MICRODENT FACILITIES (PRODUCTION AND COMMERCIAL SITE)

MICRODENT CORPORATE
Quality as objective

In order to completely and totally fulfill its customers’ requests, Microdent ensures that all products exceed the strictest regulatory requirements set by international health authorities.

It is worth noticing that the raw material used in the manufacture of all Microdent products is of the highest quality and strength, like the titanium used for the manufacture of dental implants.

All production processes, assessed and validated by the international certification body DNV-GL, include cytotoxicity tests to ensure the correct cleaning of the Microdent products, as well as validation studies of the implant sterilization process, microbiological quality assessments, endurance, torque and fatigue tests... and a large number of studies with several national and international universities on clinical outcomes of Microdent’s implants.

Technology, innovation, professionalism...

When choosing Microdent implants, customers are placing their trust in a large company with a professional career achieved with much effort, full of successes and supported by many of the most renowned implantologists in the country.

Microdent facilities are equipped with cutting-edge technology where implants and implant components are manufactured under a targeted and rigorous unit quality control.

Continuing Education

Microdent has shown a special interest in the area of education since its inception. Therefore, it often organizes and teaches continuing education clinical courses, seminars and hands-on workshops in order to provide practitioners with the appropriate knowledge and tools to achieve success in their work with patients. These courses take place in the company itself, where there is an auditorium and some practice rooms, but also in different cities in Spain.

Human team

Microdent has a team of highly-skilled, specialized technicians at the service of the professionals of implantology as well as a complete commercial network throughout the national territory which is complemented with an international distribution network in constant growth.
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STANDARD MICROIMPLANT

Standard microimplants are temporary implants used for orthodontics, manufactured in titanium alloy grade 5 in accordance with ISO 5832-3:2012 standard. Their main function is to be an independent point of anchorage to try and to avoid spreading unwanted reaction forces to other teeth during an orthodontic treatment.

The microimplant head is hexagonal and with a 0.90mm diameter hole beneath it for traction with different elements, such as coils, elastics, etc.

The endosteal section, with variable length, has a threaded profile and grooves located on the apical area giving the microimplant self-drilling and self-tapping capacity.

Thin Standard
Standard microimplants with a diameter of 1.30 mm are specially indicated for dental interradicular space.

### INSTRUMENTS

<table>
<thead>
<tr>
<th>Manual key</th>
<th>Contra-angle key</th>
<th>Manual cross-head screwdriver</th>
<th>Cross-head screwdriver for contra angle key</th>
<th>Drill</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIASLIM</td>
<td>MIASLIC</td>
<td>MIADTCM</td>
<td>MIADTCC</td>
<td>F1312</td>
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VERSATIL MICROIMPLANT

Versatil microimplants are used in the most demanding cases. The head of the self-drilling microimplant has a quadrangular geometry, size 0.018x0.025", with slots to accommodate an arch wire and to fix it with wire ligatures. The microimplant internal thread enables the placing of different abutments [impression taking, lateral bracket, etc.]. Beneath the quadrangular head there is a 0.9mm diameter hole for traction with different elements.

VERSATIL MICROIMPLANT

<table>
<thead>
<tr>
<th></th>
<th>MIA1607</th>
<th>MIA1609</th>
<th>MIA1611</th>
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<tbody>
<tr>
<td>Ø1.60mm</td>
<td>7mm</td>
<td>9mm</td>
<td>11mm</td>
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</table>

VERSATIL MICROIMPLANT SHORT

Version of the Versatil microimplant with a short head since it does not have the lower section with a hole nor the flaps to anchor the arch wires. There is a decrease in height and a smaller emergence height of the braces worn in the upper maxilla, thereby improving patient comfort.

<table>
<thead>
<tr>
<th></th>
<th>MIAC1609</th>
<th>MIAC1611</th>
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</thead>
<tbody>
<tr>
<td>Ø1.60mm</td>
<td>9mm</td>
<td>11mm</td>
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</table>

VERSATIL MICROIMPLANT ORTHOPAEDIC

Version of the Versatil microimplant with an external thread of 2.00mm designed to anchor orthopaedic equipment [facial masks and circuit breakers]. Available in two lengths, 7 and 9mm, and with self-drilling and self-tapping capacity.

<table>
<thead>
<tr>
<th></th>
<th>MIAC2007</th>
<th>MIAC2009</th>
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</thead>
<tbody>
<tr>
<td>Ø2.00mm</td>
<td>7mm</td>
<td>9mm</td>
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</table>
VERSATIL MICROIMPLANT ABUTMENTS

Surgical instruments and abutments are the same for Versatil microimplant and short Versatil microimplant, except the analogue

**Cover screw**
Its function is to protect and cover the internal thread of the microimplant, and to protect the patient from possible injury and discomfort.

**Retention screw**
It enables the fixation of the lateral bracket and the support of the palatal bar to the microimplant head. Used with an MH120 screwdriver.

**Lateral bracket**
It is used to anchor and place arch wires using microimplants.

**Palatal bar support**
It is intended to build palatine maxillary appliances on microimplants. Used with an MH120 screwdriver.

**Chain ensemble**
Cap and chain are indicated for orthodontic traction from areas where microimplants are covered by free gum (lower retromolar area, upper superior vestibular area).

**Analogue and transfer**
They are used to take impressions for palatine maxillary orthodontic appliances. MIACRI is specially indicated for short Versatil microimplants.

**SURGICAL INSTRUMENTS**

- **Manual key**
- **Manual cross-head screwdriver**
- **Contra angle key**
- **Drill**
- **Cross-head screwdriver for contra angle key**

**Detail of the Microdent Standard screwdriver head.**
VERSATIL
MICROIMPLANT
OVERVIEW AND DETAILS

Palatine bar support
Retention screw
Versatil microimplant
Fixation of the arch wire with wire ligatures
0.018x0.025" slot to place arch wires

COMPLETE KIT
ORTHODONTICS

PN-KITORTO

The kit includes:
- Rotatory screwdriver (short and long)
- Drill, Ref. F1312
- Contra angle cross-head screwdriver, Ref. MIADTCC
- Manual cross-head screwdriver, Ref. MIADTCM
- Contra angle key, Ref. MIALIC
- Manual key for Versatil microimplants, Ref. MIALIM
- Manual key for Standard microimplants, Ref. MIASLIM
- Manual screwdriver shank, Ref. MIADTM

Note: Orthodontic microimplants are sold separately
ORTHODONTIC PROTOCOL
VERSATIL MICROIMPLANT

HOW TO LIGATE AN ARCH WIRE TO A VERSATIL MICROIMPLANT

1. Insertion of a Versatil microimplant in the contra angle drill.

2. Placement of the microimplant (maximum insertion torque is 20 Ncm).

3. Inserted Versatil microimplant.

4. Placing of an arch wire, 0.018x0.025", in the slot of the Versatil microimplant.

5. First insertion of the wire ligature.

6. Insertion ligating the four flaps of the Versatil microimplant.
Threaded wire ligature.

Arch wire ligated to the Versatil microimplant.

Wire ligature with ligated arch wire to the Versatil microimplant.
ORTHODONTIC PROTOCOL
VERSATIL MICROIMPLANT

IMPRESSION TAKING WITH VERSATIL MICROIMPLANT

1. Placement of a microimplant in the palatal area.

2. Inserted Versatil microimplant.

3. Transfer (impression abutment).

4. Threading of the transfer into the Versatil microimplant.

5. Placing of the alginate on the impression tray.

6. Impression of the microimplant with the transfer.
Impression taken.

Impression with the hole to insert the transfer.

Clay model with transfer for impression taking.

Frontal view of the clay model with Versatil microimplant analogue.
Insertion of a retention screw to fasten the support of the palatal bar.

Manufacturing of required appliances (e.g. distalize molars).

Placement of a Versatil microimplant in the centre of the palate.

Inserted Versatil microimplant.

Insertion of a cover screw with a hexagonal surgery screwdriver of 1.20 mm.

Threading of the cover screw into the Versatil microimplant head.
CHAIN CAP INSERTION

Placement of a Versatil microimplant.

Insertion of a chain ensemble (cap and chain) with a hexagonal surgery screwdriver of 1.20 mm.

Lateral view once the chain ensemble has been inserted into the Versatil microimplant.

Links of the chain ensemble to enable traction with an elastic or elastic power chain.
ORTHODONTIC PROTOCOL
VERSATIL MICROIMPLANT

LATERAL BRACKET

1. Insertion of a Versatil microimplant in a contra-angle drill.

2. Placement of the microimplant.

3. Inserted Versatil microimplant.

4. Placing of a lateral bracket on the Versatil microimplant.

5. Fixing of the lateral bracket with a retention screw using a hexagonal surgery screwdriver of 1.20 mm.

6. Insertion of the arch wire in the slot of the lateral bracket.
Ligation of the arch wire with a wire ligature to the lateral bracket.

Cut wire ligature and placed arch wire.
SURGICAL INSTRUMENTS

Weingart plier
PN-ORTA01

Distal end cutter
PN-ORTA02

Ligature cutter
PN-ORTA03

Needlenose Mathieu plier
PN-ORTP04
**Step plier**
PN-ORTA05

**Arch forming plier**
PN-ORTA06

**Tweed plier**
PN-ORTA07

**Angle or Bird beak bracket plier**
PN-ORTA08
SURGICAL INSTRUMENTS

Bracket removing plier
PN-ORTA09

Band removing plier
PN-ORTA10

Three-jaw plier
PN-ORTA11

De la Rosa plier
PN-ORTA12
Distal end cutter
PN-ORTA13

Buccal tube tweezer
PN-ORTP01

Bracket placing tweezer
PN-ORTP02

Bite stick
PN-ORTM
SURGICAL INSTRUMENTS

Band pusher
PN-ORTE

Ligature director
PN-ORTSO1

Periodontal probe
PN-ORTSO2

Curette probe
PN-ORTSO3
Mirror shank

PN-ORTOME

Mirror

PN-ORTOE

Impression tray U2 / U3 / U4

Size U2 PN-ORTOCU2
Size U3 PN-ORTOCU3
Size U4 PN-ORTOCU4

Impression tray L2 / L3 / L4

Size L2 PN-ORTOCL2
Size L3 PN-ORTOCL3
Size L4 PN-ORTOCL4
CLINICAL CASE WITH STANDARD MICROIMPLANT

Image 1
En masse traction of the anterior dental group for cases with maximum posterior anchorage.

Image 2
Extrusion of the upper arch.

Image 3
En masse traction of the anterior dental group for cases with maximum anterior anchorage.

Image 4
Intrusion of the inferior dental group.

CLINICAL CASE WITH VERSATIL MICROIMPLANT

Image 1
Straightening of the molar root.

Image 2
Canine traction.

Image 3
Sectional supported on the microimplant to place the canine in the arch.
GENERAL CONDITIONS

Customer service
Tel. 0034 - 93 844 76 50 from Monday – Thursday: 9h-18h and Friday: 8h-15h.

Purchase order
• Tel. 0034 - 93 844 76 50, extension 1.
• Fax: 0034 - 93 844 76 93.
• E-mail: implant@microdentsystem.com.

Delivery times
Peninsula: Orders placed before 14h will be delivered on the next business day.
Canary Islands: Orders placed before 14h will be delivered on the next 24-48 h.
Province of Barcelona: consult about same day deliveries.
* For deliveries outside Spain, please contact us.

Shipping policy
The following shipment methods are available for orders placed before 14h:
• Service 8.30
• Priority: delivery between 8.30h and 10h.
• Express: delivery between 10h and 13h.
• Service 19h: delivery before 19h.
• Urgent: delivery time out of the established timetable (in the evening) has an extra charge.
* Available for the Peninsula (for Canary Islands, please contact us).
* For deliveries outside Spain, please contact us.

Product return policy
All returns must be accompanied by the return form, duly completed, and a copy of the delivery note.
Any returns or refunds of items that have been opened, tampered with or not in their original condition will not be accepted.

Billing and payment methods
Ask our customer service or your local representative about different payment plan options.
* Microdent reserves the right to improve, modify or discontinue products and equipment at any time without incurring any obligation or without prior notice.
* For commercial schedules and deliveries outside Spain, please ask about conditions by country.

Important
The use of foreign-brand surgical instruments may compromise the stability and fixation of the prosthesis, as well as cause situations of loosening or fracture. Moreover, it also voids the product warranty.