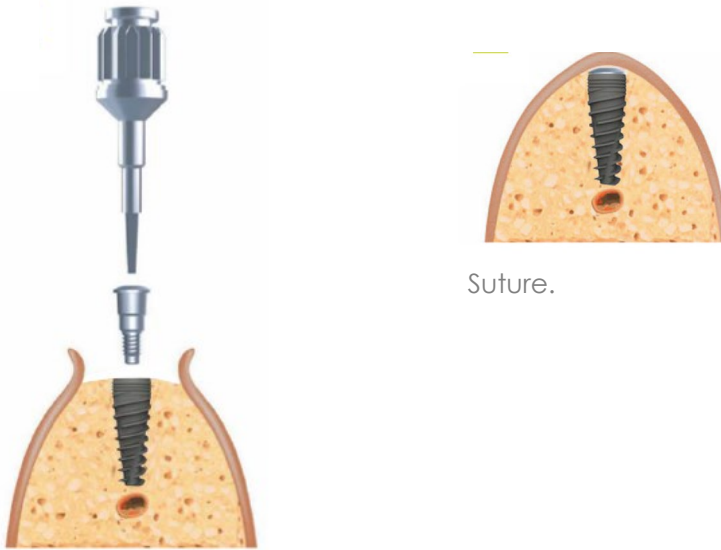
*(Omit this step for an im-  
plant placement at the  
maxilla.)*



Screw the IDCam implant at 1  
mm in sub-crestal position with  
a speed of 25 rpm and a  
torque of up to 75 N.cm.

- with the help of a contra-  
angle and a screwdriver P/N  
1046 or P/N 1146.
- or with the manual screwdriv-  
er P/N 0046 or P/N 0146.

# Cover screw setting



Screw the cover screw at 5 N.cm with the screwdriver P/N 0014 or P/N 0114.

## **Expert advice :**

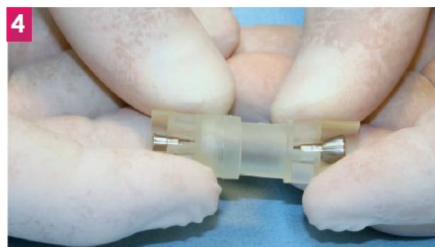
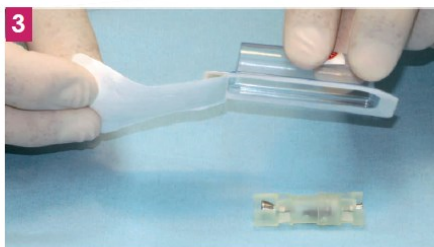
Soak the **closing** cap (ref 0212) and the **healing** cap in an antibiotic (tobramycin or gentamicin type - 75 mg) diluted in 20 cl of physiological serum before placing it (with a torque of 5N.cm) .

**Caution :** small diameter implants and angled abutments are not recommended for use in the posterior region of the mouth



# IDI implant packaging

## A DOUBLE STERILE PACKAGING



### Method 1:

Pick up the implant with a contra-angle



Press



Remove

### Method 2:

Pick up the implant manually



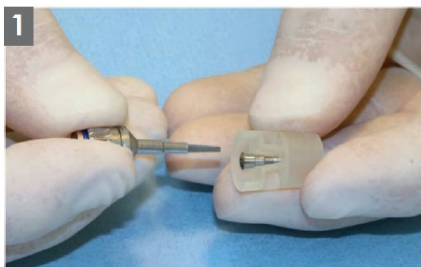
Press



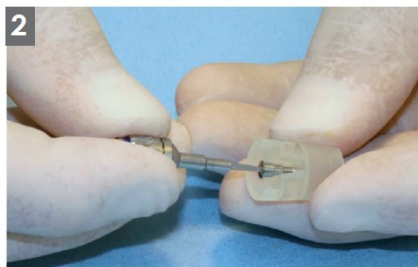
Remove



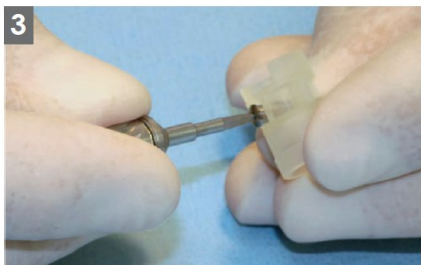
Pick up the closing cap from the packaging



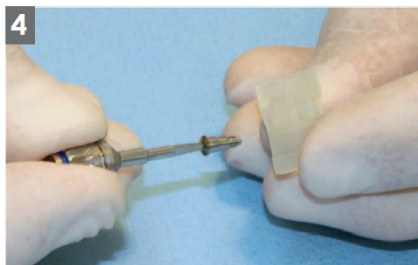
Take the packaging



Insert the screwdriver

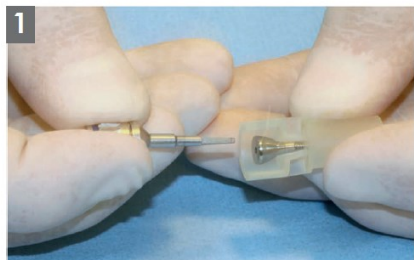


Rotate by 90°

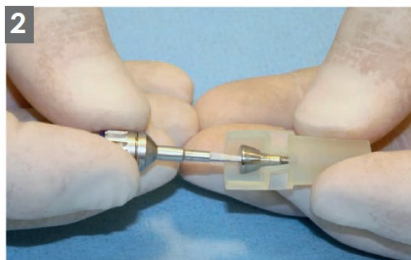


Remove

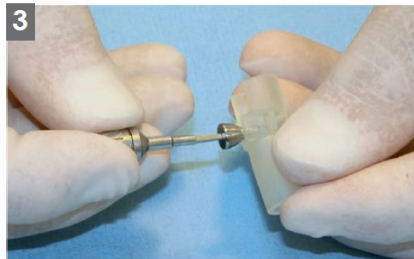
Pick up the healing cap from the lower part of the packaging



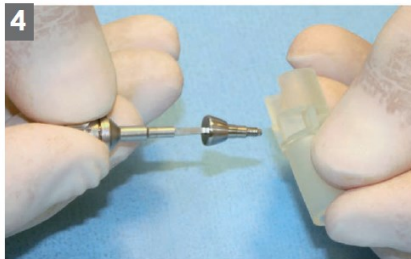
Take the packaging



Insert the screwdriver



Rotate by 90°



Remove





# The keys to success in implantology

With over 30 years of clinical background, we established more than 20 main **reasons of implant failures in implantology**.

Consider the following points :

- Powder of the gloves
- Periodontology
- Tobacco
- Bone without bleeding
- Contact with a devitalized tooth
- Contact with a live tooth
- Instruments cleaning
- Sinus floor elevation
- Unstabilized Implant
- Contaminated and non rinsed socket
- Fibromucosa
- Post-extractional
- Healing cap that cannot be removed
- Immediate loading
- Bone heated up
- Unbalanced occlusion
- TPS surface
- Non consideration of the biomechanics
- Asepsis mistakes
- Antiseptic product
- Tooth paste







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