ARNO FRITZ | MONDEAL

LOMAS / MONDEFIT

The most innovative anchorage method for tooth correction

- Controlled and reliable tooth movement
- Completion of tooth correction without gaps
- For the young and young at heart

ORTHODONTICS

The most innovative anchorage method for tooth correction

The MONDEFIT system was developed based on the LOMAS system. Due to the compatibility of both systems by using the same instruments, this combination covers many orthodontic indications with amazing results.

MONDEFIT / ORTHODONTICS

The MONDEFIT system can be used for a variety of applications in the maxilla because of the screw design and the abutments available. The molar anchorage, the distal extension of the dental arch as well as the mesialization of molars can be named as important indications.

LOMAS / ORTHODONTICS

The usage of Mini-Anchor-Screws has become a standard for orthodontic treatment. The self-drilling LOMAS screws offer many advantages such as high stability, immediate screw loadability as well as reliable and secure fixation.
There are additional applications by combining the LOMAS system with the innovative MONDEFIT system.

Indications and Advantages

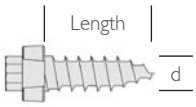
Possible Indications

- Mesialization / Distalization of molars
- Molar uprighting
- Maximum anchorage
  (Front anchorage / Molar anchorage)
- Temporary dentures
- Maxillary expansion
- Opening gaps in case of retention
- Symmetrical alignment of asymmetries
- Displaced teeth

Advantages

- Immediate loading is possible
- Minimally invasive insertion protocol
- Orthodontists can insert by themselves
- Easy to use
- Easy to combine with applications
  of the orthodontic accessories
- Reduced treatment time

MONDEFIT - Screws (Packaging 1/ea.) Material: Titanium



MONDEFIT Screw, ∅ 1.5 mm self-drilling

Art. No.	Diameter (d) x Length
A33-M4A-1507	1.5 x 7 mm
A33-M4A-1509	1.5 x 9 mm

MONDEFIT Screw, ∅ 2.0 mm self-drilling

Art. No.	Diameter (d) x Length
A33-M4A-2007	2.0 x 7 mm
A33-M4A-2009	2.0 x 9 mm
A33-M4A-2011	2.0 x 11 mm

MONDEFIT Screw, ∅ 1.5 mm self-drilling, **sterile**

Art. No.	Diameter (d) x Length
ST-A33-M4A-1507	1.5 x 7 mm
ST-A33-M4A-1509	1.5 x 9 mm

MONDEFIT Screw, ∅ 2.0 mm self-drilling, **sterile**

Art. No.	Diameter (d) x Length
ST-A33-M4A-2007	2.0 x 7 mm
ST-A33-M4A-2009	2.0 x 9 mm
ST-A33-M4A-2011	2.0 x 11 mm

MONDEFIT Emerg. Screw, ∅ 2.3 mm self-drilling

Art. No.	Diameter (d) x Length
A33-M4A-2309	2.3 x 9 mm

MONDEFIT Emerg. Screw, ∅ 2.3 mm self-drilling, **sterile**

Art. No.	Diameter (d) x Length
ST-A33-M4A-2309	2.3 x 9 mm

MONDEFIT - Abutments

Material: Implant steel

A33-ME0-0001 Abutment Standard, incl. Abutment screw

A33-ME2-0001 Abutment with 1 bracket, incl. Abutment screw

A33-ME2-0002 Abutment with 2 brackets, incl. Abutment screw

A33-ME1-0002 Abutment with wire 1.1 mm (Length: 120 mm), incl. Abutment screw

MONDEFIT - Impression

Material: Steel

A33-VX1-0001 Impression Cap Metal

A33-VX1-0002 Laboratory Analog

MONDEPLATES

Material: Implant steel

A33-MR0-0001	MONDEPLATE connection plate 1.2 mm, long (17.50 mm), incl. fixation screws

A33-MP0-0001	MONDEPLATE connection plate 1.2 mm, short (12.50 mm), incl. fixation screws

A33-MP1-1211	MONDEPLATE connection plate, 1.2 mm, short, with 1.1 mm wire (Length: 120 mm), incl. fixation screws
A33-MR1-1211	MONDEPLATE connection plate, 1.2 mm, long, with 1.1 mm wire (Length: 120 mm), incl. fixation screws

A33-MB0-0001	Spare fixation screws (2/ea.)

A33-MB0-0002	Spare fixation screws (2/ea.)

MONDEFIT - Accessories

A33-MZ2-0007	Hook lock (1/ea.)

A33-MZ2-0008	Mobilizer for wires (1/ea.)

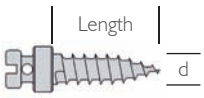
A33-MZ2-0010	Hook lock extended (1/ea.)

A33-MZ2-0011	Mobilizer for wires, extended (1/ea.)

855-606	Spring 240g (10/ea.)
58001182	Spring 500g (10/ea.)

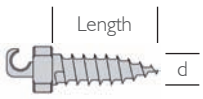
855-180	Coil spring 150g (10/ea.)
855-179	NiTi Coil spring 6mm 200g (10/ea.)

LOMAS Screws (Packaging 1/ea.)



STANDARD Screw, ∅ 1.5 mm self-drilling

Art. No.	Diameter (d) x Length
A33-11507	1.5 x 7 mm
A33-11509	1.5 x 9 mm
A33-11511	1.5 x 11 mm



HOOK Screw, ∅ 1.5 mm self-drilling

Art. No.	Diameter (d) x Length
A33-21507	1.5 x 7 mm
A33-21509	1.5 x 9 mm
A33-21511	1.5 x 11 mm

STANDARD Screw, ∅ 2.0 mm self-drilling

Art. No.	Diameter (d) x Length
A33-12207	2.0 x 7 mm
A33-12209	2.0 x 9 mm
A33-12211	2.0 x 11 mm

HOOK Screw, ∅ 2.0 mm self-drilling

Art. No.	Diameter (d) x Length
A33-22007	2.0 x 7 mm
A33-22009	2.0 x 9 mm
A33-22011	2.0 x 11 mm

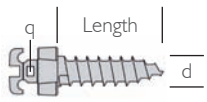
STANDARD Emerg. Screw, ∅ 2.3 mm self-drilling

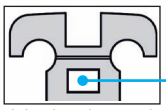
Art. No.	Diameter (d) x Length
A33-12309	2.3 x 9 mm

HOOK Emerg. Screw, ∅ 2.3 mm self-drilling

Art. No.	Diameter (d) x Length
A33-22109	2.3 x 9 mm

LOMAS Screws (Packaging 1/ea.)





QUAD Screw H, ∅ 1.5 mm
q = 0.018 x 0.025“, self-drilling

Art. No.	Diameter (d) x Length
A33-31807	1.5 x 7 mm
A33-31809	1.5 x 9 mm
A33-31811	1.5 x 11 mm

QUAD Screw H, ∅ 1.5 mm
q = 0.022 x 0.028“, self-drilling

Art. No.	Diameter (d) x Length
A33-32207	1.5 x 7 mm
A33-32209	1.5 x 9 mm
A33-32211	1.5 x 11 mm

QUAD Screw H, ∅ 2.0 mm
q = 0.018 x 0.025“, self-drilling

Art. No.	Diameter (d) x Length
A33-41807	2.0 x 7 mm
A33-41809	2.0 x 9 mm
A33-41811	2.0 x 11 mm

QUAD Screw H, ∅ 2.0 mm
q = 0.022 x 0.028“, self-drilling

Art. No.	Diameter (d) x Length
A33-42207	2.0 x 7 mm
A33-42209	2.0 x 9 mm
A33-42211	2.0 x 11 mm

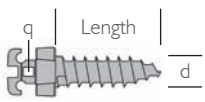
QUAD Emerg. Screw H, ∅ 2.3 mm
q = 0.018 x 0.025“, self-drilling

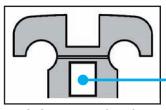
Art. No.	Diameter (d) x Length
A33-41909	2.3 x 9 mm

QUAD Emerg. Screw H, ∅ 2.3 mm
q = 0.022 x 0.028“, self-drilling

Art. No.	Diameter (d) x Length
A33-42309	2.3 x 9 mm

LOMAS Screws (Packaging 1/ea.)





QUAD Screw V, ∅ 2.0 mm
q = 0.018 x 0.025“, self-drilling

Art. No.	Diameter (d) x Length
A33-51807	2.0 x 7 mm
A33-51809	2.0 x 9 mm
A33-51811	2.0 x 11 mm

QUAD Screw V, ∅ 2.0 mm
q = 0.022 x 0.028“, self-drilling

Art. No.	Diameter (d) x Length
A33-52207	2.0 x 7 mm
A33-52209	2.0 x 9 mm
A33-52211	2.0 x 11 mm

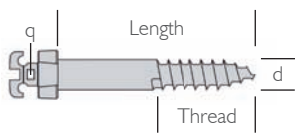
QUAD Emerg. Screw V, ∅ 2.3 mm
q = 0.018 x 0.025“, self-drilling

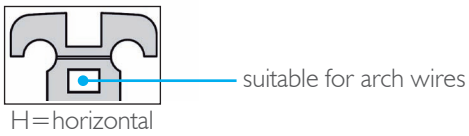
Art. No.	Diameter (d) x Length
A33-51909	2.3 x 9 mm

QUAD Emerg. Screw V, ∅ 2.3 mm
q = 0.022 x 0.028“, self-drilling

Art. No.	Diameter (d) x Length
A33-52309	2.3 x 9 mm

LOMAS VEGAS Screws (Packaging 1/ea.)





VEGAS Screw H, ∅ 2.0 mm
q = 0.022 x 0.028“, self-drilling, sterile

Art. No.	Diameter (d) x Length x Thread
ST-A33-53209	2.0 x 9 mm x 7 mm
ST-A33-53211	2.0 x 11 mm x 7.5 mm
ST-A33-53213	2.0 x 13 mm x 8 mm
ST-A33-53215	2.0 x 15 mm x 8.5 mm
ST-A33-53217	2.0 x 17 mm x 9 mm
ST-A33-53220	2.0 x 20 mm x 9.5 mm
ST-A33-53225	2.0 x 25 mm x 10 mm
ST-A33-53230	2.0 x 30 mm x 10.5 mm
ST-A33-53235	2.0 x 35 mm x 11 mm
ST-A33-53240	2.0 x 40 mm x 11.5 mm

Instruments

ML For MONDEFIT, LOMAS and LOMAS VEGAS:

A33-18232	Blade for angled handpiece, short, 23 mm, DENTAL
A33-18237	Blade for angled handpiece, long, 33 mm, DENTAL

A12-12625	Drill 1.0 x 30 mm, WL 15 mm, DENTAL for 1.5 mm screws

A10-67517	Drill 1.5 x 28 mm, WL 15 mm, DENTAL for 2.0 mm screws

A10-61000	Screwdriver handle, rotatable, 9.5 cm

A33-18230	Blade, long for A10-61000

A33-SS4-1100	Screwdriver, fixed

Instruments

M For MONDEFIT only:

A84-SK0-2000	MCD blade, 20 mm, DENTAL, self-retaining, for angled handpiece

A33-SS0-1000	Handle with blade

For fixation of:

- Fixation screws
- Abutments

For activating:

- Mobilizer

A99-003-04	Screwdriver handle, short, 6 cm **(for laboratory use only)**

A99-003-05	MCD blade, self-retaining **(for laboratory use only)**

LV For LOMAS VEGAS only:

A85-VA2-1500	Drill 1.5 x 60 mm, WL 15 mm, DENTAL for LOMAS VEGAS-Screws

Container

ML For MONDEFIT and LOMAS:

A73-31960	Sterilizing tray for implants and instruments, empty, incl. lid and length clips

A75-TC3-0677-7	Length clip 7 mm
A75-TC3-0677-9	Length clip 9 mm
A75-TC3-0677-11	Length clip 11 mm

MONDEFIT - Models

Ordering information

A95-13012
Model Mesialization / Distalization

A95-13007
Model Front anchorage

A95-13010
Model Maxillary expansion

A95-13002
Model Molar anchorage

Clinical case: Maximum anchorage

Maximum anchorage of the molars

Bilateral mesial space closure achieved by indirect anchorage

Clinical case: Distalization I

Initial situation

Bilateral tooth movement distally

Treatment outcome

Clinical case: Distalization 2










The distalization based on skeletal anchorage is evenly spreaded since the bicuspids (dentes premolares) move distal with the molars through the traction of the interdental ligaments. As a result, there are no large gaps.

Clinical case: Distalization 3







Clinical case: Mesialization





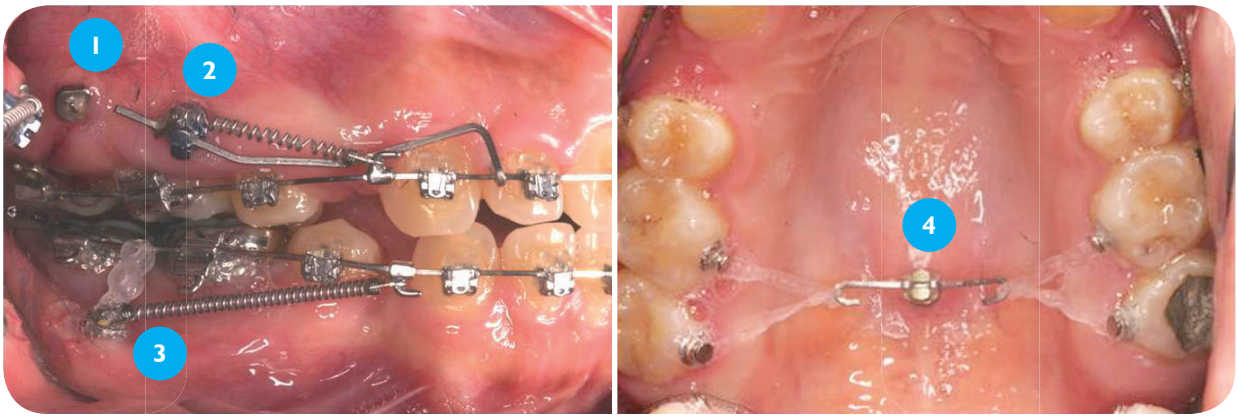






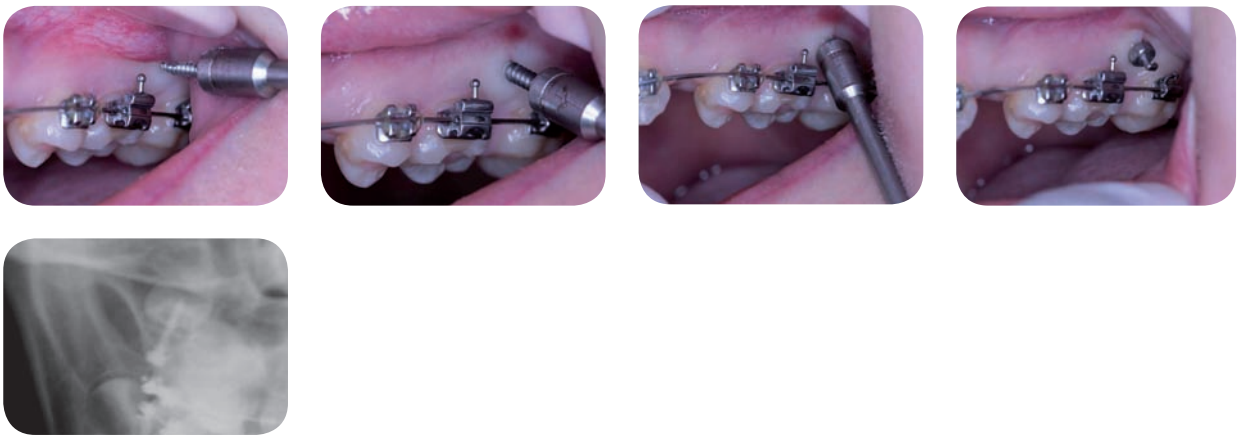
Mesialization of the upper molars through unilateral protraction palatinal.

Top 4 Areas of Application



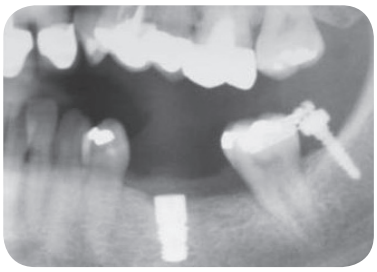
1. Infrazygomatic
2. Interdental
3. Mandibular
4. Palatinal

Instruction for insertion of the screw



Clinical case: Molar uprighting and distalization

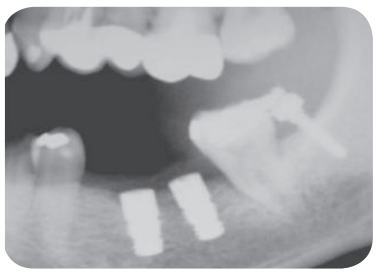
Insert LOMAS STANDARD screw as skeletal anchorage incident to the tooth using 2 NiTi coil springs



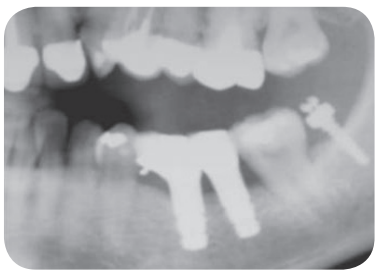
Position of the screw parallel to the tooth axis

Advanced uprighting and distalization

Completed uprighting and distalization



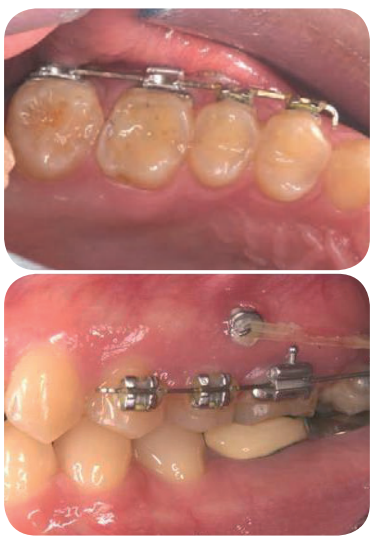
Placing the second dental implant



Placing the cap on the dental implants. After the screw has been removed, the orthodontiv treatment is successfully completed.

Clinical case: Protraction of molars

Insertion of the LOMAS HOOK screw between the first and the second molar (interdental)



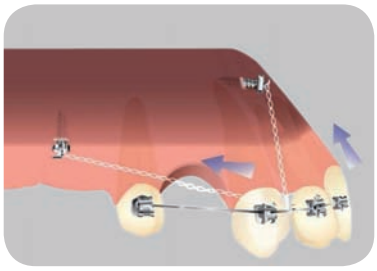
Transmission through rubber band

Transmission through NiTi coil spring

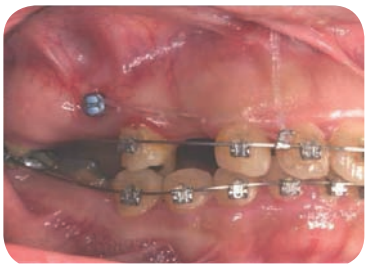
Progress of protraction

Clinical case: Skeletal Gummy Smile Correction

Patient with Gummy Smile, overbite and tooth gap (diastema)

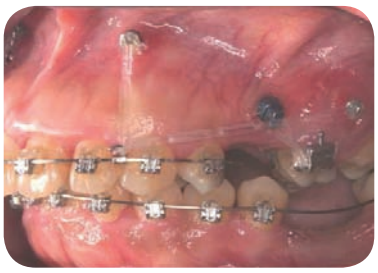


Positioning and function of the LOMAS QUAD screws



Transmission through rubber band as a tool for the correction of the overbite and for gap closure

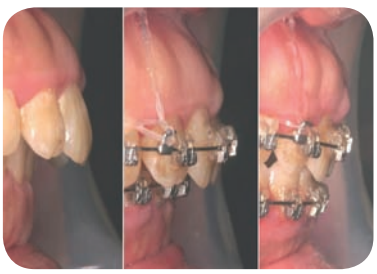
Transmission through rubber band as a tool for the correction of the Gummy Smile



Transmission through rubber band as a tool for gap closure

Finished and activated appliance

Advanced correction front view



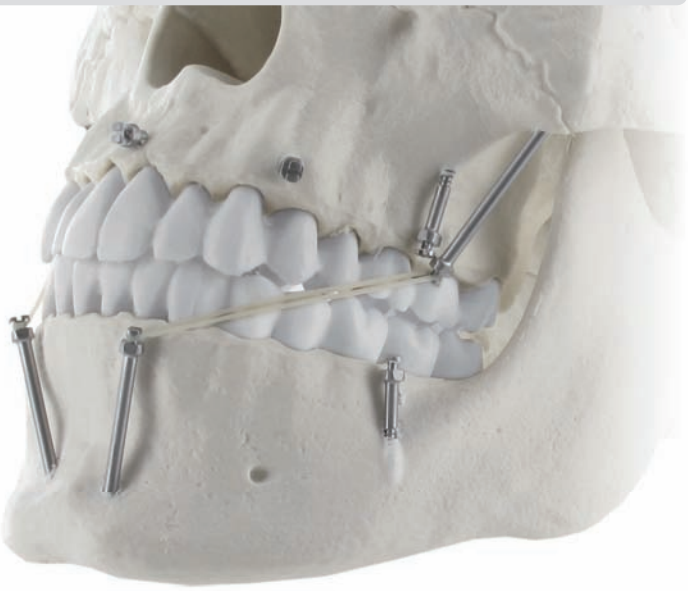
Advanced correction profile

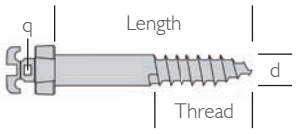
Completed orthodontic treatment outcome

Features

LOMAS VEGAS Screw H, ∅ 2.0 mm
q = 0.022 x 0.028“, self-drilling, sterile

Diameter (d) x Length x Thread
2.0 x 9 mm x 7 mm
2.0 x 11 mm x 7.5 mm
2.0 x 13 mm x 8 mm
2.0 x 15 mm x 8.5 mm
2.0 x 17 mm x 9 mm
2.0 x 20 mm x 9.5 mm
2.0 x 25 mm x 10 mm
2.0 x 30 mm x 10.5 mm
2.0 x 35 mm x 11 mm
2.0 x 40 mm x 11.5 mm

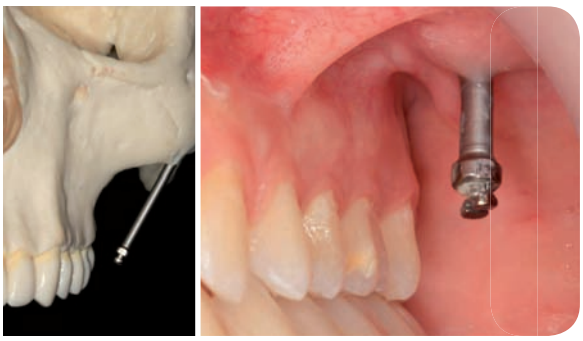




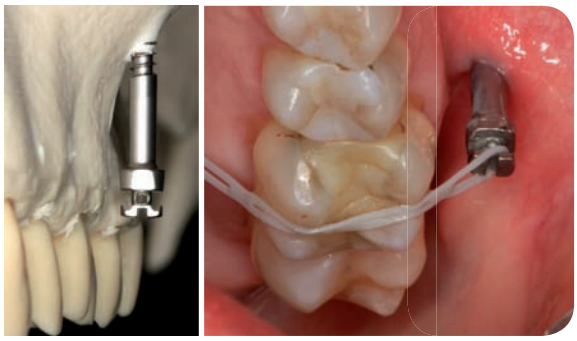
- Extended application areas: chin-menton, mandibular, (infra)zygomatic, interdental, palatinal
- Alternative for existing orthodontic mini-plate-systems
- Fast healing around the long thread-free shank of the screw
- Opportunity of a stable anchorage in the mandible
- Sterile packaging

Developed in cooperation with: Dr. Villegas • specialist for Orthodontics and OMF surgeon • Colombia

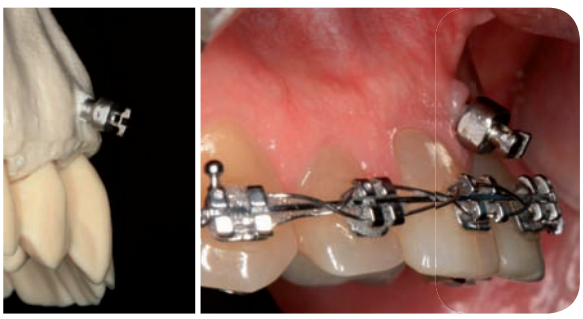
Areas of Application



Zygomatic

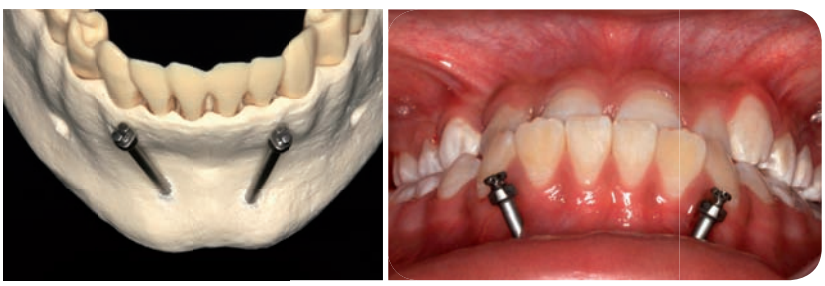


Infrazygomatic



Interdental

Mandibular



Chin-menton

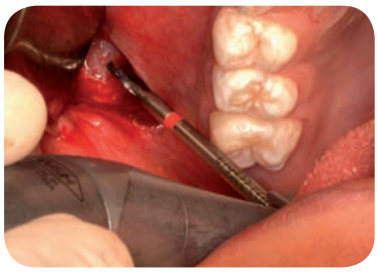
Clinical case: Class III patient

Original image

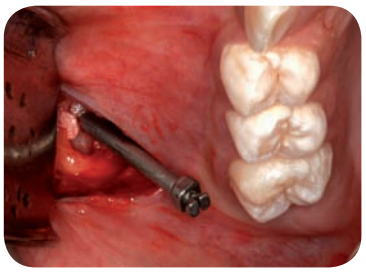
Class III, 11 years old patient

Original image

X-Ray view



Drilling in the maxilla



Placement of 2 LOMAS VEGAS screws (length 35 mm) in the zygomatic bone through 1 cm incision

Drilling in the mandible

Flapless placement of 2 LOMAS VEGAS screws (length 30 mm) in the mandibular simphysis

Placed screws for the orthopedic treatment

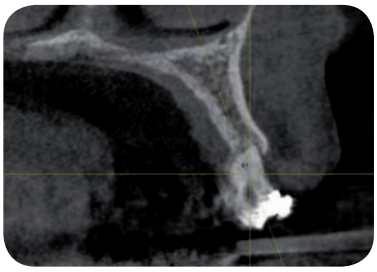
Soft tissue healing around the screws in the mandible

Class III elastics for intraoral class III orthopedic treatment

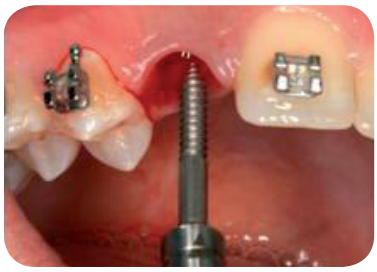
Attachment of an auxiliary wire with a hook in the rectangular slot to facilitate the placement of the elastics on the screws in the zygoma

Clinical case: Temporary dentures

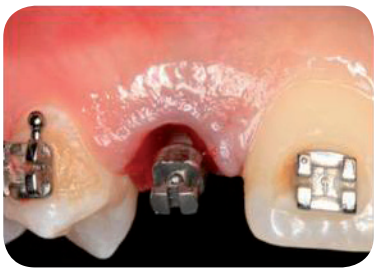
Patient with missing upper permanent lateral incisors and canines



Tomography cut showing bone availability and rooth resorption of the upper right deciduos canine



LOMAS VEGAS screw (length 20 mm) was placed flapless



LOMAS VEGAS in place

Composite was added to the head to serve as an abutment

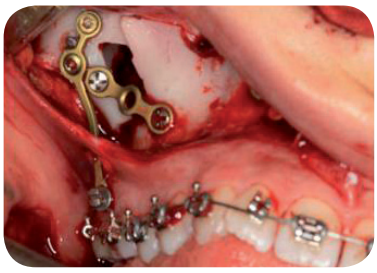
Temporary prosthesis in place

Tomographic image of the screw

Notice the great soft tissue healing around the LOMAS VEGAS with the new temporary prosthesis after 10 months

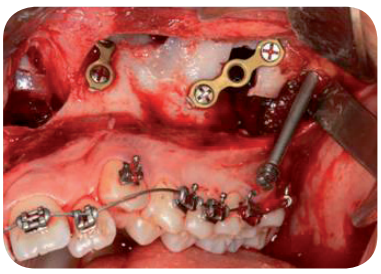
Clinical case: Comparison LOMAS VEGAS vs. 3D-VESTIPLATE

Pre-surgical occlusion and profile of a class III skeletal patient



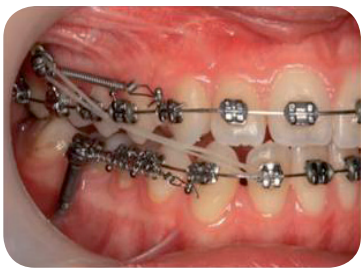
Surgery first approach was performed placing a 3D-VESTIPLATE with 2 mini screws on the right side ...

... leaving increased overbite ...



... and a long LOMAS VEGAS screw (length 40 mm) on the left zygoma to be used as skeletal anchorage during post-surgical orthodontic treatment

Placing 2 LOMAS VEGAS screws (length 20 mm) in the mandibular bucal bilaterally in order to have anchorage to distalize the lower dental arch

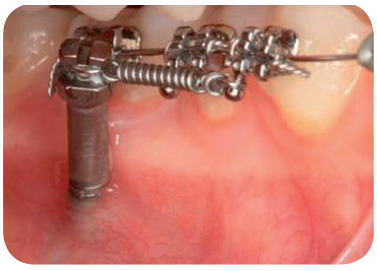


NiTi coil springs used to distalize (right side)

NiTi coil springs used to distalize (left side)

Soft tissue healing around the screws and 3D-VESTIPLATE after 5 months of treatment: Maxilla right

Soft tissue healing around the screws and 3D-VESTIPLATE after 5 months of treatment: Maxilla left



Soft tissue healing around the screws and 3D-VESTIPLATE after 5 months of treatment: Mandible right

Soft tissue healing around the screws and 3D-VESTIPLATE after 5 months of treatment: Mandible left

Final occlusion 13 months after surgery

Instruction: Handling of sterile screws

Sterile version of the MONDEFIT, LOMAS and LOMAS VEGAS Screws

Pushing in the cardboard packaging above the preforation

Opening of the cardboard packaging and removing of the sterile double blister packaging

Sterile double blister packaging

Opening of the first blister and removing of the second sterile blister

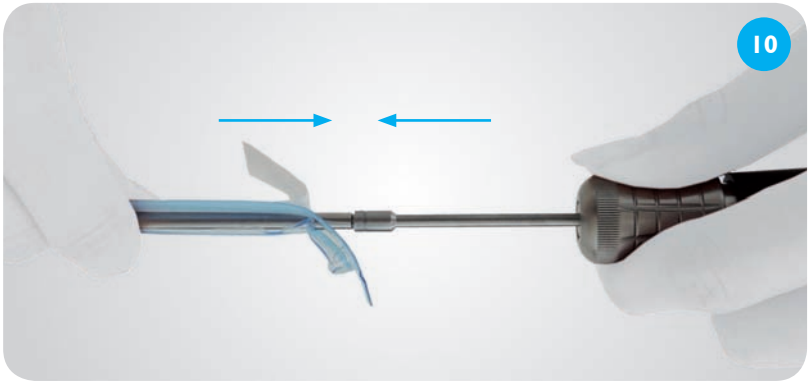
Second sterile blister

Opening of the second sterile blister

Attention: Before folding back the blister to expose the screw head, make sure the screw head is not pulled out since especially in case of using the short screws (7-9 mm) it could happen that they fall out of the tube. Therefore: Do not put yout thumb over the screw head.

Folding back the blister to expose the screw head

Instruction: Handling of sterile screws



Receiving the screw with the screwdriver / the blade
(horizontal and with little pressure)

The screw stucks in the blade.
Control: Only 1-2 tenths of the screw head platform should be seen.

Applicable for these products:

- MONDEFIT
- LOMAS
- LOMAS VEGAS

Notes

Notes

Orthodontics
by AFM

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