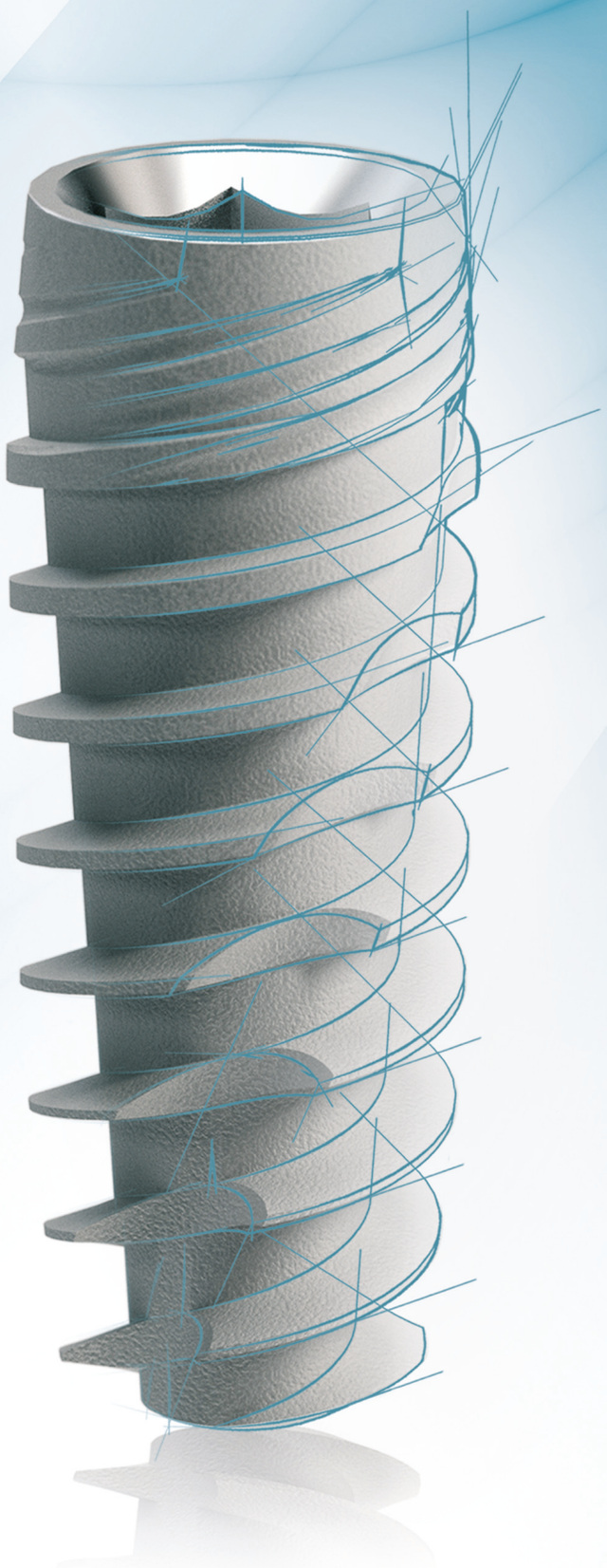
J DENTAL CARE

just smile



Surgical Procedure
Prosthetic Procedure
Product Catalogue

JD EVOLUTION®

Security and exceptional product features: this is the goal of JDentalCare® when the time comes to satisfy both clinician and patient. To ensure that you receive the maximum standard of quality, JDentalCare®, in addition to strictly adhering to regulatory specifications, works on the basis of operative protocols elaborated in function of the type of product manufactured and its final use.
The basic characteristics common to all JDentalCare® products are the following:

- Use of certified raw materials.
- Production process with the highest quality numerical control machinery.
- Qualified personnel monitoring the complete productive process.
- Exhaustive quality control (100% of critical level) in a metrological room with instrumentation regularly approved by the SIT (Italian Calibration Service).
- Assembly in white room.

Using the most advanced technology, JDentalCare® exercises minute control over the surface cleaning of the dental implants. The "Checksurface" makes it possible to verify with great precision the morphological state of the surface, picking up possible alterations. Surface contamination control is carried out with a SEM system.

TÜV SÜD EN ISO 13485

CE 0123

The Quality System of JDentalCare® is certified under the norm EN ISO 13485.
The dental implants and surgical material class II A are certified by TÜV Product Service CE0123.

INDEX

GENERAL INFORMATION

Read this manual carefully before starting the treatment.
This manual must be used as a reference guide by the doctor so as to optimise the use of the implants, surgical instruments, and the prosthetic components of the system.
The exclusive design of JDentalCare® products allows the safe insertion of implants into the mandibular or maxillary bone, fully or partially edentulous, to affix a removable or permanent prosthesis. The exclusive JDentalCare® system uses proven surgical processes for the affixing of implants in bone tissue, with optimal osseointegration. The prosthetic procedures described in this manual represent the latest advancement in the field, ensuring the best esthetics and functionality.
The success of an implant system, however, depends on the correct use of its instruments and components. This manual is merely complementary to the training and experience of the professional.
Before starting with a new treatment method it is recommended to inform oneself thoroughly on the techniques and procedures to use. To this end, our company offers a consulting service by our experts, who are available at your disposal, as well as a large variety of training courses for all levels.
For further information please visit: **www.jdentalcare.com**

SURGICAL PROCEDURE

EXAMINATION AND TREATMENT PLANNING

Before beginning the treatment a detailed examination will be necessary of the general health conditions of the patient as well as a careful evaluation of his/her motivation and expectations. It is also necessary to consider key factors such as oral hygiene, occlusion type and habits such as smoking.
The dentist must rule out the presence of soft tissue pathologies and must consider whether the patient's bone condition is ideal for the insertion of the implant.

Quality of the bone

Generally, dense bone gives the implant a good primary stability, while soft bone requires "under-preparation" of the implant bed to be able to guarantee an adequate primary stability.

Vertical bone quantity

The quantity of available bone for the insertion of the implant varies in function of the anatomy.
The JDEvolution® system design allows the affixing and stabilisation of the implant in only three millimetres of bone. The available bone may be situated in the most apical section of the implant, as it happens in a post-extraction sites, or at the neck section of the implant, as in cases of maxillary sinus elevation procedure.

Horizontal bone thickness

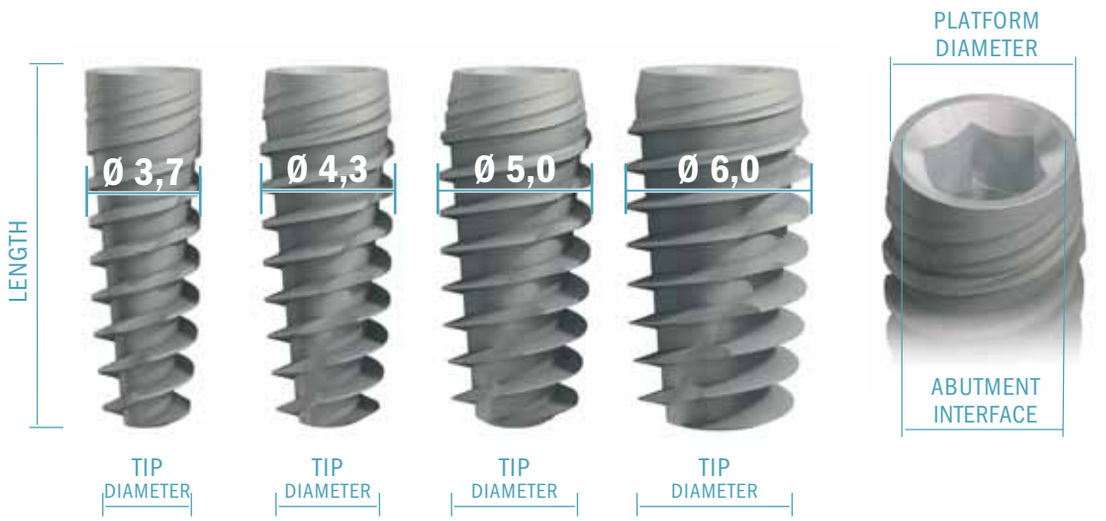
After placement of the implant the thickness of the residual bone needs to be at least one millimeter, in both lingual-palatal and vestibular direction. The special reduction in the coronal section of the implant makes it ideal for cases with thin alveolar ridges.

You can use the flapless technique when there is an optimal quantity of bone and soft tissue.
Use flap technique when it is necessary to examine the alveolar bone and the adjacent anatomical structures, and when executing ridge augmentation procedures.

Important: an objective examination and a radiological study are essential elements to determine anatomical conformation, occlusion, periodontal status and bone thickness. A "Cone Beam CT" radiological study is recommended to obtain a more precise evaluation of the dimension and the quality of the available bone.

IMPLANT DIAMETERS AND LENGTHS

To ease treatment planning and the clinical procedures, JDEvolution® implants are available in various easily identifiable diameters and lengths using colour coding.
JDEvolution® products are distinguished by their unique prosthetic connection, in which the abutment platform is the same for all implant diameters.
Available lengths for each diameter are indicated in the following table.



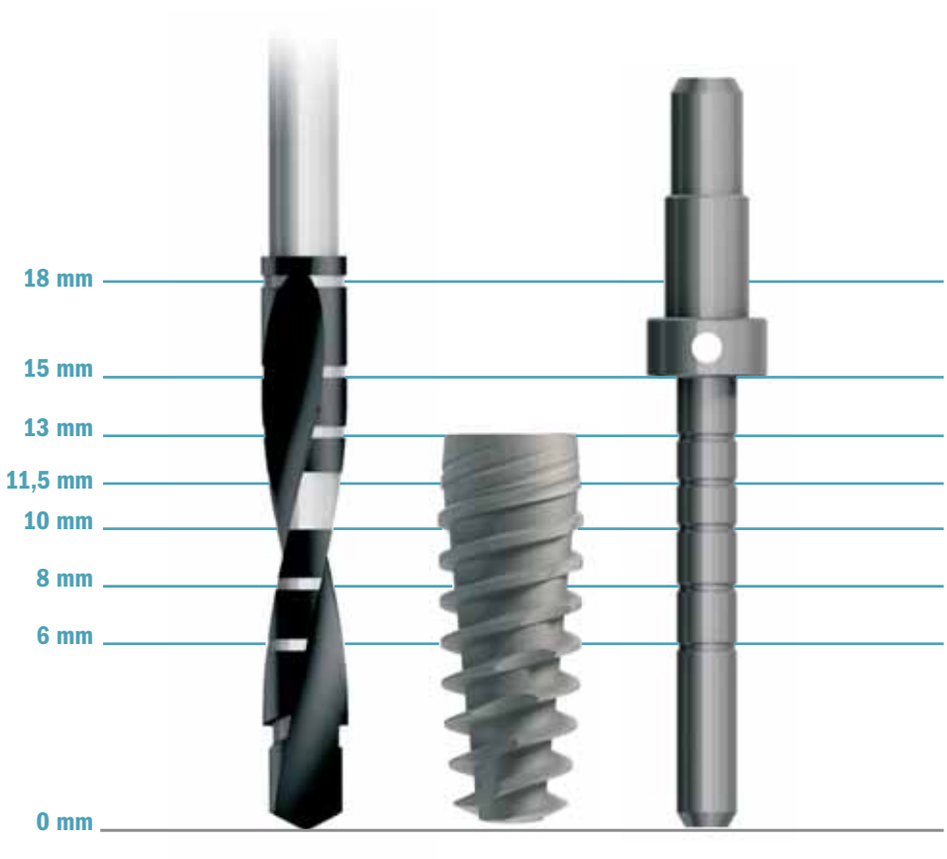
IMPLANT DIAMETER	TIP DIAMETER	ABUTMENT INTERFACE	PLATFORM DIAMETER	LENGTH
Ø 3,7	2.7	3.4	3.7	8 | 10 | 11.5 | 13 | 15
Ø 4,3	3.2	3.4	4.0	6 | 8 | 10 | 11.5 | 13 | 15
Ø 5,0	3.9	3.4	4.0	6 | 8 | 10 | 11.5 | 13 | 15
Ø 6,0	4.8	3.4	5.0	6 | 8 | 10 | 11.5 | 13 | 15

Note: All dimensions are expressed in millimeters.

DRILLING SEQUENCE

The drills provided with the surgical kit must be used with external irrigation to prevent excessive heating of the bone tissue. Drilling must be interrupted if it is not possible to verify irrigation.
Drill with an in and out pumping motion without excessive force. When doing this movement, you will have to take out the drill completely to check that irrigation is taking place correctly.
Drills are characterised by their inclined wedges allowing the homogeneous distribution of the cooling physiological solution, as well as the conservation of cortical bone shavings resulting from the drilling process after the preparation.
If the sharpness of the drill diminishes, the latter must be pulled out of the handle for cleaning. Proceed until you are able to take the drill to the desired depth.
Should there be adjacent natural teeth interfering with the head of the contra-angle, the drill extension must be used. It is advisable to use surgical motors with adjustable speed and torque.

Important: The initial drill head is of the precision type. It must be used only in one surgical intervention. Drill heads must be substituted approximately every 20 osteotomies, or when their cutting efficiency diminishes.



Drilling sequence

It is recommended to adhere to the indications of the following drilling sequence to ensure optimal primary stability of the implant.

IMPLANT DIAMETER	SOFT BONE TYPE IV	MEDIUM BONE TYPE II-III	DENSE BONE TYPE I
Ø 3.7	2.0 2.4	2.0 2.4 2.8	2.0 2.4 2.8 3.2 (3,6)
Ø 4.3	2.0 2.4 2.8	2.0 2.4 2.8 3.2 (3.6)	2.0 2.4 2.8 3.2 3.6 (4.0)
Ø 5.0	2.0 2.4 2.8 3.2	2.0 2.4 2.8 3.2 3.6 (4.0)	2.0 2.4 2.8 3.2 3.6 4.0 (4.4)
Ø 6.0	2.0 2.4 2.8 3.2 3.6	2.0 2.4 2.8 3.2 3.6 4.0 (4.4)	2.0 2.4 2.8 3.2 3.6 4.0 4.4 (4.8)

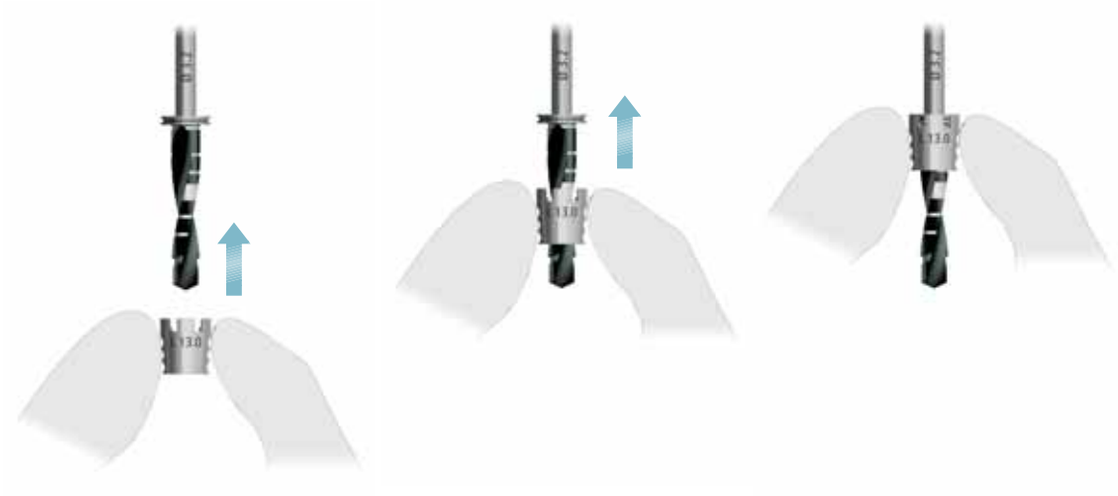
Note: All dimensions are expressed in millimeters.

Drill Stop procedure

For a safe and accurate drilling procedure, mount the Drill Stop on the twist drill.
JDentalCare is manfucaturing two types of drill stops.

Take the drill stop and move it along the drill to the desired length mark. Fix it to the drill using the screwdriver.

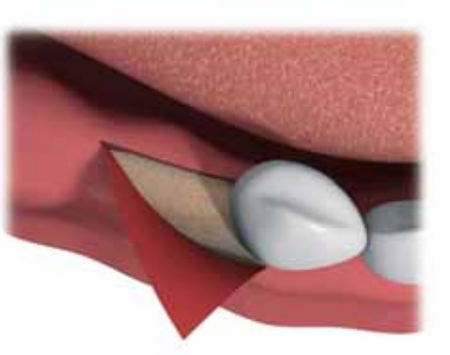
Take the drill stop of the correct length and mount it on the drill.



CLINICAL PROCEDURE STEP BY STEP

The illustrations show the drilling sequence for a JDEvolution® 4.3 x 13 mm implant in medium bone. The drilling protocol for all diameters and bone qualities must be consulted in the preceding table.

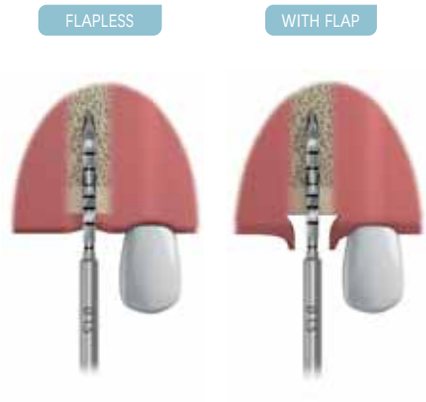
If the technique of surgery with flap is used for a better visualisation of the bone anatomy, it will be necessary, as a preliminary operation, to make an incision along all the thickness of the soft tissue, and lift the gum edge to access the bone crest.



If the flapless technique is used (minimally invasive) it is necessary to remove gum tissue with a circular scalpel.

Initial precision drilling

Drill a hole on the crest with the ø 1.5 mm precision drill.
The initial precision drill features an aggressive cutting angle that is efficent even in dense bone.
Make sure that you do not drill with the precision drill to a depth greater than that of the selected implant.
The maximum drilling speed with the precision drill must be 1500 rpm.



Maximum Speed
1500 rpm.

Note: When operating flapless, always measure the thickness of soft tissue with a probe, for a correct preparation of the osteotomy to the desired depth.

Only if you use flapless surgery:

Tissue punch

Insert the direction guide for the tissue punch corresponding to the diameter of the selected implant in the ø 1.5 hole. Connect the tissue punch to the contra-angle and position it on the guide. Incise into tissue until reaching the osseous crest.
The speed must not exceed 800 rpm.

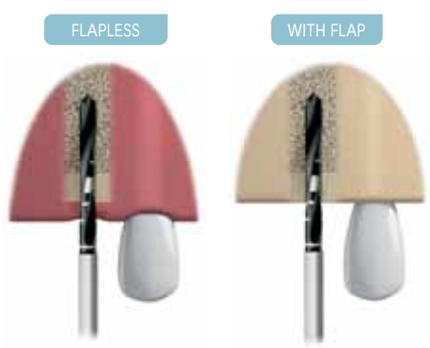
Maximum Speed
800 rpm.

With the use of a normal or small surgical blade incise perpendicularly along the outline of the soft tissue so as to free it and remove it from the top of the crest.

Ø 2 drill

To continue preparing the osteotomy use the ø 2.0 drill.
Maximum speed must be 1,500 rpm.

Maximum Speed
1500 rpm.



Direction indicator

You can control the direction of the drilling at all times using the direction indicator. You may need a radiological examination to verify parallelism with other pieces or adjacent implants. If necessary, correct the direction of the drilling.
When placing multiple implants, proceed with the same drill for all the osteotomies before moving to the next drill in the sequence.

Ø 2.4/2.8 drilling

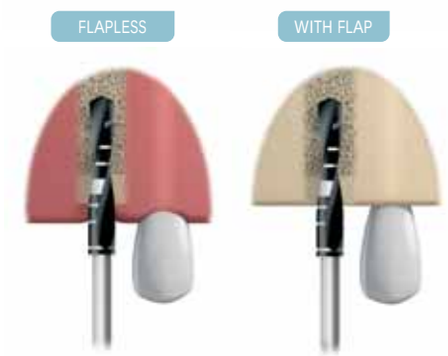
To continue with the preparation use the ø 2.4/2.8 drill head.
Maximum drilling speed is to be 1,500 rpm.

Maximum Speed
1500 rpm.

Ø 3.2/3.6 drilling

To continue with the preparation use the ø 3.2/3.6 drill head.
Maximum drilling speed is to be 1,500 rpm.

Maximum Speed
1500 rpm.



Control the depth of the drilling and integrity of the cortical walls in the prepared cavity using a probe.

Insertion of the implant

The printed label on the exterior of the package contains information on the dimensions of the implant: the diameter, associated with a colour code and the length.
Open the package in a sterile environment and remove the plastic protection to access the implant.

The final placement of the JDEvolution® implant, depending on the clinical situation, can be carried out with one of the following methods:

1. The JDTorque® dynamometric key

2. The surgical engine

3. The surgical driver

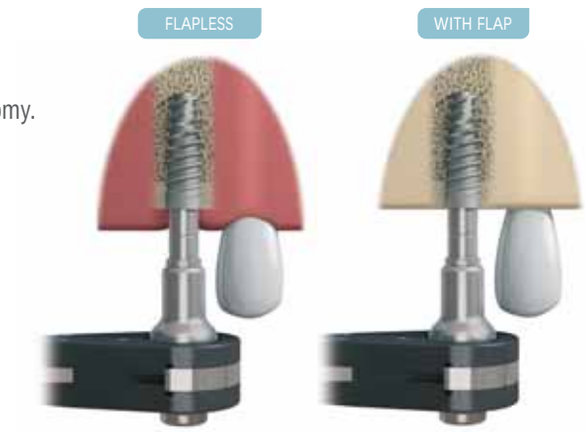
Important: An excessive torque on the implant may compromise the integrity of the internal connection and put excessive pressure on the surrounding bone, negatively affecting bone integration. The implant insertion torque cannot exceed 80 Ncm.

Use of the JDTorque® dynamometric key

Connect the implant driver to the JDTorque® dynamometric key with the mounted surgical adapter.

To connect the implant put light pressure on the driver.

Insert the implant in the previously made osteotomy.



Use of the surgical engine

Connect the implant driver to the hand piece.

To connect the implant, apply light pressure on the driver.

Slowly insert the implant in the previously made osteotomy. (25 rotations/minute)

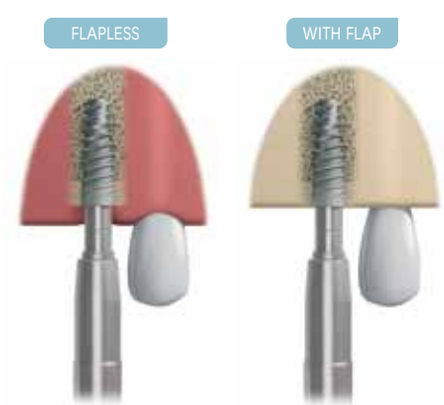
Maximum Speed
25 rpm.

Use of the surgical driver

It is also possible to use the surgical driver to position the implants. Connect the implant driver to the surgical driver.

To connect the implant, apply light pressure on the driver.

Insert the implant in the osteotomy previously carried out.



Final positioning

Connect the JDTorque® dynamometric key with the JDTorque surgical adapter mounted on the driver of the implant and seat the implant to its final depth.
To carry out immediate load protocols, the implant should be inserted with a final seating torque of 35-45 Ncm but without exceeding in any case 80 Ncm. You can withdraw the driver by extracting it with vertical movement.

For an optimal esthetic result position the implant on the bone crest or up to 0.5 to 1 mm below.

Important: Avoid excessive force when inserting the implant with the dynamometric key given that inadequate pressure on the bone could cause necrosis and compromise integration with the bone. If you observe excessive torque (of approximately 80 Ncm) at any stage of the insertion, rotate the implant in the counter-clockwise direction two or three turns in order to take advantage of its self-threading capacity and continue with the insertion. However, if you still encounter too much resistance, pull out the implant and carry out a more extensive osteotomy.

Orientation of the implant

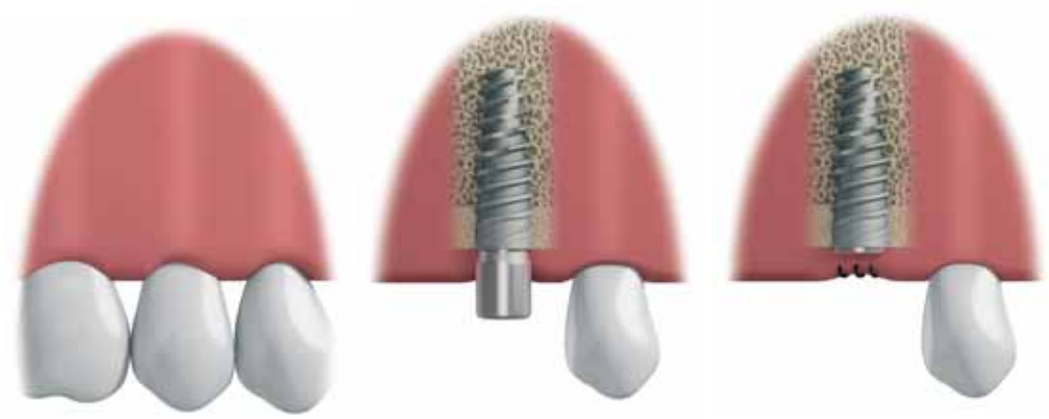
At the time of the final placement of the implant, when the desired depth has been reached, it is necessary to align the reference points in the driver with the vestibular wall. In this way the hexagonal shape of the internal connection makes it possible to position and orient the prosthetic abutment in an optimal manner.

The implant driver has a 3 mm mark to facilitate the vertical positioning of the implant platform in accordance to soft tissue thickness (applicable in flapless surgery).

PROSTHETIC PROCEDURE

FINALISATION OF THE IMPLANT SURGERY

There are three options for the finalisation of the implant surgery intervention using JDEvolution® implants:



IMMEDIATE LOADING

If the implant is inserted with high primary stability it is possible to fix a provisional prosthesis using the JDentalCare provisional components or definitive abutments (consult the aforementioned procedures).

NON-SUBMERGED HEALING

Screw into the implant a healing abutment, adapt soft tissue and suture.

SUBMERGED HEALING

Screw a cover screw into the implant and suture with preferred technique.

Bone Mill

If bone above the implant platform interferes with complete seating of any components (healing abutment, impression coping, abutment), the Bone Mill with its guide are used either manually or at low speed in the handpiece to clear the path of insertion.

BONE MILL Ø 5.0

BONE MILL Ø 6.0

Depending on the clinical situation and the choice of the surgeon, there are three options to anchor prosthetic components of the JDEvolution® system:

1. Using the JDTorque® dynamometric key: connect the JDTorque® dynamometric key to the prosthetic adapter and using the screw driver proceed to screw in the prosthetic component.

2. Using a surgical engine connected to a machine screw driver.

3. Using a manual screw driver. Connect the JDTorque® prosthetic adapter to the machine screw driver and manually screw in the prosthetic component.

Healing Abutment

Indications: closing of the implant connection for non-submerged healing.

Connect the healing abutment of the correct diameter and height .

Adapt the soft tissues and suture them around the healing abutment.

The exclusive design of the healing abutment with integrated Platform Switching ensures soft tissue formation of greater thikness. This translates into greater long term stability of these tissues, and into limited crestal bone resorption.

IMPRESSION TECHNIQUES

Impression techniques used in the implant treatment are:
- Closed tray
- Open tray
- Conventional

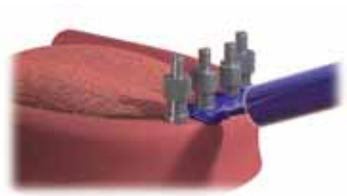
Closed tray impression technique

This technique is recommended for single unit restorations or multiple unit restorations where implants are placed sufficently parallel to each others. The laboratory receives the impression coping with the impression. Connect a replica of the corresponding implant or abutment to the closed tray coping and then insert the impression coping in its recorded place in the impression. Pour the impression with material for soft tissue and plaster.

Open tray impression technique

This technique is recommended in multiple unit restorations where the absence of parallelism would hinder the removal of a closed tray impression and distort the impression. A limitation can be the absence of sufficient space due to a limited mouth opening in the posteriors.

After removing the impression from the mouth along with the impression copings, attach to the latter the corresponding implant or abutment replica. Pour the impression with material for soft tissue and plaster.



Implant level Impression

Transfer the position of the implant in the mouth of the patient to a master model so as to select a prosthetic abutment that is adequate for the treated clinical case and for the dentist's requirements.

Abutment level impression

The abutment is selected, positioned, and placed by the dentist. To transfer the position of the abutment in the mouth of the patient to the prosthetic model it is necessary to use an impression coping specific for the selected abutment. The prosthetic restoration will be undertaken in a way adaptable to the abutment.

Conventional impression

This technique is used when the dentist selects and modifies a definitive abutment to cement a single or multiple unit restorations (crown and bridge technique).
The abutment is fixed to the implant, modified using conventional preparation methods directly in the mouth, using high speed handpiece with abundant irrigation.
Perform a conventional impression of the abutment or abutments previously prepared in the mouth (it is recommended to use a retraction cord).

TEMPORARY SOLUTIONS FOR THE DENTAL LABORATORY

Temporary Abutment

TEMPORARY ENGAGING ABUTMENT / PEEK

Indications: screwed-in temporary of single implant cases and cemented temporaries of multiple implant cases

TEMPORARY NON ENGAGING ABUTMENT

Indications: screwed-in temporaries of multiple implant cases

For cemented crowns and bridges

Pour and make a master model using the corresponding replica.
Position, and fix to the replica, the temporary engaging abutment.
Modify the temporary abutment in function of the existing situation in the mouth of the patient, verifying the necessary occlusal space for the covering materials (do not reduce the abutment to less than 4mm in height).
Make the crown or bridge to be cemented using conventional processes.
Position the temporary abutment on the implant and screw in manually or with the JDTorque® dynamometric key, with a torque set between 15 and 35 Ncm. Cover the head of the screw with cotton and temporarily seal the screw channel.
Fill the inside of the crown or the bridge with temporary cement, and place it on the prepared temporary abutment(s).

For screwed-in crowns and bridges

Pour and make a master model using the corresponding replica.
Position and fix the temporary abutment to the replica.
Modify the temporary abutment in function of the existing situation in the mouth of the patient, checking the necessary occlusal space for the covering materials (do not reduce the abutment to less than 4mm in height).
Temporarily seal the screw channel (with cotton, for example) and make a screwed-in crown or bridge with conventional procedures.
Position the temporary abutment on the implant and screw in manually or using the JDTorque® dynamometric key with a torque ranging between 15 and 35 Ncm.
Cover the screw channel with cotton and seal it temporarily with a temporary filling material (composite for example).

Note: To verify the correct adaptation of the abutment to the implant it is necessary to make an X-ray control.

CHAIR-SIDE TEMPORARY RESTORATIONS

GP Abutment

GP ABUTMENT

Indications: cemented temporary restorations of single and multiple implants.

Place the abutment onto the implant and screw it.

Verify the direction and the length of the GP abutment in respect of the adjacent teeth/implants and the necessary occlusal space for the covering materials.

Unscrew the abutment, push it onto an implant replica and modify it in function of the existing situation (do not reduce the abutment to less than 4mm in height).

Place the modified GP abutment onto the implant and screw it in with a torque of 20 Ncm using the JDTorque® dynamometric key or a surgical motor connected to the machine screwdriver.

Note: to verify the correct adaptation of the abutment to the implant it is advisable to make an X-ray control.

A provisional restoration can be relined with acrylic resin directly in the mouth, refined, polished and cemented with temporary cement.

The GP abutment can be used also as a definitive abutment. After tissue healing it is possible to perform a conventional impression of the abutment (it is recommended to use the retraction cord) to make the definitive prosthesis.

ABUTMENT SELECTION

Selection of the final abutment is decisive for the final result of the prosthesis to comply with the functional and esthetic requirements of the dentist and the patient. The dentist can choose the abutment and subsequently send to the laboratory an impression taken at the abutment level, or can take a direct implant level impression and later communicate to the dental technician which abutment to use.

For the selection of the final abutment it is necessary to consider certain aspects:

Prosthesis type

Cemented prosthesis
Cemented prosthesis are placed using the same conventional protocols that are used in the techniques of cemented crowns and bridges over natural teeth. The abutments are screwed in to the implants and the prosthesis is cemented on top of them.
Screwed-in prosthesis
A screwed-in prosthesis is affixed with screws through the occlusal part of the prosthesis. The screw goes through the crown and goes into the abutment or into the implant. The prosthesis may be unscrewed at any time by the dentist.

Soft tissues height

To determine the correct height of the soft tissue, measure with a probe the depth of the latter around the implant. The selection of the abutment transgingival height will depend on the hygienic and the esthetic considerations of the dentist.

Interdental space and emergence profile

Available interdental space and emergence profile requirements are key to abutment selection.

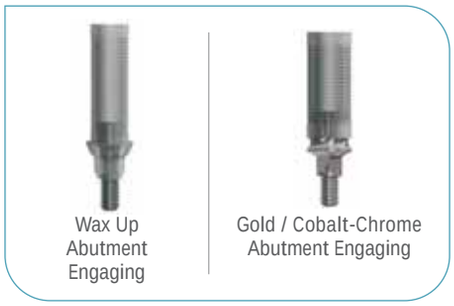
Angling

Angling of the implant also determines which abutment can be used, straight or angled, or if it is necessary to use a customized abutment.

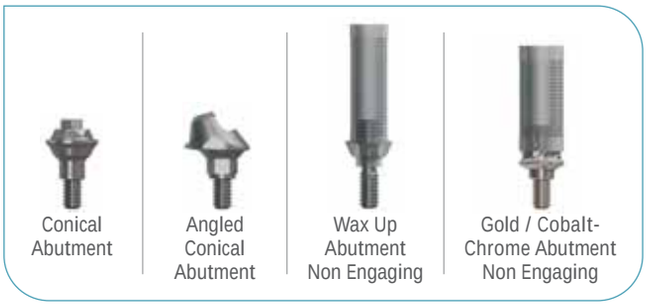
PROSTHESIS TYPES

Single cemented prosthesis / Multiple cemented prosthesis

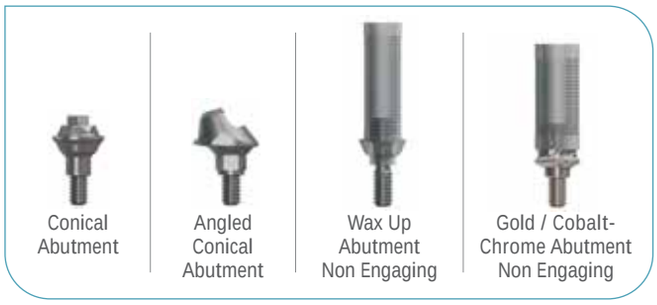
Single screwed-in prosthesis



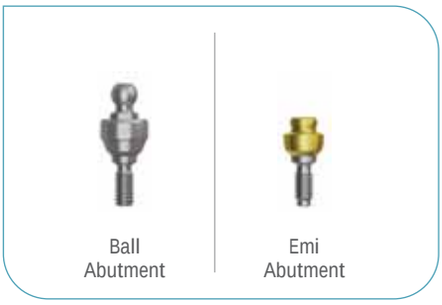
Multiple screwed-in prosthesis



Overdentures with bar fastening



Overdenture



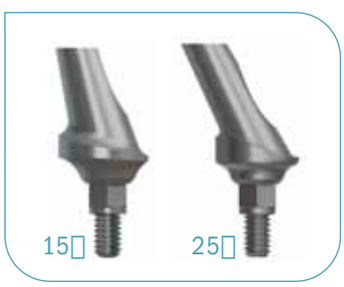
CEMENTED PROSTHESIS

Straight Abutment

Indications: single or multiple unit cemented prosthesis

The laboratory receives an impression at the implant level with a replica of the implant.
Pour and make a master model.
Select the titanium abutment that is suitable in function of the height of the soft tissues and affix it to the implant replica with a laboratory screw.
Modify the abutment and fabricate the prosthesis using conventional prosthetic techniques (do not reduce the abutment to less than 4mm in height).

Anatomical Abutment



Indications: single or multiple unit cemented prosthesis

The anatomical abutment has been designed with an anatomical festoon preparation of the cervical margin . This ensures lesser need of abutment preparation and a better adaptation to the natural profile of soft tissues, given that it is available with different heights.
The description of straight anatomical abutment that follows is applicable also to 15° and 25° angled anatomic abutment.

- The laboratory receives an impression at the implant level with an implant replica.
- Pour and make a master model.
- Select the anatomical abutment and fix it to the replica of the implant with a lab screw.
- Modify the abutment and fabricate the prosthesis using conventional prosthetic protocols (do not reduce the abutment to less than 4mm in height).

Rapid Abutment

Indications: single unit restorations or cemented posterior multiple unit restorations.

With Rapid abutment it is possible to use two distinct techniques for the impression and making of the prosthetic model.

1. Creation of a model with a Rapid abutment replica
(only applicable if the Rapid abutment has not been modified)

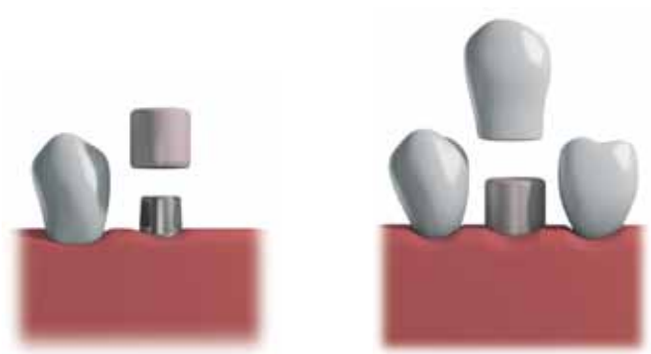
Place the abutment onto the implant and screw it in with a torque of 35 Ncm using the JDTorque® Dynamometric key or a surgical motor connected to the machine screw driver.

Note: to verify the correct adaptation of the abutment to the implant it is advisable to make an X-ray control.

Push the Rapid abutment impression coping onto the abutment.
A “click” will indicate that the impression coping is totally inserted and adapted to the margin of the Rapid abutment.
Take a conventional impression. Upon withdrawing, the impression coping should remain encased into the impression material.

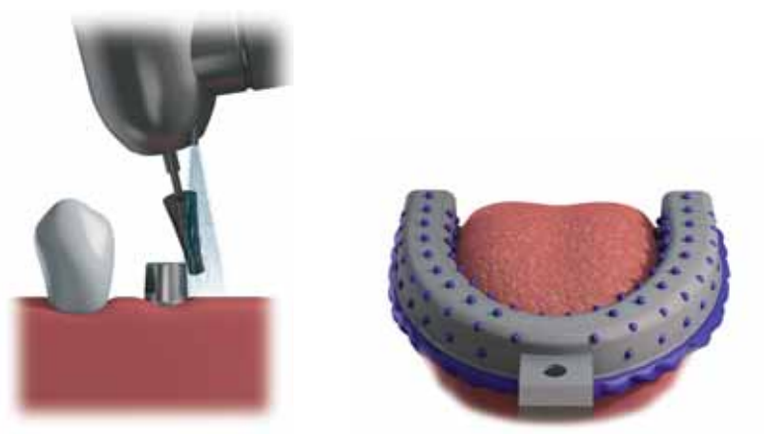
It is possible to make an immediate provisional prosthesis with Rapid abutments using the protection coping included in the Rapid abutment kit.

The laboratory receives the Rapid abutment impression with the incorporated impression copings.
Check the position of the abutment replica in the impression as well as the correct alignment of the three grooves.
Pour and make a master model.
Make the prosthesis using conventional prosthetic protocols.



2. Creation of a conventional plaster model
(applicable when the Rapid abutment has been modified)

Modify the rapid abutment in function of the requirements (do not reduce the abutment to less than 4mm in height).
Take a conventional impression and send it to the laboratory for the making of the prosthetic model.
Pour the impression to obtain a master model.
Make the prosthesis using conventional prosthetic protocols.



Wax-up Abutment

WAX-UP ABUTMENT ENGAGING

Indications: single and multiple unit cemented prosthesis.

The laboratory receives an impression at the implant level and places a replica of the implant.
Pour and make a master model.
Fix the wax-up abutment to the implant replica.
Reduce the height of the wax-up abutment according to clinical requirements (do not reduce the abutment to less than 4mm in height).
After casting the abutments, fabricate the crown or the bridge using conventional prosthetic protocols.

Gold and Cobalt-Chrome Abutment.

GOLD / COBALT CHROME ABUTMENT ENGAGING

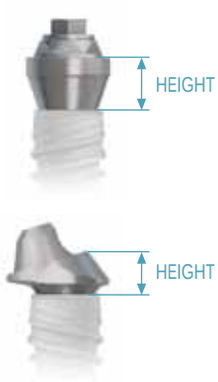
Indications: single and multiple unit cemented prosthesis.

The Gold/Cobalt-Chrome abutment fits directly in the anti-rotational component of the head of the implant by way of a machined base supporting a plastic tube to facilitate wax-up and overcasting.

The laboratory receives an implant-level impression with a replica of the implant.
Pour and make a master model.
Fix the Gold/Cobalt-Chrome abutment to the replica of the implant.
Reduce the height of the wax-up part of the abutment according to the clinical requirements (do not reduce the abutment to less than 4mm in height).
Create a structure around the base of the abutment to guarantee optimal esthetics and retention of the prosthesis. Overcast and then fabricate the crown or the bridge using conventional prosthetic protocols.

SCREWED-IN PROSTHESIS

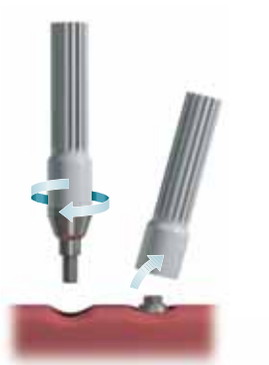
Conical Abutment



Indications: screwed-in prosthesis

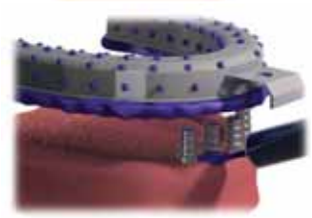
The conical abutment is available either straight or angled at 17° and 30°.

Connection of the straight conical abutment
Screw in the conical abutment onto the head of the implant in the correct position using the plastic transporter that comes assembled.
If height is insufficient the transporter can be cut.
Once in position the plastic transporter can be manually detached from the abutment.
To verify the correct adaptation of the abutment to the implant it is recommended to make an X-ray control.
Screw in the abutment at 35 Ncm using the dynamometric key JDTorque® or the surgical motor/engine connected to the screw driver.

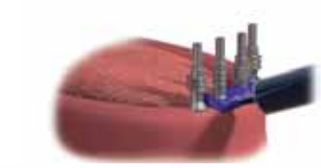


Connection of the conical abutment angled at 17° and 30°
The abutment can be connected easily by way of its pre-assembled transporter.
Take into account that various positions are possible for the placement of the abutment.
Screw in until you note an amount of resistance
To verify the correct insertion of the abutment into the implant it is advisable to take an X-ray control .
Withdraw the transporter manually and screw in at 35 Ncm using the dynamometric key JDTorque® or the surgical engine connected to the screw driver.

Closed tray impression for conical abutment
Place the impression copings on the conical abutments.
Inject impression material and take the impression.
Once the material is solid, remove the impression and take out the impression copings to attach the replicas and correctly reposition into the cast.



Open tray impression for conical abutment
Place the impression copings on the conical abutments.
Inject impression material around the impression copings and inside the impression tray.
Position the tray in the mouth and ensure that you see all the guide screws of the impression copings emerge.
Once the material is solid, unscrew the guide screws to withdraw the impression copings along with the impression.



Laboratory procedure
The laboratory receives a conical level impression and connects conical abutment replicas to the impression copings.
Pour and make a master model.
Affix the wax-up abutment for conical abutment on its replicas.
Enclose and make an infrastructure with the conventional techniques.
Cover the infrastructure with veneering material and send the finished prosthesis to the dentist.

Note: it is possible to make a provisional prosthesis on the conical abutments using the temporary cylinder for conical abutment.

Connection of the final prosthesis
Connect the prosthesis to the conical abutment with the prosthetic screws.
Starting from the central zone, adjust the other screws, alternating the left with the right side.
Screw in the prosthetic screw at 15 Ncm using the JDTorque® dynamometric key or the surgical engine connected to the screw driver.
Cover the access channels of the screws with cotton and seal them with a temporary filling material (composite for example).

GP Abutment for Conical Abutment

GP ABUTMENT FOR CONICAL ABUTMENT

Indications: cemented temporary restorations of multiple implants with Conical abutments.

After positioning the Conical Abutments (see pg. 30), place the GP abutments for Conical abutments and screw them.

Verify the direction and the length of the abutments in respect of the adjacent teeth/implants and the necessary occlusal space for the covering materials.
Unscrew the abutments, push them onto a conical abutment replica and modify them in function of the existing situation (do not reduce the abutment to less than 4mm in height).

Place the modified GP abutments and screw them with a torque of 20 Ncm using the JDTorque® dynamometric key or a surgical motor connected to the machine screwdriver.

A provisional restoration can be relined with acrylic resin directly in the mouth, refined, polished and cemented with temporary cement.

Wax up Abutment

WAX UP ABUTMENT ENGAGING

Indications: single unit screwed-in prosthesis

WAX UP ABUTMENT NON ENGAGING

Indications: multiple unit screwed-in prosthesis

The laboratory receives an implant level impression and places a replica of the implant.
Pour and make a master model.
Fix the wax-up abutment to the replica of the implant.
Reduce the height of the wax-up abutment according to clinical requirements (do not reduce the abutment to less than 4mm in height).
Proceed with wax-up, casting and veneering using conventional prosthetic protocols.

Gold and Cobalt-Chrome Abutment

GOLD/COBALT-CHROME ABUTMENT ENGAGING

Indications: single unit screwed-in prosthesis

GOLD/COBALT-CHROME ABUTMENT NON ENGAGING

Indications: multiple unit screwed-in prosthesis

The Gold/Cobalt-Chrome abutment fits directly in the replica of the abutment by way of a machined base supporting a plastic tube to facilitate wax-up and overcasting.

The laboratory receives an implant level impression and connects the implant replicas.
Pour and make a master model.
Fix the Gold/Cobalt-Chrome abutment to the replica of the implant.
Reduce the height of the wax-up part of the abutment according to the clinical requirements (do not reduce the abutment to less than 4mm in height).
Create a structure around the base of the abutment to guarantee optimal esthetics and support for the veneering material.
Overcast and place the veneering material directly on the fabricated abutment using conventional prosthetic protocols.

OVERDENTURE

Ball Abutment

Indications: overdentures with ball anchoring.

Emi Abutment

Indications: overdentures with emi anchoring.

Connection and impression

Screw in the ball abutment or the emi abutment to the head of the implant with the screwdriver.
To check the correct adaptation of the abutment to the implant it is advisable to take an X-ray control .
Take the impression in the conventional way. When the material is solid you can take out the cast and connect the ball abutment or the emi abutment replicas.

Laboratory procedures

The laboratory receives an impression at the abutment level with positioned replicas of the ball abutments or the emi abutment.
Pour and obtain a master model.
Block the abutment replicas and prepare an occlusal rim.
Send to the dentist for interocclusal records.
Prepare a teeth set up using the conventional technique.
Position the metal female pieces in the replicas of the ball abutments or the emi abutment so that they are parallel to each other with respect to the horizontal and vertical planes.
Block the space between the female piece and the replica.
Cure and finish the prosthesis using the conventional technique.
Send to dentist for delivery.

INSTRUMENTS AND ACCESSORIES

J DENTALCARE SURGICAL KIT AND JD PAD

The JDentalCare surgical kit contains all the surgical components and accessories in the JDentalCare system, and it is elaborated to optimise the use and access to the instruments as well as to guarantee an optimal sterilization process.
Instruments, normally positioned horizontally and affixed in rotary cylinders, can be raised simply by rotating the aforementioned cylinders. In front of each instrument, there is a description of the latter to ensure correct identification.
The surgical Kit is entirely made of anodised aluminum which makes it possible to endure multiple sterilization cycles without losing any of its properties.

The JDPAD kit has been designed and developed to have a box more compact and lighter.
It is manufactured in silicon material with the cover that contains the drill sequence in aluminum.

JD TORQUE®

The patented design dynamometric JDTorque® key has been designed and developed for surgical and prosthetic use. The instrument can be used as a dynamometric or fixed key.
The great mechanical resistance together with the high elasticity of the PEEK™ polymer allows the JDTorque® dynamometric key to take measurements up to 80Ncm, an absolute innovation for this type of instrument.
On the other hand this material is extremely light compared to metals and can be subjected to sterilization in autoclaves with temperatures up to 134ºC without altering its mechanical characteristics.
Design, functionality, practicality, and light weight make this instrument unique in its category.

Use of JDTorque® as dynamometric key

Use of JDTorque®as fixed key

PRODUCT CATALOGUE

Implants:

Ø 3,7

EV37080	JDEvolution® Ø 3.7 L 8
EV37100	JDEvolution® Ø 3.7 L 10
EV37115	JDEvolution® Ø 3.7 L 11.5
EV37130	JDEvolution® Ø 3.7 L 13
EV37150	JDEvolution® Ø 3.7 L 15

Ø 4,3

EV43060	JDEvolution® Ø 4.3 L 6
EV43080	JDEvolution® Ø 4.3 L 8
EV43100	JDEvolution® Ø 4.3 L 10
EV43115	JDEvolution® Ø 4.3 L 11.5
EV43130	JDEvolution® Ø 4.3 L 13
EV43150	JDEvolution® Ø 4.3 L 15

Ø 5,0

EV50060	JDEvolution® Ø 5.0 L 6
EV50080	JDEvolution® Ø 5.0 L 8
EV50100	JDEvolution® Ø 5.0 L 10
EV50115	JDEvolution® Ø 5.0 L 11.5
EV50130	JDEvolution® Ø 5.0 L 13
EV50150	JDEvolution® Ø 5.0 L 15

Ø 6,0

EV60060	JDEvolution® Ø 6.0 L 6
EV60080	JDEvolution® Ø 6.0 L 8
EV60100	JDEvolution® Ø 6.0 L 10
EV60115	JDEvolution® Ø 6.0 L 11.5
EV60130	JDEvolution® Ø 6.0 L 13
EV60150	JDEvolution® Ø 6.0 L 15

Drills:

JDPD	Precision drill Ø 1,5
JDDR20	Twist drill Ø 2.0
JDDR24	Twist drill Ø 2.4
JDDR28	Twist drill Ø 2.8
JDDR32	Twist drill Ø 3.2
JDDR36	Twist drill Ø 3.6
JDDR40	Twist drill Ø 4.0
JDDR44	Twist drill Ø 4.4
JDDR48	Twist drill Ø 4.8
JDDREXT	Drill extension

JDDR20C	Twist drill Ø 2.0
JDDR24C	Twist drill Ø 2.4
JDDR28C	Twist drill Ø 2.8
JDDR32C	Twist drill Ø 3.2
JDDR36C	Twist drill Ø 3.6
JDDR40C	Twist drill Ø 4.0
JDDR44C	Twist drill Ø 4.4
JDDR48C	Twist drill Ø 4.8

Drill stop:

JDDRST20	Drill stop Ø 2.0
JDDRST24	Drill stop Ø 2.4
JDDRST28	Drill stop Ø 2.8
JDDRST32	Drill stop Ø 3.2
JDDRST36	Drill stop Ø 3.6
JDDRST40	Drill stop Ø 4.0
JDDRST44	Drill stop Ø 4.4
JDDRST48	Drill stop Ø 4.8

JDDRST60	Drill stop L 6.0
JDDRST80	Drill stop L 8.0
JDDRST100	Drill stop L 10.0
JDDRST115	Drill stop L 11.5
JDDRST130	Drill stop L 13.0
JDDRST150	Drill stop L 15.0

Direction indicator:

JDDI	Direction indicator
JDDIS	Short direction indicator

Implant and prosthetic drivers:

EVID	Implant driver JDEvolution®
EVIDL	Implant driver long JDEvolution®
JDTWAPM	Manual prosthetic adapter
EVSDP20	Screwdriver machine prosthetic L 20
EVSDP25	Screwdriver machine prosthetic L 25
EVSDP30	Screwdriver machine prosthetic L 30
EVSDCA	Screwdriver machine conical abutment

Surgical Driver:

EVSUD	Surgical driver JDEvolution®

Torque wrench and compatible adapters:

JDTW	JDTorque® torque wrench
JDTWA	JDTorque® adapter surgical
JDTWAP	JDTorque® adapter prosthetic

Bone Mills:

JDBMNC	Bone mill and bone mill guide JDEvolution®
JDBM6C	Bone mill and bone mill guide Ø 6.0 JDEvolution®
JDBMGN	Bone mill guide JDEvolution®

Cover screw:

EVCS	Cover screw JDEvolution®

Healing Abutment:

EVHA43	Healing Abutment Ø 4.0 H 3.0 JDEvolution®
EVHA45	Healing Abutment Ø 4.0 H 5.0 JDEvolution®
EVHA47	Healing Abutment Ø 4.0 H 7.0 JDEvolution®
EVHA53	Healing Abutment Ø 5.0 H 3.0 JDEvolution®
EVHA55	Healing Abutment Ø 5.0 H 5.0 JDEvolution®
EVHA57	Healing Abutment Ø 5.0 H 7.0 JDEvolution®
EVHA63	Healing Abutment Ø 6.0 H 3.0 JDEvolution®
EVHA65	Healing Abutment Ø 6.0 H 5.0 JDEvolution®
EVHA67	Healing Abutment Ø 6.0 H 7.0 JDEvolution®
EVHA753	Healing Abutment Ø 7.5 H 3.0 JDEvolution®
EVHA755	Healing Abutment Ø 7.5 H 5.0 JDEvolution®
EVHA757	Healing Abutment Ø 7.5 H 7.0 JDEvolution®

Healing Abutment Bicomponents:

EVHB53	Healing Abutment Bicomponents Ø 5.0 H 3.0 JDEvolution®
EVHB55	Healing Abutment Bicomponents Ø 5.0 H 5.0 JDEvolution®
EVHB57	Healing Abutment Bicomponents Ø 5.0 H 7.0 JDEvolution®
EVHB63	Healing Abutment Bicomponents Ø 6.0 H 3.0 JDEvolution®
EVHB65	Healing Abutment Bicomponents Ø 6.0 H 5.0 JDEvolution®
EVHB67	Healing Abutment Bicomponents Ø 6.0 H 7.0 JDEvolution®

Impression copings:

OPEN TRAY

EVICOT4C	Impression coping open tray Ø 4.0 JDEvolution®
EVICOT5C	Impression coping open tray Ø 5.0 JDEvolution®
EVICOT6C	Impression coping open tray Ø 6.0 JDEvolution®
EVICOT75C	Impression coping open tray Ø 7.5 JDEvolution®
EVICOTNEC	Impression coping open tray non engaging JDEvolution®

CLOSED TRAY

EVICCT4C	Impression coping closed tray Ø 4.0 JDEvolution®
EVICCT5C	Impression coping closed tray Ø 5.0 JDEvolution®
EVICCT6C	Impression coping closed tray Ø 6.0 JDEvolution®

Immediate Temporary Abutment:

EVIT15C	Immediate Temporary Abutment JDEvolution®
EVITC	Healing cap

Temporary Abutment:

EVTAEC	Temporary Abutment engaging JDEvolution®
EVTANEC	Temporary Abutment non engaging JDEvolution®
EVTAEPC	Temporary Abutment engaging peek JDEvolution®

GP Abutment:

EVGPA40EC	Gp Abutment engaging Ø 4.0 JDEvolution®
EVGPAEC	Gp Abutment engaging Ø 5.0 JDEvolution®
EVGPA60EC	Gp Abutment engaging Ø 6.0 JDEvolution®

Straight Abutment:

EVNSA4520C	Straight Abutment Ø 4.5 H 2.0 JDEvolution®
EVNSA4540C	Straight Abutment Ø 4.5 H 4.0 JDEvolution®
EVNSA5020C	Straight Abutment Ø 5.0 H 2.0 JDEvolution®
EVNSA5040C	Straight Abutment Ø 5.0 H 4.0 JDEvolution®
EVNSA6020C	Straight Abutment Ø 6.0 H 2.0 JDEvolution®
EVNSA6040C	Straight Abutment Ø 6.0 H 4.0 JDEvolution®

Anatomic Abutment:

EVEA15	Anatomic Abutment H 1.5 JDEvolution®
EVEA30	Anatomic Abutment H 3.0 JDEvolution®

EV15A15N	15° Angulated Anatomic Abutment Ø 4.5 H 1.5 JDEvolution®
EV15A30N	15° Angulated Anatomic Abutment Ø 4.5 H 3.0 JDEvolution®

EV15A15	15° Angulated Anatomic Abutment Ø 5.5 H 1.5 JDEvolution®
EV15A30	15° Angulated Anatomic Abutment Ø 5.5 H 3.0 JDEvolution®

EV25A15	25° Angulated Anatomic Abutment Ø 5.5 H 1.5 JDEvolution®
EV25A30	25° Angulated Anatomic Abutment Ø 5.5 H 3.0 JDEvolution®

TiBase e ScanPost for Cerec Sirona:

EVTIBC	TiBase engaging JDEvolution®
EVTIBNEC	TiBase non engaging JDEvolution®
EVSCPC	ScanPost JDEvolution®

Prosthetic screw:

EVS	Abutment Screw JDEvolution®

Rapid Abutment:

EVRA15C	Rapid Abutment H 1.5 JDEvolution®
EVRA30C	Rapid Abutment H 3.0 JDEvolution®
EVRAHC	Rapid Abutment healing cap JDEvolution®
EVRAIC	Coping Rapid abutment JDEvolution®
EVRAAR	Abutment replica rapid abutment JDEvolution®

Zirconia Abutment:

EVZA15C	Zirconia Abutment H 1.5 JDEvolution®
EVZA30C	Zirconia Abutment H 3.0 JDEvolution®
EV15ZA15C	15° Zirconia Abutment H 1.5 JDEvolution®
EV15ZA30C	15° Zirconia Abutment H 3.0 JDEvolution®

Wax up Abutment:

EVWAEC	Wax-up Abutment engaging JDEvolution®
EVWANEC	Wax-up Abutment non engaging JDEvolution®

Gold Abutment:

EVGAEC	Gold Abutment engaging JDEvolution®
EVGANEC	Gold Abutment non engaging JDEvolution®

Cobalt-Chrome Abutment:

EVCCEC	Cobalt-Chrome Abutment engaging JDEvolution®
EVCCNEC	Cobalt-Chrome Abutment non engaging JDEvolution®

Conical Abutment:

EVCA15C	Straight Conical Abutment H 1.5 JDEvolution®
EVCA30C	Straight Conical Abutment H 3.0 JDEvolution®
EVCA1725C	17° angulated Conical Abutment H 2.5 JDEvolution®
EVCA1735C	17° angulated Conical Abutment H 3.5 JDEvolution®
EVCA3025C	30° angulated Conical Abutment H 2.5 JDEvolution®
EVCA3035C	30° angulated Conical Abutment H 3.5 JDEvolution®
EVCAPS	Prosthetic screw Conical Abutment
EVCASA	Screw for angulated Conical Abutment JDEvolution®
EVCAICOTC	Impression coping open tray Conical Abutment
EVCAICCTC	Impression coping closed tray Conical Abutment
EVCAHC	Healing cap Conical Abutment
EVCAGPANEC	GP for Conical Abutment non engaging
EVCATANEC	Temporary cylinder non engaging Conical Abutment
EVCAWANEC	Wax up cylinder Conical Abutment non engaging
EVCAAR	Abutment replica Conical Abutment

Interfaces:

70286C	Interface engaging for JDEvolution® implant
70550C	Interface non engaging for JDEvolution® implant
70287C	Interface non engaging for Conical Abutment

Ball Abutment:

EVBA15	Ball Abutment H 1.5 JDEvolution®
EVBA30	Ball Abutment H 3 JDEvolution®
EVBA50	Ball Abutment H 5 JDEvolution®
EVBAA	Ball Abutment replica
EVBAHC	Cap attachment housing and elastic retentive cap Ball Abutment
EVBAN	Elastic retentive cap Ball Abutment

Emi Abutment:

EVEMI15	Emi Abutment H 1.5 JDEvolution®
EVEMI30	Emi Abutment H 3.0 JDEvolution®
EVEMI50	Emi Abutment H 5.0 JDEvolution®
EVEMIHC	Cap attachment housing and elastic retentive cap Emi Abutment
EVEMIN	Elastic retentive cap standard Emi Abutment - Retention 1,2 Kg
EVEMIH	Cap attachment housing Emi Abutment
EVEMIIC	Impression coping Plastic for Emi Abutment
EVEMIICS	Impression coping Steel for Emi Abutment
EVEMINT	Elastic retentive cap white Emi Abutment - Retention 1,8 Kg
EVEMINY	Elastic retentive cap yellow Emi Abutment - Retention 0,6 Kg
EVEMINP	Elastic retentive cap purple Emi Abutment - Retention 2,5 Kg
EVEMINB	Elastic retentive cap for laboratory Emi Abutment
EVEMIA	Emi Abutment analog
EVEMIIT	Insertion Tool for Caps Emi Abutment
EVEMIET	Extractor Tool for Caps Emi Abutment

Implant replica:

EVAN	Implant replica JDEvolution®

Surgical kits:

EVSTRAYC	Surgical tray aluminum complete JDEvolution®
EVSTRAYR	Surgical tray aluminum complete with drill stops JDEvolution®
EVPS	JDPAD complete JDEvolution®
EVPC	JDPAD complete with drill stops JDEvolution®

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