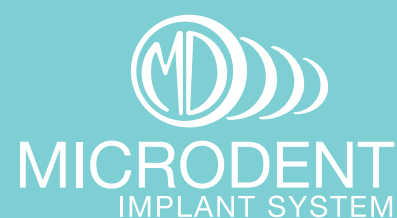

MICRODENT BONE REGENERATION

PRODUCT CATALOGUE

www.microdentsystem.com



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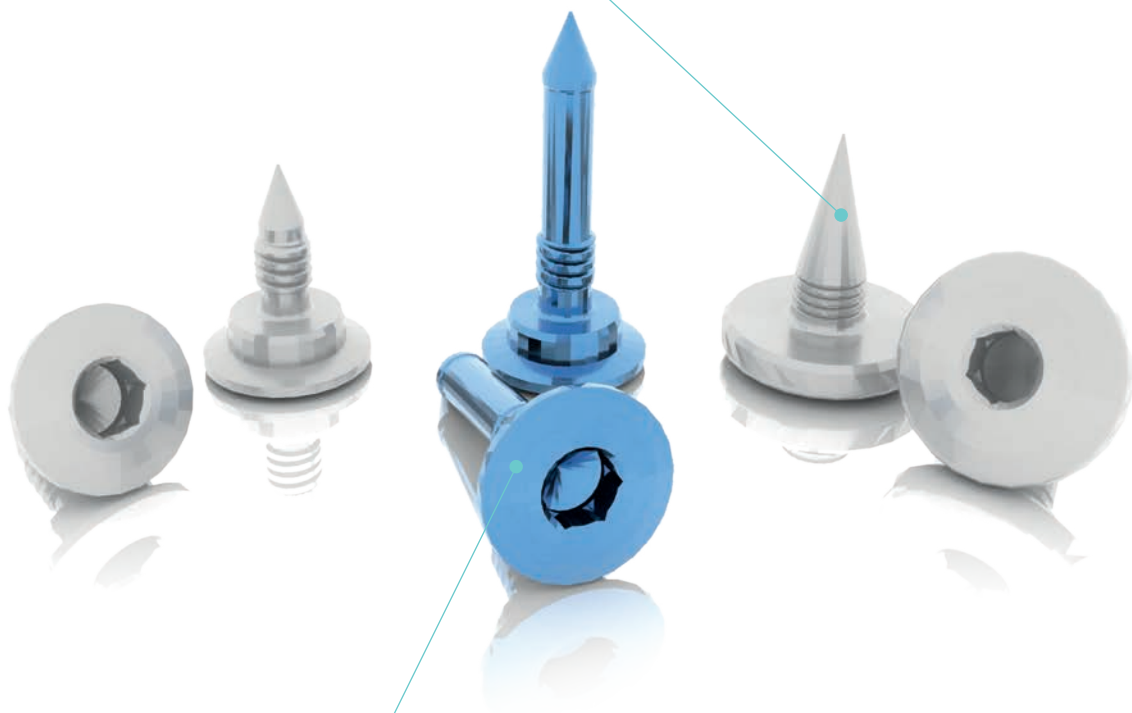
Biomaterials

MICRODENT BONE REGENERATION



FIXING TACKS SYSTEM

The tacks system designed by Dr. Pier Gallo solves many of the clinical shortcomings of existing products on the market.



Traditional Microdent Membrane fixing system with two models of tack, 3 mm and 5 mm.

The Microdent membrane fixing system offers a wide range of tacks, 2 models which are 3 mm long and another model which is 5 mm, all of them made of grade 5 titanium.

MICRODENT FIXING TACKS SYSTEM

MICRODENT FIXING TACKS SYSTEM

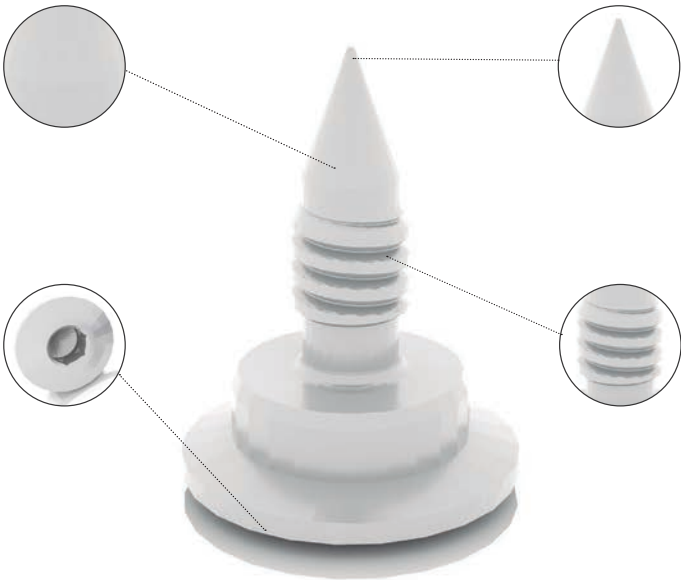
The Microdent Membrane fixing system consists of two models of tack, one which is 3 mm and one which is 5 mm, the latter anodized in blue to identify the difference in length.

The tacks are retained with the tip of the impactor, and inserted into the membrane with a firm hammer blow for penetration.

The tacks have a small internal hexagon of 0.90 mm for their removal, where the chosen screwdriver is applied.

Made of grade 5 titanium.

0.90 mm hexagon to fit a screwdriver for easy and simple removal.

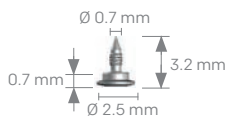


0.7 mm wide pin for easy insertion.

Threaded area to give greater stability in the cortical bone.

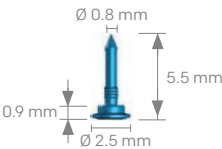
3 MM TACK

TA03



5 MM TACK

TA05



MEMBRANE FIXING KIT

MEMBRANE FIXING KIT

Surgical kit for membrane fixing with a removable inner container with capacity for 10 tacks of 3 mm and another 10 of 5 mm, to adapt to the needs of the clinician.



The Membrane Fixing Kit includes the following items:

KFM

- Straight impactor for tacks.
- Angled impactor for tacks.
- Hammer.
- Metallic tray.
- 10 tacks of 3 mm.
- 10 tacks of 5 mm (blue anodized).
- Screwdriver.



Removable tack container for greater ease of use.
Also available separately (Ref. COCV).

INSTRUMENTS FOR THE FIXING OF TACKS

STRAIGHT IMPACTOR FOR TACKS

Straight impactor made of stainless steel to apply the tacks directly on the membrane.

IMTA



ANGLED IMPACTOR FOR TACKS

Angled impactor made of stainless steel to apply the tacks directly on the membrane.

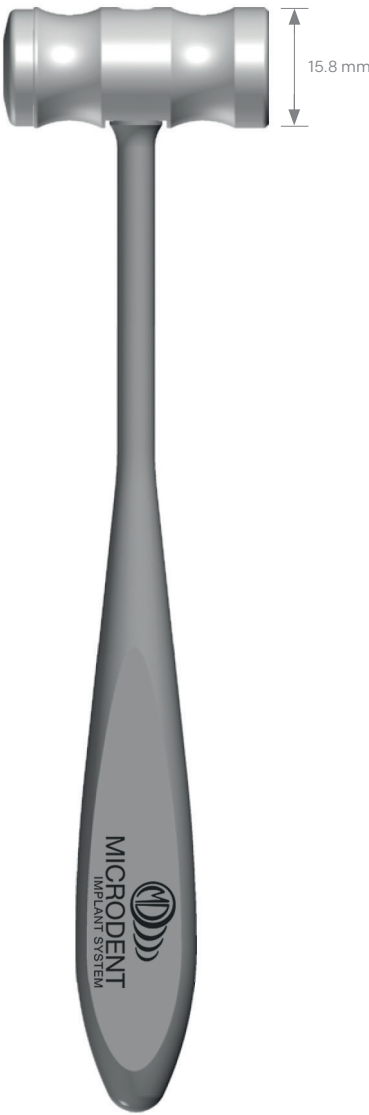
IATA



HAMMER

Instrument to hit directly on the impactor, straight or angled, and place the tacks. Double sided, one in stainless steel and the other in POM, for greater versatility.

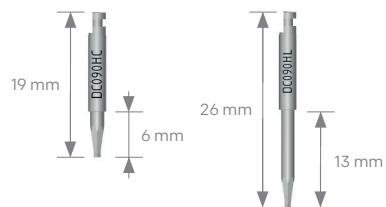
MTQP



CONTRA-ANGLE SCREWDRIVER

Hexagonal contra-angle screwdriver for the removal of the tacks.

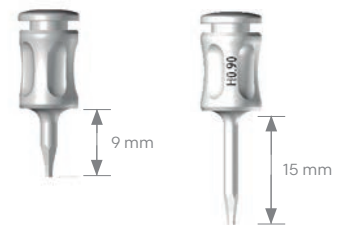
Type of tip	Short	Long
Hexagonal	DC090HC	DC090HL



MANUAL SCREWDRIVER

Hexagonal manual screwdriver for the removal of the tacks.

Type of tip	Short	Long
Hexagonal	MH090C	MH090L



FIXING TACKS SYSTEM by Pier Gallo

FIXING TACKS SYSTEM by PIER GALLO

The tack system designed in collaboration with Dr. Pier Gallo is used for the fixing of membranes, absorbable and non-absorbable, with the ultimate goal of avoiding the micro-mobility of the graft during the process of healing.

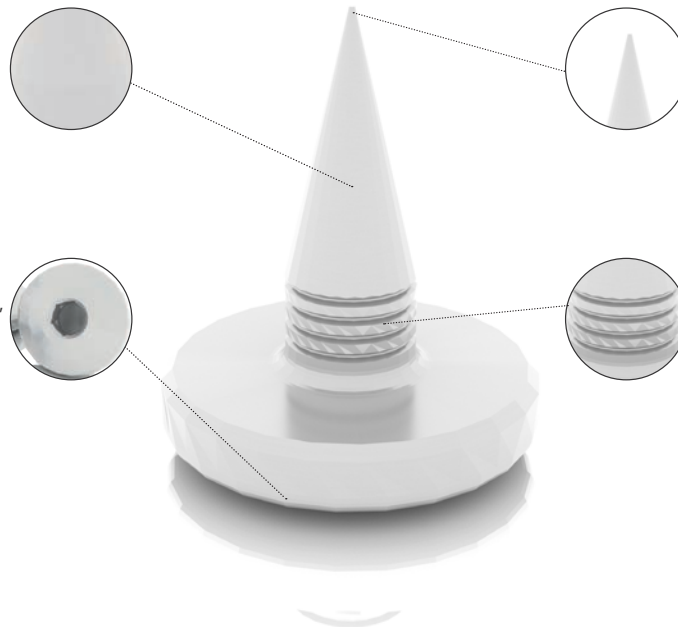
Its design allows an easy and simple use, so that with the first impact of the hammer the perforation of the cortical bone is ensured, as well as a fast and safe insertion that speeds up the surgery and provides a greater guarantee of regeneration.

The razor-sharp design of the tack tip ensures stability in the cortical bone, especially in hard-to-reach areas to guarantee maximum precision.

At its insertion, this tip gives way to a grooved area with a continuous thread that helps to stabilise the tack. The same thread makes it easy to remove the tack once the treatment is finished.

Made of grade 5 titanium.

Over-dimensioned head to be able to reduce greater angulation, in addition to better transmit the impact of the hammer.

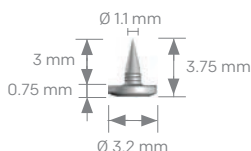


The extremely sharp tip will give us the perfect stability to be able to make a precise impact.

Grooves that provide cortical stability and robustness.

FIXING TACS 3 MM

TA3203



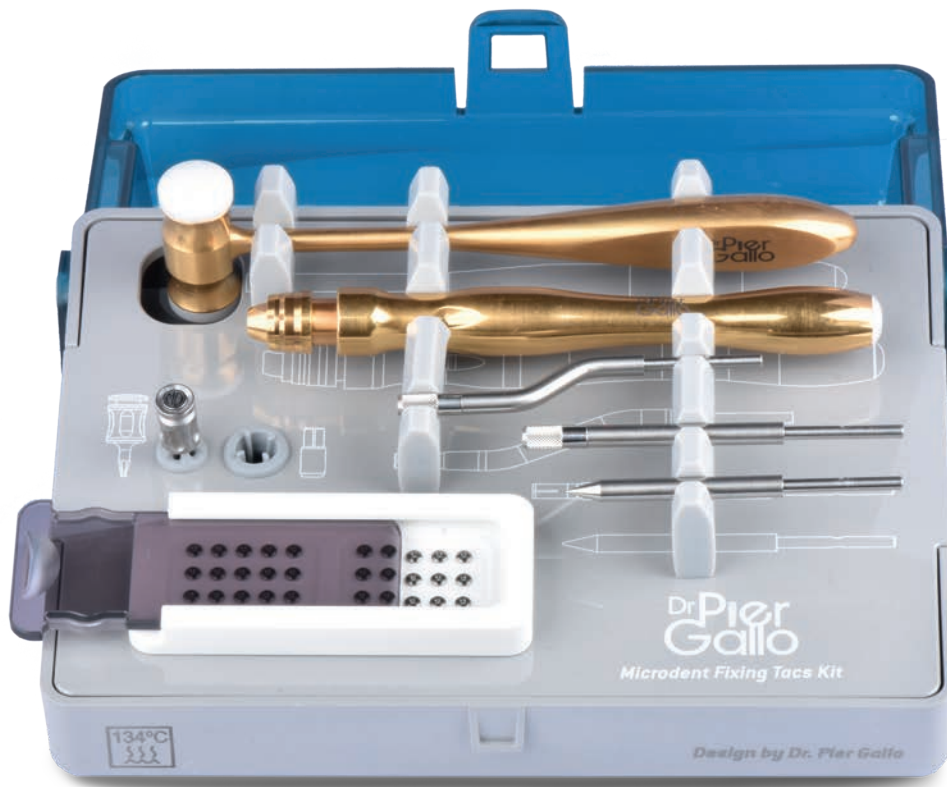
From clinical experience to the tack by

**Dr Pier
Gallo**

FIXING TACS KIT by PIER GALLO

FIXING TACS KIT by PIER GALLO

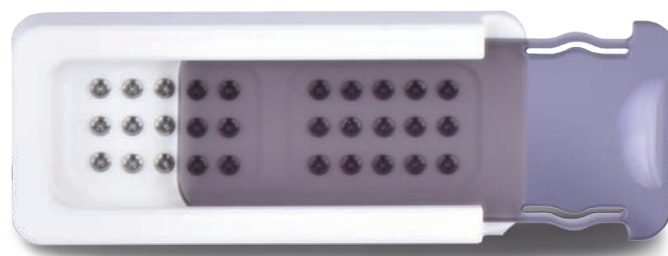
Designed in collaboration with Dr. Pier Gallo, the Microdent Fixing Tacs Kit consists of 6 tools that will make it easier than ever to put a tack in place. Configurable according to the number of units, it can hold up to 30 tacs.



The Fixing Tacs Kit by Pier Gallo includes the following elements:

KPG

- Straight tip for tacks.
- Angled tip for tacks.
- Punch type straight tip.
- Tip adapter.
- Hammer.
- 30 tacks of 3 mm.
- Screwdriver.



Removable tack container for greater ease of use.

INSTRUMENTS FOR FIXING TACKS PIER GALLO

STRAIGHT IMPACTOR FOR TACKS

Impactor handle with straight interchangeable tips made of stainless steel, gold plated.

IMPG



HAMMER

Straight hammer made of stainless steel, gold plated. With two sides of POM.

MTQPPG



STRAIGHT TIP

Interchangeable straight tip for the application of the tacks on the membranes.

ITA02PI



ANGLED TIP

Interchangeable curved tip for the application of the tacks on the membranes.

ITA03PI



STEEL PUNCH

Stainless steel punch used to prepare the bed.

ITA09PI



STEEL TIP CAP

To load the tacks and, if necessary, to finish inserting them.

ITA04PI



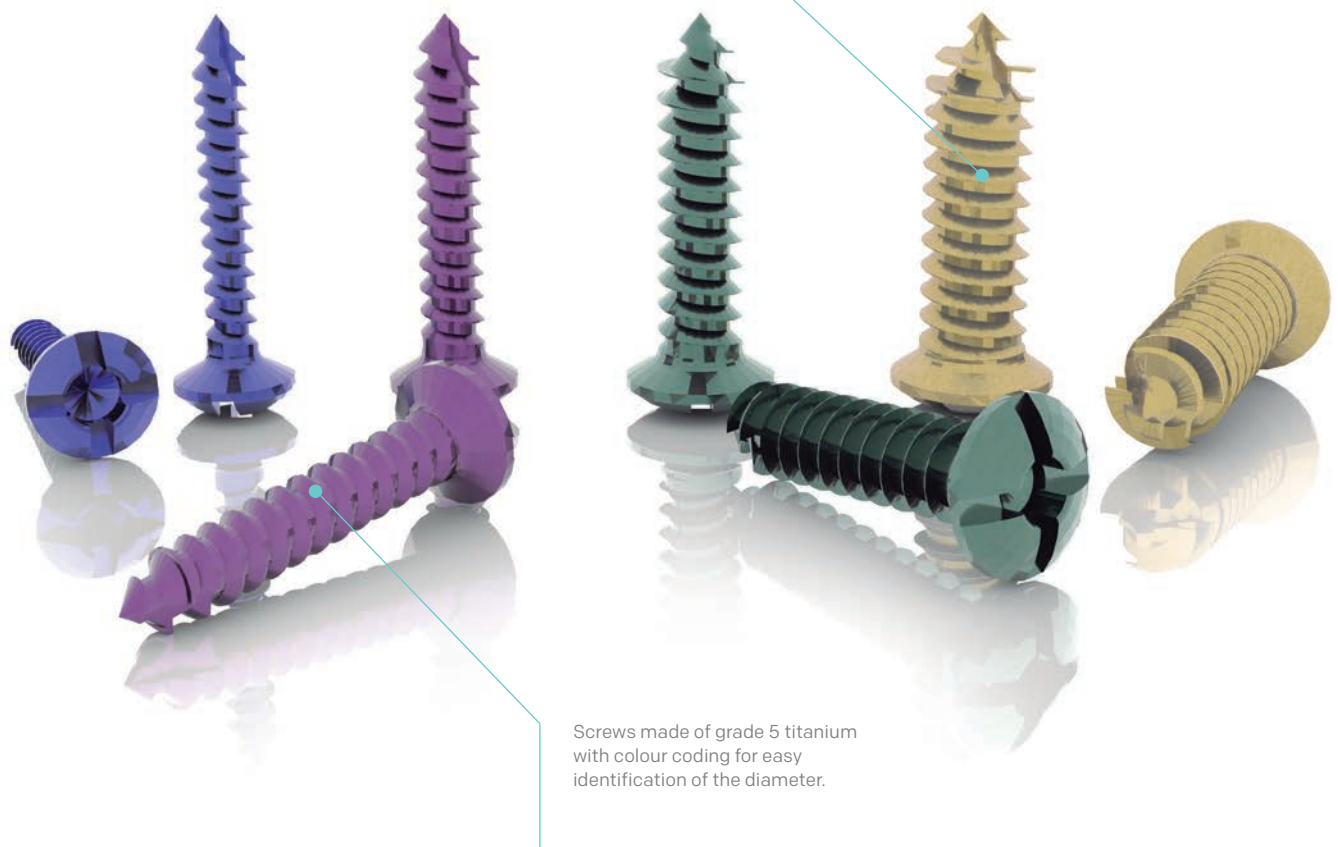
MANUAL SCREWDRIVER

For the removal of the tacks.

MH090C



FIXING TACKS FIXING SYSTEM



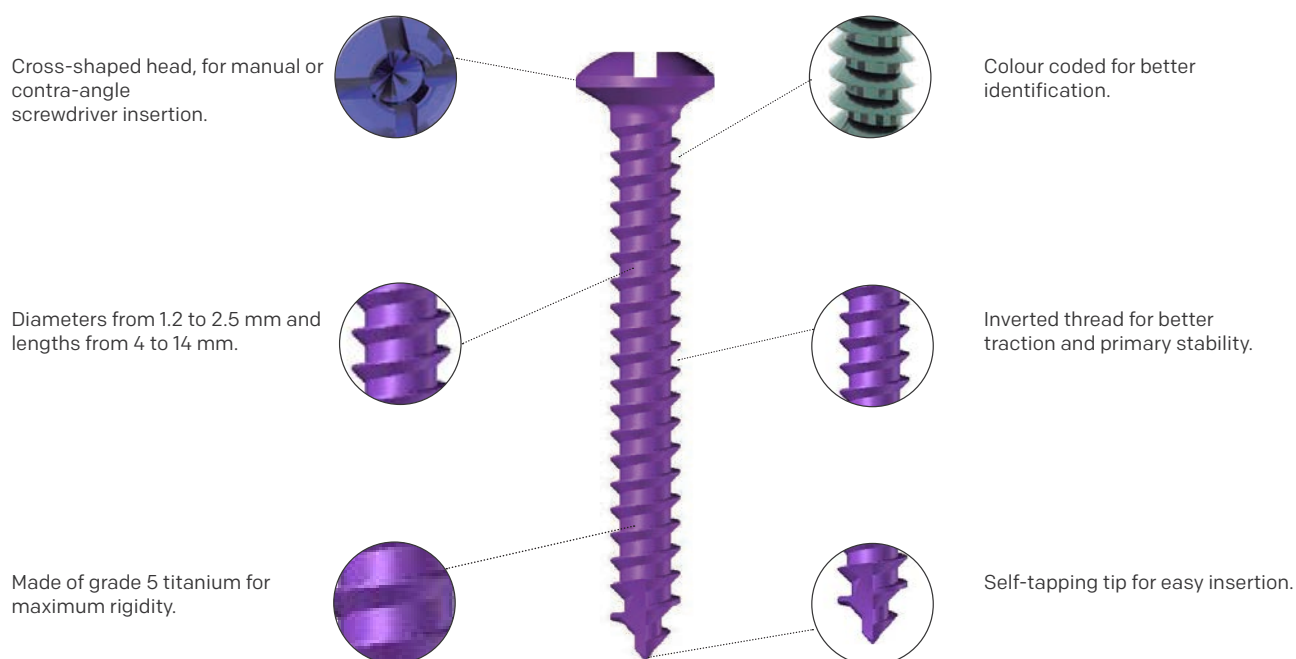
The Microdent osteosynthesis screw system has 4 different diameters that differ in colour and head size and are available in lengths from 4 to 14 millimetres. They are made of grade 5 titanium.

FIXING TACKS FIXING SYSTEM

MICRODENT OSTEOSYNTHESIS SCREW FIXING SYSTEM

The Microdent osteosynthesis screw fixing system with cortical anchorage is used in maxillofacial surgery for the fixing of plates, block grafts as well as in the occlusive barrier technique designed in cad-cam. They are made of grade 5 titanium and its aggressive thread allows a touch that facilitates the knowledge of the stability at every moment of the surgery. The cross-shaped head allows it to be placed with manual and contra-angle screwdrivers.

To facilitate their differentiation, they have been anodized in colour, which helps to identify their dual use in the occlusive barrier technique by Osteophoenix.

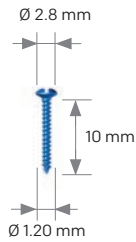


OSTEOSYNTHESIS SCREWS FIXING SYSTEM

OSTEOSYNTHESIS SCREW 1.20 mm

The 1.20 mm Microdent osteosynthesis screw is the blue-coloured screw, indicated for the bone regeneration technique. The 4 mm length is particularly useful for the use of the titanium foil, always depending on the clinical case.

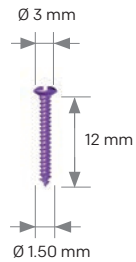
Ø Diameter	h=4	h=6	h=8	h=10	h=11	h=12	h=14
1.20	TO1204	TO1206	TO1208	TO1210	TO1211	TO1212	TO1214



OSTEOSYNTHESIS SCREW 1.50 mm

The 1.50 mm Microdent osteosynthesis screw is the lilac-coloured screw, indicated for the bone regeneration technique, the most recommended lengths for the placement of occlusive barriers being 6 mm and 8 mm.

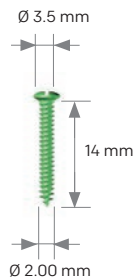
Ø Diameter	h=4	h=6	h=8	h=10	h=11	h=12	h=14
1.50	TO1504	TO1506	TO1508	TO1510	TO1511	TO1512	TO1514



OSTEOSYNTHESIS SCREW 2.00 mm

The 2.00 mm Microdent osteosynthesis screw is the green-coloured screw, indicated for the bone regeneration technique, as well as recommended as a 1.50 mm rescue screw in lengths of 6 mm and 8 mm for the placement of occlusive barriers.

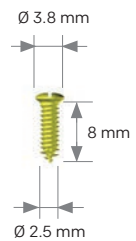
Ø Diameter	h=4	h=6	h=8	h=10	h=11	h=12	h=14
2.00	TO2004	TO2006	TO2008	TO2010	TO2011	TO2012	TO2014



OSTEOSYNTHESIS SCREW 2.50 mm

The 2.50 mm Microdent osteosynthesis screw is the yellow-coloured screw, indicated for the bone regeneration technique, and recommended as a rescue screw in extreme cases where the maxillary cortical bone is very thin and a larger diameter is required.

Ø Diameter	h=4	h=6	h=8	h=10	h=11	h=12	h=14
2.50	TO2504	TO2506	TO2508	TO2510	TO2511	TO2512	TO2514



SCREW FIXING KIT

SCREW FIXING KIT

The screw fixing kit is prepared to contain all the necessary tools for the placement of the screws manually and with a contra-angle screwdriver. Ideal for the placement of both bone blocks and occlusive barriers. Removable internal screw container includes 4 different diameters conveniently separated for ease of use.



The Screw Fixing Kit includes the following items:

KFT

- Manual screwdriver handle.
- Manual screwdriver.
- Contra-angle screwdriver.
- Countersink drill.
- Drills of Ø 1.00 mm, Ø 1.30 mm, Ø 1.60 mm and Ø 2.10 mm.
- Container for screws of Ø 1.20 mm, Ø 1.50 mm, Ø 2.00 mm and Ø 2.50 mm with lengths from 4 to 14 mm.



Removable screw container for greater ease of use.

INSTRUMENTS FOR THE FIXING OF OSTEOSYNTHESIS SCREWS

MANUAL SCREWDRIVER HANDLE

Handle for inserting the screwdrivers necessary for the placement of the osteosynthesis screws.

TODTM



MANUAL SCREWDRIVER

Screwdriver made of stainless steel with cross head for easy handling of the osteosynthesis screws.

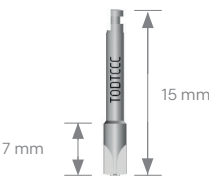
TODTCM



CONTRA-ANGLE SCREWDRIVER

Motor screwdriver made of stainless steel with cross head for easy handling of the osteosynthesis screws.

TODTCCC



DRILL Ø 1.00 mm

Drill for placement of osteosynthesis screws of Ø 1.20 mm.

F100C



DRILL Ø 1.30 mm

Drill for placement of osteosynthesis screws of Ø 1.50 mm.

F1312



DRILL Ø 1.60 mm

Drill for placement of osteosynthesis screws of Ø 2.00 mm.

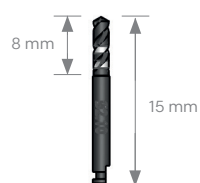
F1614



DRILL Ø 2.10mm

Drill that allows the passage of the screw through the block to fix it by means of the thread to the bone.

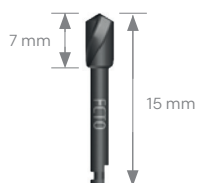
F2108



COUNTERSINK

Stainless steel countersink drill for screw head seating.

FCT0



CORTICAL-FIX INTERNAL SINUS LIFT SYSTEM



Sinus lift system developed and patented by Microdent, designed for atraumatic and vertical elevations of the Schneider Membrane.

CORTICAL-FIX INTERNAL SINUS LIFT SYSTEM

MICRODENT CORTICAL-FIX SYSTEM

The Cortical-Fix Bone Regeneration System is a device for oral surgery developed and patented by Microdent, intended to increase by compaction in a slow and controlled way the second cortical bone of the subantral area of the sinus.

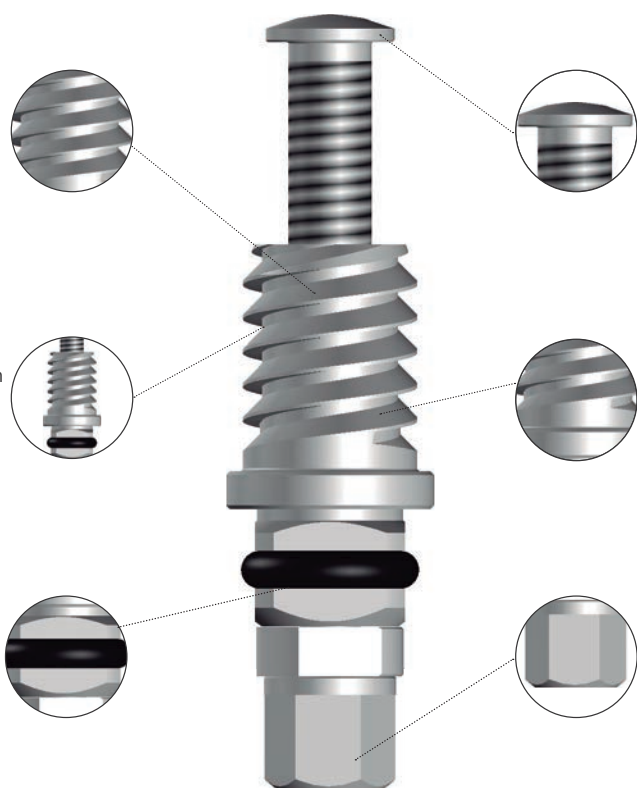
With the help of the device, the insertion of longer implants is achieved and consequently the conditions of stability, security and osseointegration are improved in this area where bone quality is often precarious.

The original design of the Cortical-Fix allows very simple functionality and has a low traumatic incidence, since the fixation of the device in the bone is self-tapping and follows the same surgical protocol as if it were an implant. Furthermore, once the activation of the plunger has been completed, the body of the Cortical-Fix is removed from the socket to which it is attached and replaced by a definitive implant of larger diameter, with the appropriate dimensions for excellent primary retention.

Aggressive thread for excellent primary stability in type III and IV bones.

For implant placement starting from 4.00 mm diameter.

Square connection for contra-angle (LC44), manual extra oral (LLEO) and ratchet spanners (LD1).



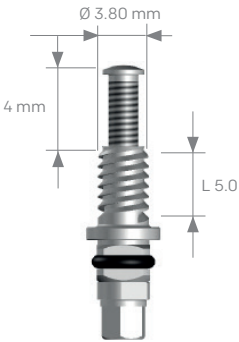
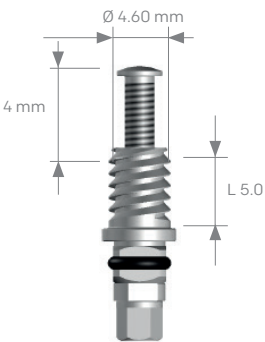
Plunger which is used to elevate the second subantral cortical bone of the sinus atraumatically.

Made of stainless steel resistant to prolonged use, to guarantee its functionality.

Adjustable plunger activation hexagon that rises smoothly and easily.

CORTICAL-FIX INTERNAL SINUS LIFT SYSTEM

CORTICAL-FIX

CF42C	CF50C
	
<p>Device for the placement of implants of Ø 4.20 mm and with lengths of between 6 and 10 mm.</p> <p>The prior drilling for this model must not exceed a diameter of 2.80 mm.</p>	<p>Device for the placement of implants of Ø 5.00 mm and with lengths of between 6 and 10 mm.</p> <p>The prior drilling for this model must not exceed a diameter of 3.20 mm.</p>



Made of surgical stainless steel.

When inserting the Cortical-Fix, make sure that the adjustable plunger is fully deactivated (anti-clockwise).

CORTICAL-FIX SURGICAL KIT

CORTICAL-FIX KIT

The Cortical-Fix Surgical Kit, now with a renewed and improved design that includes interchangeable stops to facilitate drilling prior to sinus lift, consists of the necessary material to perform the vertical crestal lift technique in an easy and predictable way.







The Cortical-Fix Surgical Kit includes the following items:

KCF

- Cortical Drill.
- Drill with stop Ø 2.90 mm.
- Drill with stop Ø 3.20 mm.
- Manual drill Ø 2.80 mm
- Manual drill Ø 3.20 mm
- Spanners to operate the device.
- Extension.
- Cortical-Fix disassembly spanner.
- Compactor implants 4.20 mm.
- Compactor implants 5.00 mm.
- Cortical-Fix 4.20 mm.
- Cortical-Fix 5.00 mm.
- Metallic tray.
- Handle

CORTICAL-FIX INSTRUMENTS

INTERCHANGEABLE DRILL STOPS

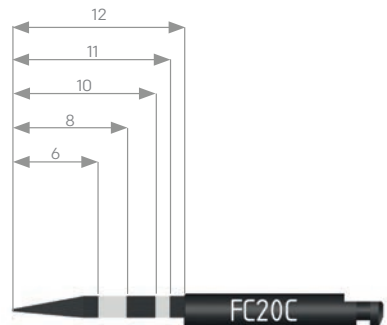
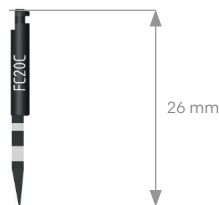
Ø Drills	Short	Colour
2.00	FTI200C	
2.90	FTI290C	
3.20	FTI320C	
3.80	FTI380C	



LANCE DRILL

Drill that allows the cutting of the cortical bone

FC20C



All Microdent drills are delivered with a recommended cleaning and sterilisation protocol.

SHORT AND LONG SPANNERS EXTENSION FOR PLUNGER CONTROL AND ADVANCE

CF06C



CF06L

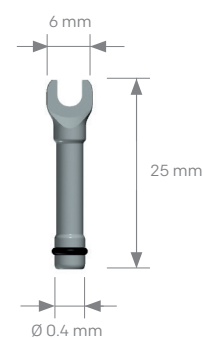


ACL44



CORTICAL-FIX DISASSEMBLY SPANNER

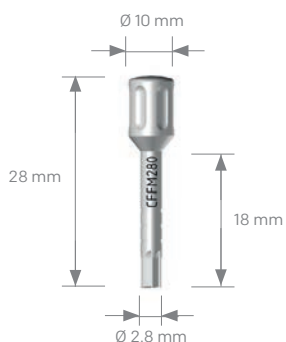
CF07



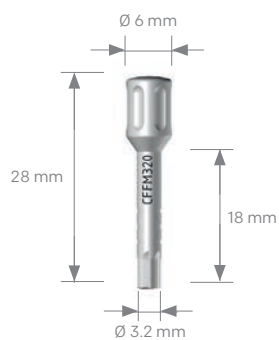
MANUAL DRILLS FOR THE PRE-FIXING OF THE DEVICE

Suitable for removing the remaining bone from the socket that cannot be removed by the cortical drill tip.

CFFM280



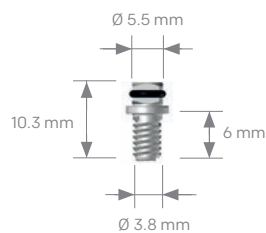
CFFM320



CORTICAL-FIX THREADFORMER

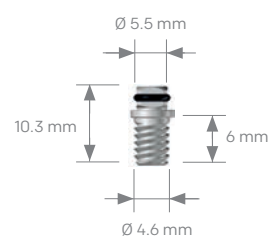
Intermediate bone compactor (4.20mm).

CF42R



Intermediate bone compactor (5.00 mm).

CF50R



CLINICAL CONSIDERATIONS

The Cortical-Fix instrument does not have the same dimensions as the implant and therefore requires a different surgical protocol for the preparation of the implant socket. The following surgical protocol must be particularised according to the patient's bone conditions.

Prior to the approach of the protocol for the use of the Cortical-Fix system, we must have the maximum information about the morphology and dimensions of the subantral area.

The technique described below can be complemented, if required, with the use of autologous bone graft, biomaterials of animal origin or synthetic materials.

1. Opening of the flap for access to the bone support.
2. Stitching with the cortical drill (maximum depth 3.0 mm).
3. Optionally, 1.80 diameter drilling can be done (with a drill preferably with a stop) controlling the precise depth until it meets the strength and hardness of the second cortical bone. Very slow rotation speed, max. 300-400 rpm.
4. Drilling with final drill with stop.

Maximum diameter of 2.80 mm for the fixing of a 4.20 mm implant. Maximum diameter of 3.20 mm for the fixing of a 5.00 mm implant.

IMPORTANT

The drilling sequence must be carried out with extreme caution, noting the change in density and the encounter with the hardness of the second cortical bone

Rotation speed, between 200-300 rpm.

5. Manual drilling.

Manual drills are very useful for removing the remaining bone from the socket that cannot be removed by the cortical drill tip.

6. Passage of the bone compactor.

By using the compactor we can harden and compact the bone in an area of poor bone quality before the introduction of the Cortical-Fix.

IMPORTANT

Press the compactor into the cavity to shape the thread until the previously set drilling depth is reached.

It is important not to exceed the required depth with the compactor, as there is a risk of destroying the thread in the cavity and consequently destroying the retentive capacity of the body of the device.

7. Fixing the Cortical-Fix.

The body must be threaded to the maximum stop for good retention and must be prevented from backing out when the plunger shaft is activated.

IMPORTANT

Fix the body of the device in the jaw when the plunger is in the non-activated position.

8. The plunger must be operated slowly to ensure the displacement and elevation of the sinus wall by the pressure exerted, avoiding bone fracture, until the appropriate height is achieved.

9. Once elevation has been achieved, the Cortical-Fix device must be completely unscrewed from the area.

10. Insertion of the implant of greater diameter and length, according to the elevation achieved, and suture of the soft tissues.

CLINICAL PROCEDURE AND IN VITRO PRACTICE

CLINICAL PROCEDURE



Desperiostization and pre-drilling.



Placing the Cortical-Fix.



Activating the Cortical-Fix.



Periapical status where we check the elevation.



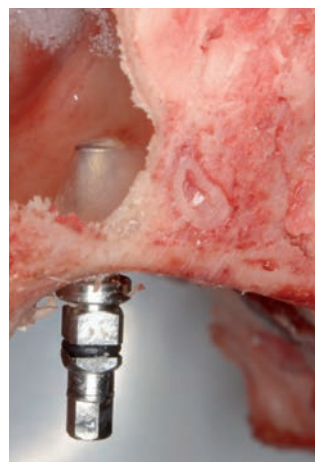
We remove Cortical-Fix and place the implants.



Suture.

IN VITRO PRACTICE

Practice performed on animal head, where the elevation of the membrane can be perfectly appreciated.



CLINICAL CASES

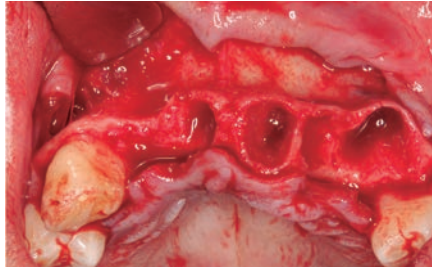
MICRODENT BONE REGENERATION

CLINICAL CASE No.1

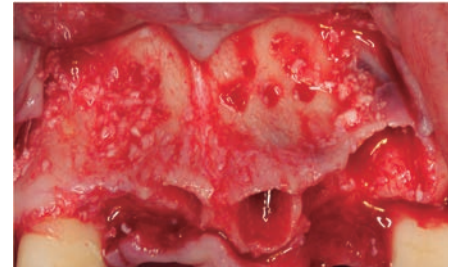
Clinical photos courtesy of **Dr. Holmes Ortega Mejía**



24 year old patient with absence of 1.2 and grade III mobility in teeth 1.1, 1.2, 2.1 and 2.2.



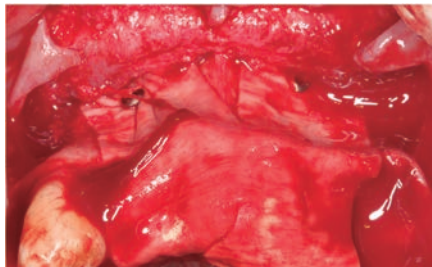
A full-thickness flap and extraction of the teeth is performed with mobility grade III.



The vestibular plate is drilled.



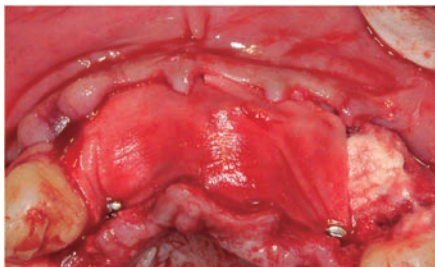
Microdent membrane fixing kit.



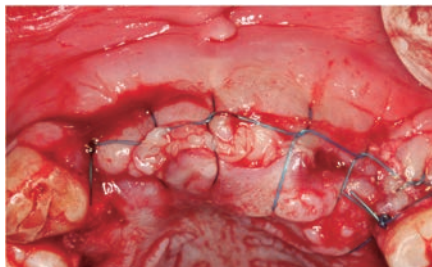
Placing a membrane Evolution fastened with Microdent tacks.



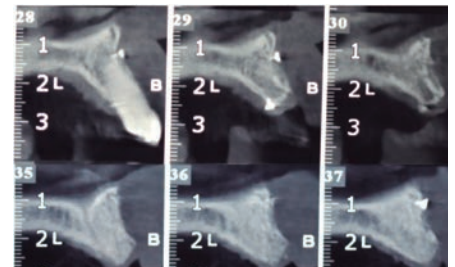
Apatos bone is placed with plasma rich in growth factors (PRGF).



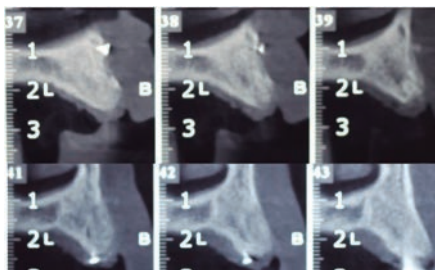
Two tacks are inserted per palatine to fix the graft.



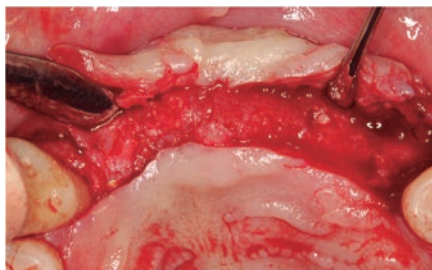
Suture with monofilament 4/0.



CT scan at 4 months.



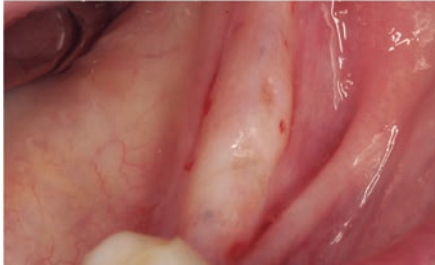
CT scan at 4 months.



A significant improvement in bone volume is observed at 5 months.

CLINICAL CASE No.2

Clinical photos courtesy of **Dr. Holmes Ortega Mejía**



47 years old patient, edentulous 20 years ago.



Lingual ridge incision.



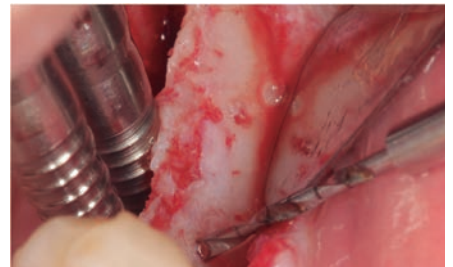
Crest with a thickness of 2.00 mm.



Longitudinal corticotomy.



Microdent expander sequence.



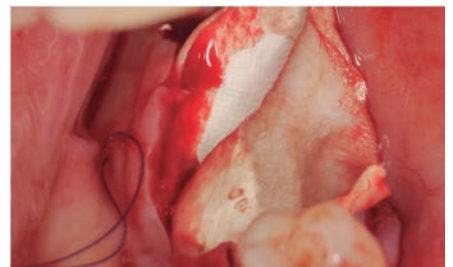
After expansion, the vestibular plate is drilled.



Placement of 1.20 mm Microdent osteosynthesis screws (blue colour).



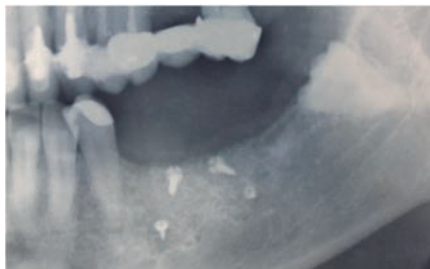
A fracture is observed in the lingual plate and two osteosynthesis screws are placed that serve to maintain the gained space.



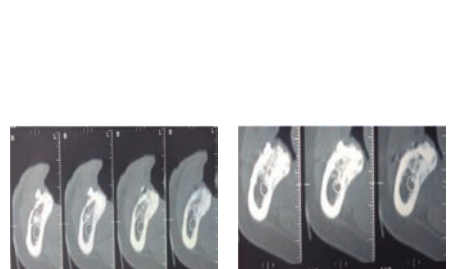
A membrane held in place by lingual stitches is placed.



It is filled with Apatos bone and fixed with Microdent tacks.



In the orthopantomography, 2 osteosynthesis screws and two Microdent brand tacks were observed.

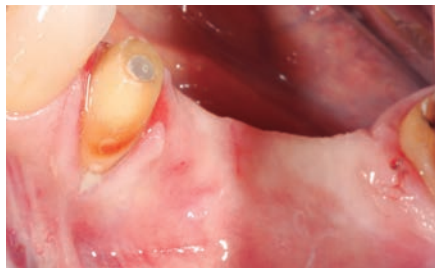


In the cuts it is possible to see the modification of bone volume.

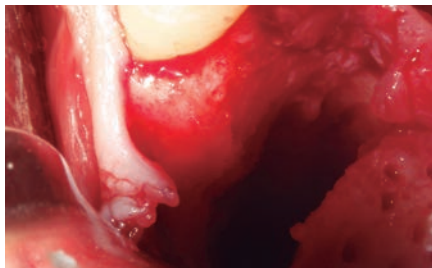
CLINICAL CASE No.3

Clinical photos courtesy of **Dr. Antonio Murillo Rodríguez**

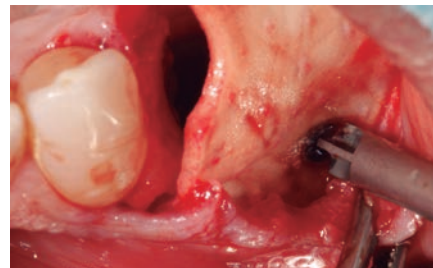
A female patient, with no medical history of interest, attends the clinic for replacement of absences in the third quadrant. Clinical and radiological examination is performed. We observed bone loss at 3.3, which will need to be regenerated prior to implant placement.



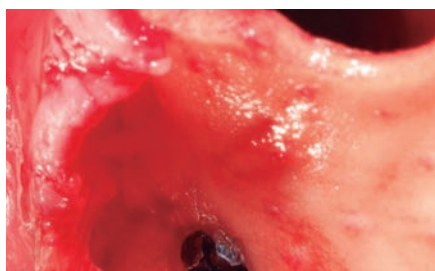
Initial appearance of the case.



Bone defect in zone 3.4. It is necessary to previously regenerate the area to proceed with the subsequent placement of the implant in 3D position.



A membrane fixed apically by means of osteosynthesis screws is placed. We can observe its fixation to the bone by means of the stem.



Detail of the screw once it has been placed in its correct position.



Detail of the membrane once in place



The flap is sutured with monofilament 5/0.

CLINICAL CASE No.4

Clinical photos courtesy of **Dr. Holmes Ortega Mejía**



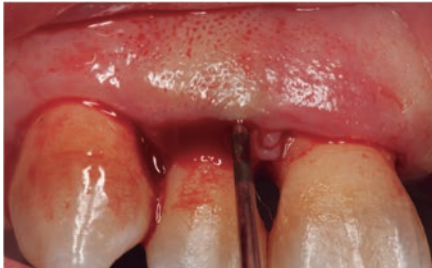
47 years old patient, mobility in the 3 upper incisors and absence of 21. Poor hygiene and presence of plaque 15 days after curettage.



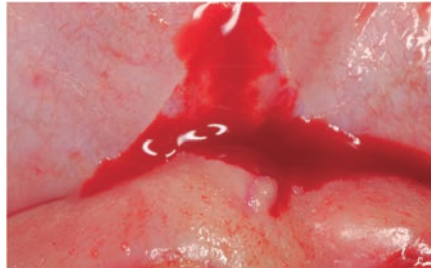
Low labial frenulum.



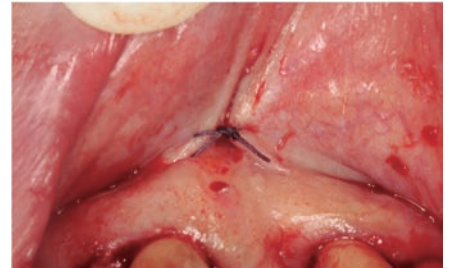
The labial frenulum can have an influence on the regeneration process.



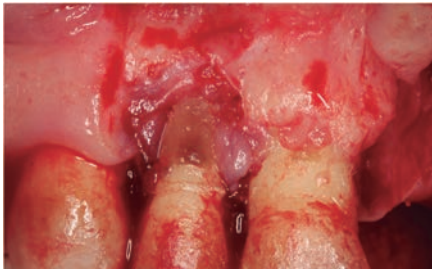
Periodontal probing of 9.00 mm.



Cutting of the superficial labial frenulum.



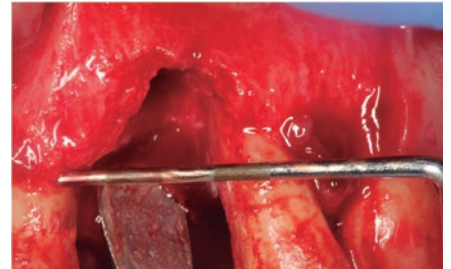
Suture of the lower labial frenulum.



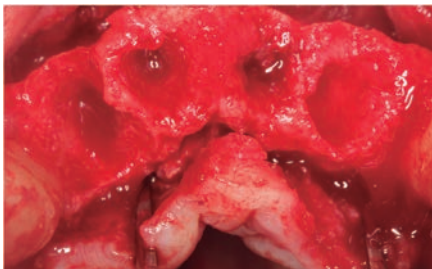
Full-thickness flap, granulation tissue can be seen.



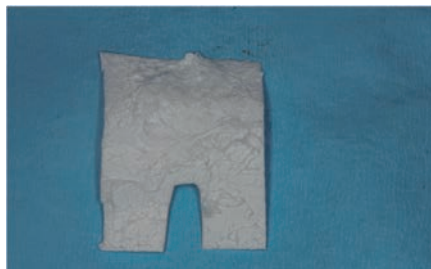
Extraction of the lateral 1.2 and cleaning of the granulation tissue.



Bone defect 9.00 mm wide and 6.00 mm high.



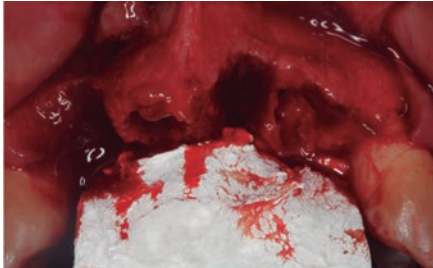
Extraction of teeth 1.1 - 2.2 and cleaning of the granulation tissue.



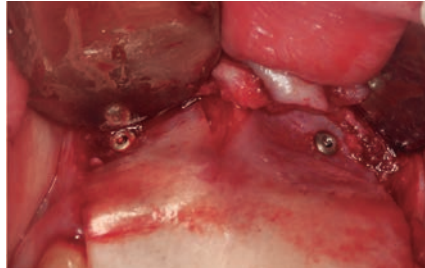
Cutting of the Evolution membrane for lateral access to the nasal palatine nerve.



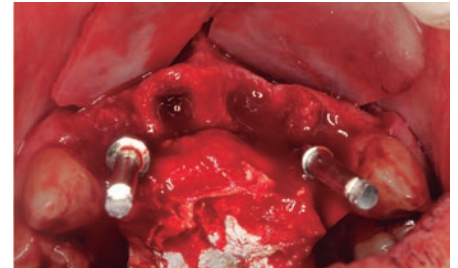
Mattress stitches to pull the membrane.



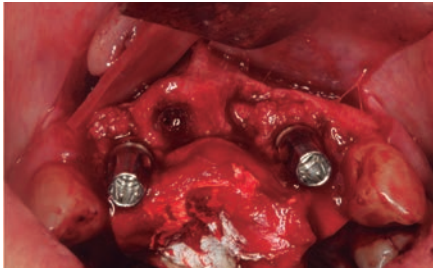
Laying of the Evolution membrane.



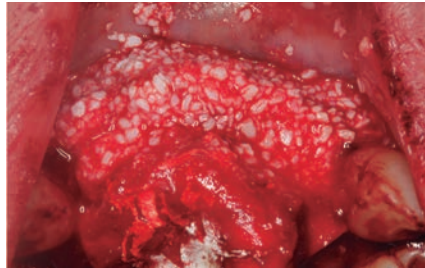
Placement of the corticalised (soft) membrane fixed with Microdent tacks.



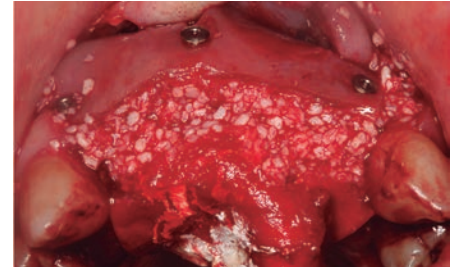
Biological drilling.



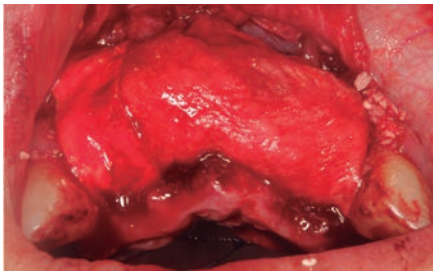
Placement of Ektos implants of Ø 4x12 mm.



Bone regeneration with Apatos bone.



Fixing of the crestal membrane with Microdent tacks.



Membrane overlap Evolution and labial fixing with Microdent tacks



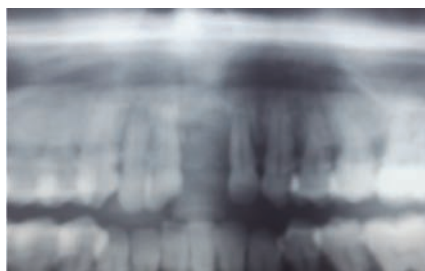
Simple stitches and containment stitches with polyglycolic acid suture.



The incisions are protected with Periacryl, cyanoacrylate-based adhesive, to reinforce sutures and protect soft tissues.



Cuts showing the transverse bone defect involving the labial and palatal plate.



Orthopantomography showing localized periodontal disease.

CLINICAL CASE No.5

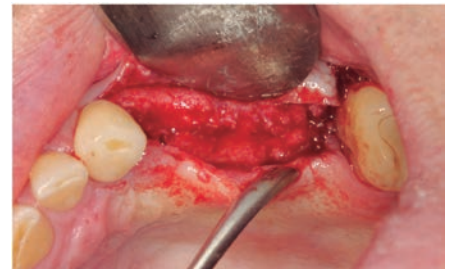
Clinical photos courtesy of **Dr. Holmes Ortega Mejía**



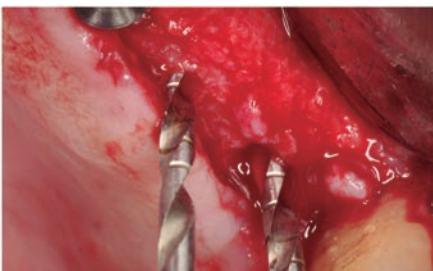
Note the pneumatisation of the maxillary sinus in the second quadrant.



Anesthesia is performed at crestal level, good quality of keratinised gingiva can be observed.



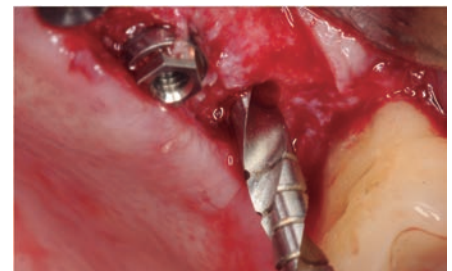
Full-thickness incision, slightly palatalised.



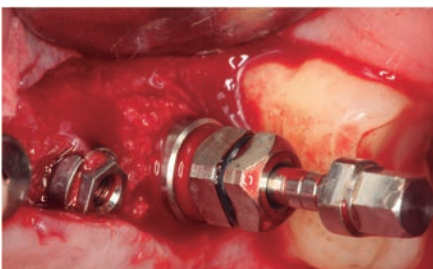
Once the M4210 implant is in place, we proceed to drill the implant bed to place the implants in 2.5 and 2.6.



In 2.6 we drill the bone cortical with a lance-shaped drill. With the 1.8 drill we drill 1 mm before the floor of the sinus and perform X-ray control.



Then we introduce the Ø 2.80 mm drill at a depth of 4 mm and finally the Ø 3.20 mm drill at a depth of 2 mm.



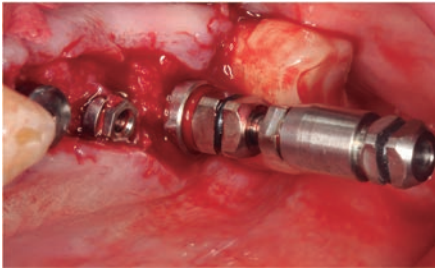
The Cortical-Fix is inserted with the plunger open (deactivated).



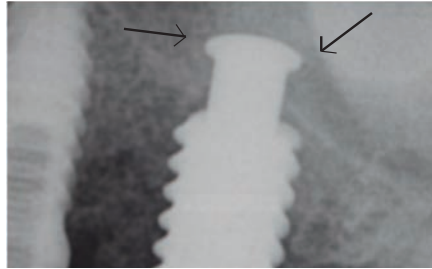
The adapter is placed on the Cortical-Fix and activated by turning it slowly clockwise until it stops. Internally it is functioning.



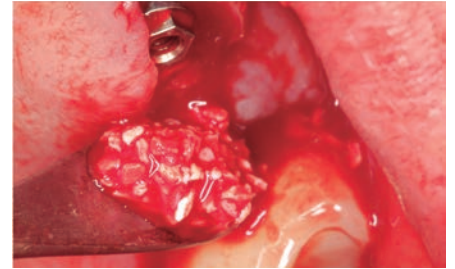
X-ray control of the position of the Cortical-Fix in contact with the floor of the maxillary sinus.



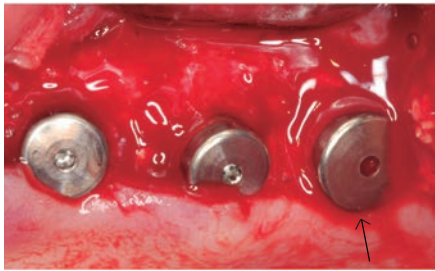
The plunger of the Cortical-Fix is opened, thus raising the floor of the maxillary sinus.



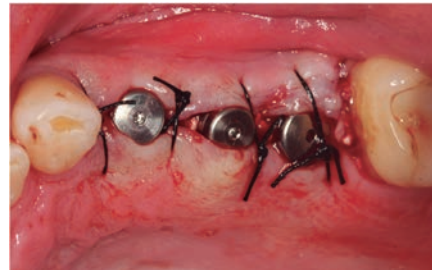
X-ray control of the Cortical-Fix, showing how the plunger has raised the maxillary sinus membrane.



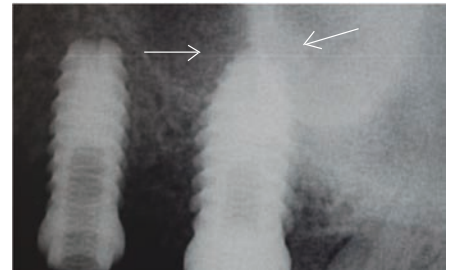
Placement of MP3 bone graft (prehydrated granules and collagen gel) in the bed left by the Cortical-Fix.



Microdent Implant Placement
Ø M-5010 wide platform.



Suture with braided silk.



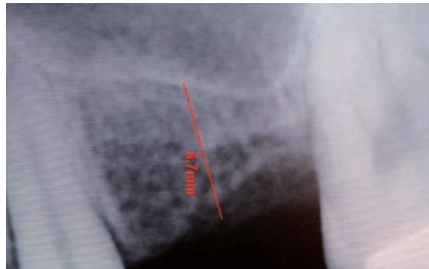
X-ray control of the implant showing the bone graft.

CLINICAL CASE No.6

Clinical photos courtesy of **Dr. Holmes Ortega Mejía**



32 year old female patient who had her 2.6 extracted. 16 months later she decides to have an implant to recover the tooth.



Radiographically there is a pneumatization of the sinus in its middle part with 6.7 mm. It was decided to place a 5.0 x 10 mm Microdent implant.



A crestal incision is made and we continue drilling with the cortical drill.



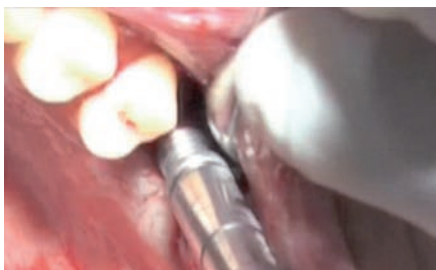
We continue the protocol with the optional pilot drill (Ø 1.80 mm) drilling 1 mm before the floor of the sinus.



X-ray control in which we check the depth of the first drilling cut at 5.5 mm.



We drill the holes in a progressive manner: with the Ø 2.8 mm drill we deepen 2 mm and 1 mm with the drill Ø 3.2 mm.



We place the Cortical-Fix with the extra oral spanner.



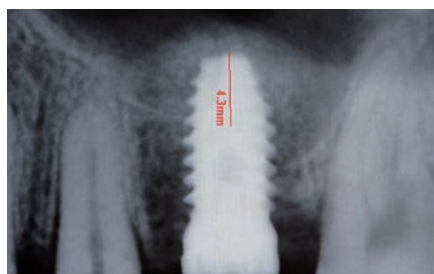
X-ray control with the Cortical-Fix inserted.



It can be seen on the X-ray how the Cortical-Fix begins to displace the floor of the maxillary sinus. We lift the plunger 3 mm to gain 10 mm in height.



We remove the Cortical-Fix. We place the Apatos biomaterial (radiopaque hydroxyapatite granules) and a 5.0 x 10 mm wide platform implant with a torque of 45 Ncm.



Heterologous bone can be seen by X-ray.



3 months later.



Before taking impressions.



Placement of the prosthesis.

BIOMATERIALS



The technological process of the bone substitutes of our strategic partner Osteogenos has been developed to conserve the original collagen matrix present in the heterologous tissue, with the intention of preserving its positive biological functions, achieving excellent biocompatibility.

Evolution

Tissue of origin

Heterologous pericardium.

Tissue collagen

Preserved.

Physical form

Desiccated membrane with one side smooth and the other microrough.

Composition

100% pericardium.

Thicknesses

Fine: 0.4mm +/-0.1.

Standard: 0.6 mm +/-0.1.

Resorption times

Fine: approximately 3 months.

Standard: approximately 4 months.

Packaging (oval)

Fine: 20x20mm; 30x30mm; 25x35mm.

Standard: 20x20mm; 30x30mm; 25x35mm.

Clinical indications

Oral surgery and traumatology: in cases of large regenerations with risk of exposure (standard model).

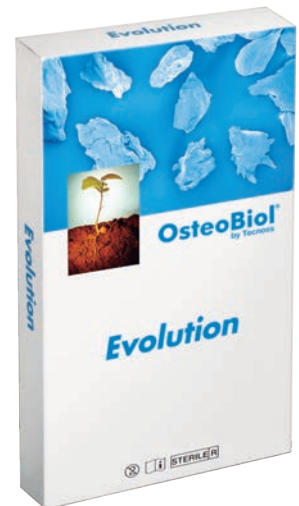
Implantology: ideal for the coverage of antrostomy and for the protection of grafts made in two-walled defects (standard model).

Periodontics: graft protection in infra-osseous defects when suturing of the edges presents a risk of exposure. Space maintenance in gingival recessions (fine model).

Directions for use

Optionally it can be modelled with sterile scissors to achieve the desired shape, after which it must be hydrated with sterile warm physiological solution.

In case of accidental exposure, the dense collagen matrix protects the graft from infection. The membrane will not be contaminated allowing secondary intention healing.



Derma

Tissue of origin

Porcine dermis.

Tissue collagen

Preserved.

Physical form

Desiccated membrane.

Composition

100% dermis.

Thickness

Fine: 1mm.

Standard: 2mm.

Resorption times

Fine: approximately 3 months.

Standard: approximately 4 months.

Packaging

Fine: 25x25mm; 50x50mm.

Standard: 30x30mm; 50x50mm.

Clinical indications

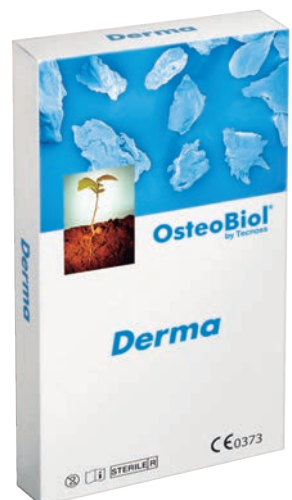
Oral surgery and traumatology: stabilisation and protection of extensive regenerations at risk of exposure.

Implantology: graft protection in two-walled defects.

Periodontics: space creation in the treatment of gingival recessions (fine model).

Directions for use

It can be modelled with sterile scissors to reach the desired dimensions, it must be hydrated for 15 minutes with sterile warm physiological solution. It is advisable to prepare a cavity with a periosteal spacer to obtain a perfect closure of the membrane after suturing the edges.



BIOMATERIALS

Apatos

Tissue of origin

Mix of heterologous cortical and cancellous bone.

Tissue collagen

Degraded.

Physical form

Radiopaque hydroxyapatite granules.

Composition

100% heterologous cortical and cancellous bone mix.

Granulometry

600-1000 microns.

Re-entry times

Approximately 5 months.

Packaging

Vial 0.5g; vial 1g.

Clinical indications

Oral surgery: treatment of granulomas, odontogenic cysts and split-crest procedures.

Implantology: universal filling for the treatment of dehiscence and peri-implantitis, two-walled defects, sinus lift with lateral and crestal access. If necessary, the graft can be protected with the placement of an Evolution membrane or a Cortical Lamina.

Directions for use

It has to be rehydrated by mixing it with a few drops of physiological solution. Can also be mixed with the patient's blood.



Putty

Tissue of origin

Mix of cancellous porcine bone and collagenised cortical bone.

Tissue collagen

Preserved + 20% collagen gel.

Physical form

Bone paste with plastic consistency.

Composition

80% granulated mix, 20% collagen gel.

Granulometry

300 microns.

Re-entry time

Approximately 4 months.

Packaging

Syringe of 0.5cc pack of 3 units of 0.5cc; pack of 3 units of 1cc.

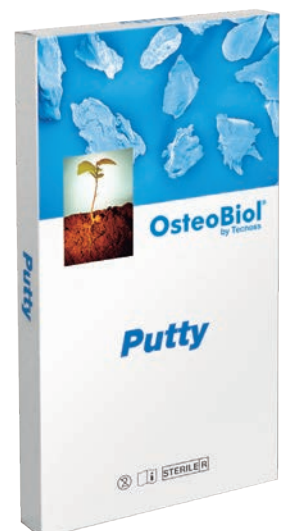
Clinical indications

Implantology: cavity filling to preserve ridge volume in cases of immediate postextraction implants where it facilitates primary stability. Ideal for treatment of peri-implantitis and split-crest procedures. In cases of sinus elevation with crestal access, it is recommended to use it together with Gen-Os to facilitate insertion.

Oral surgery: Bone filling after tooth extractions, granulomas and odontogenic cysts.

Directions for use

Inject the product and adapt it to the morphology of the defect without compressing it, all unstable residues must be removed before suturing the soft tissues. It is recommended to use an Evolution membrane to protect the graft in peri-implant defects.



Gen-Os

Tissue of origin

Mix of cancellous porcine bone and collagenised cortical bone.

Tissue collagen

Preserved.

Physical form

Slightly radiopaque granules.

Composition

100% granulated mix.

Granulometry

250-1000 microns.

Re-entry time

4/5 months, depending on the characteristics of the graft area.

Packaging

Vial of 0.25g; vial of 0.50g; vial of 1g.

Clinical indications

Oral surgery: granulomas, odontogenic cyst, split-crest procedures.

Periodontics: filling of deep infraosseous defects and bifurcations.

Implantology: universal filling used in the treatment of dehiscence and peri-implantitis, two-walled defects, in sinus lift with lateral and crestal access. If necessary, the graft can be stabilised by mixing it with Gel O and protected by placing a Cortical Foil membrane.

Directions for use

It must always be prehydrated by adding a few drops of sterile physiological solution to allow activation of the collagen matrix and improve adhesiveness.



mp3

Tissue of origin

Mix of cancellous porcine bone and prehydrated cortical collagen.

Tissue collagen

Preserved + 10% collagen gel.

Physical form

Pre-hydrated granules and collagen gel.

Composition

90% granulated mix, 10% collagen gel.

Granulometry

600-1000 microns.

Re-entry times

Approximately 5 months.

Packaging

1cc syringe; pack of 3 units of 0.5cc.

Clinical indications

Oral surgery and implantology:

Thanks to its particular formulation and granulometry mp3 is ideal for grafting in sinus lift surgical procedures with lateral access. The placement of an Evolution or Special membrane is recommended to cover the antrostomy.

Directions for use

mp3 is available in a pre-filled syringe and can be easily applied by omitting the hydration and handling phase. After the material has been adapted to the geometry of the defect, it is necessary to remove excess residues before suturing the soft tissues.



See other biomaterials available.

CUSTOMER SERVICE

Telephone: 93 844 76 50

Hours: Monday to Thursday from 9am to 6pm.

Friday from 9am to 4pm

PLACING ORDERS

Tel. 93 844 76 93.

E-mail implant@microdentsystem.com

www.microdentsystem.com.

Sales representative for your area.

DELIVERY TIMES

Delivery Mainland Spain before 7pm the next day for orders placed before 2pm (Iberian Peninsula).

Delivery between 24-48h for orders placed before 2pm (Canary Islands).

Consult same day delivery options (available only in Barcelona province).

DISPATCH OF PRODUCTS

Always for orders placed before 2pm.

Tell us your chosen time when placing your order:

- 8.30 am Service.
- Preferential: delivery from 8.30am to 10am
- Express: delivery from 10am to 1pm.
- 7pm service: delivery before 7pm. (Default times).

*Available for the whole of mainland Spain. Consult for the Canary Islands.

RETURNS

Returns will not be accepted after a period of 30 days from the delivery of the goods.

All material returns must be accompanied by the product return form duly completed and enclosing a copy of the delivery note.

INVOICING AND METHOD OF PAYMENT

Bank transfer within 30 days of the invoice date.

Consult other payment methods and facilities with our customer service department or the sales representative for your area.

* Microdent reserves the right to make any changes without prior notice.

Important:

- The use of attachments not supplied by Microdent can compromise the stability and fixation of the prosthesis as well as cause loosening or fracture. It also renders the warranty for our implants null and void.

- Consult availability of references according to country as there may be products not marketed in your area.

