REVOIS®
Dental Implantat System

Surgerical and prosthetic care with the procuct variants

REVOIS® : PRO
REVOIS® : compact
REVOIS® : Classic

REVOIS® : compact

User Manual

REVOIS® Dental Implantat System

AUROSAN

www.aurosan.de
www.revois-dental.com

Legal Disclaimer

- This manual has been compiled with great care and the ambition to provide a thorough knowledge base for the user of the REVOIS® compact product variant of the REVOIS® Dental Implantat System.
- Nevertheless, AUROSAN does not take liability for any mistakes or incompleteness as this manual is subject to regular update.
- We appreciate any feedback of the reader for constant improvements.

User manual

REVOIS® Dental Implantat System
Product variant

REVOIS® : compact

The Product variant REVOIS® : compact

REVOIS® compact continues the success story of the **REVOIS®** Dental Implantat System. In special situations, in which the material properties or the design of **REVOIS® PRO** limit its use, or if a particularly fast one-time treatment is preferred, **REVOIS® compact** is the answer. The so-called "mini-implants" **REVOIS® compact** are, different from **Classic or PRO**, one-piece implants with an outer octagon, used with limited bone height, small geometries, or if space-saving supraconstructions like modular bars are needed. The small number of components ease the treatment complexity (time and money) and provide a fast and cost-effective treatment option.

The variant REVOIS® compact of the REVOIS® Dental Implantat System works best for the enosseal replacement of the teeth 12/22/32/31/41/42, as well as for the anchoring of bar or telescope supraconstructions.

The design of **REVOIS® : compact** is of particular user-friendliness. REVOIS® compact implants are delivered in an inlay-blister, pre-mounted with impression post and impression screw. The low number of parts is reflected in price and cost-effectiveness – an equal benefit for patients and implantologists.

Impression screw

Transfer post also serving as impression post with rotation lock

REVOIS® compact Implant

REVOIS® compact implants are available with diameter of Ø 3,0 mm and in lengths of 7 / 9 / 11 mm

Making use of small one-piece implants with a reduced diameter permits a reliable treatment - even in situations with small geometries. Various prosthetic options and preferences can be followed, such as individual crowns, bridges, telescopes, and bars incl. the SFI-Bar®.
The high self-cutting thread of the REVOIS® compact implant ensures the flexibility in implant height adjustment needed for one-piece implants and leave enough bone material in place accelerating osseointegration.
REVOIS® implants have a particular, enlarged surface from blasting and etching, and undergo a multiple-steps cleaning process. Design and this unique surface finishing process are the basis for fast osseointegration and excellent long-term implant performance. In addition, the outer octagon with a slight conical shape promotes a physiological mucosal alignment for optimal aesthetic results. It also provides a balanced force transmissionand rotation stability if needed.

REVOIS® compact implants are available with diameter of Ø 2,2 mm and in the length of 13 mm

The REVOIS® compact temporary implant is indicated for the provisory fixation of prostheses during a healing phase of final implants. In the same session, the provisory prosthesis can be integrated, a maximum benefit for patient and implantologist. The fully self-cutting threat permits straight insertion, minimizing the surgical procedure.
The surface of the REVOIS® compact temporary implant is blasted, but not etched, to avoid significant osseointegration and easing later removal.

Advantages of **REVOIS® compact**

- Making single tooth replacement in very small geometries possible;
- High retention force in combination with modular bars, permitting individual activation/ de-activation and selection of appropriate retention inserts;
- Minimal surgical trauma and option for one-step drilling protocol;
- All-in one-sessions possible, white various options to work stepwise according to patient's needs and personal preferences;
- Very easy option for interim anchors using the REVOIS® compact temporary implant;
- A most cost-effective option to broaden the customer base;
- increasing the steps of treatments performed chairside.

REVOIS® : compact - System Overview

Impression screw

Inbus
screw 0.9

Impression post, lock

Gold sleeve,*
lock

Titanium sleeve,
lock

Titanium sleeve,
no lock

cap

* Upon request gold sleeve is also available without lock.

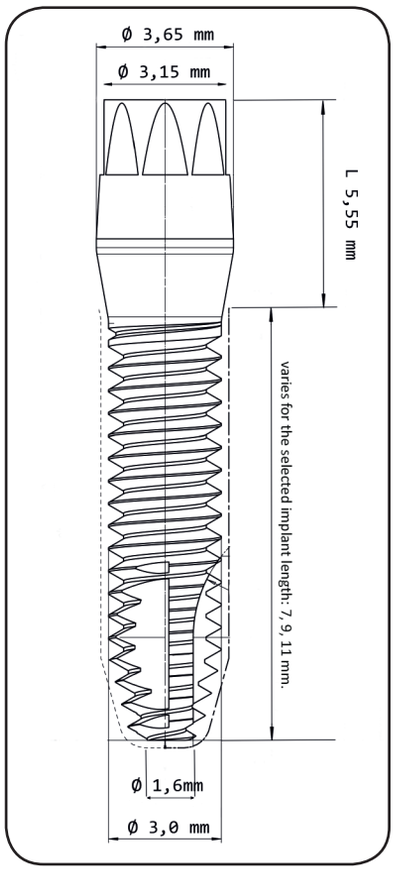
REVOIS® compact
implant
Ø 3,0 mm

REVOIS® compact
temporary implant
Ø 2,2 mm

REVOIS® compact
laboratory analogue

	D (mm)	L (mm)
Implant	**3,0**	**7 / 9 / 11**
Temporary implant	**2,2**	**13**

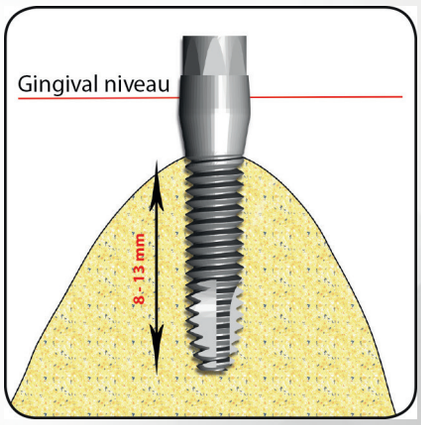
Planning patient care with REVOIS® compact - surgery and prosthetics



Note:
The implant head and all tooling used above need to be free of bone contact at all times.

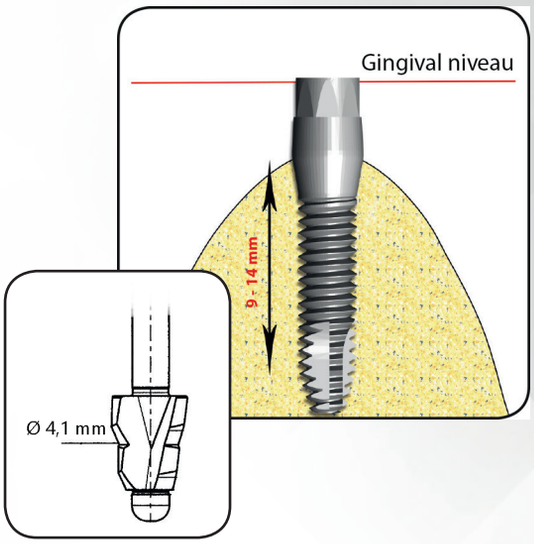
For
- **Single crown**
- **Bridges**
- **Press ceramics**

The recommended drilling depth is the implant length plus 1 – 2 mm subject to bone density. Please also consider the gingival niveau (see figure to the upper right) ensuring that the concentric part of the implant head and its octagon are free accessible above the intended gingival modelling.



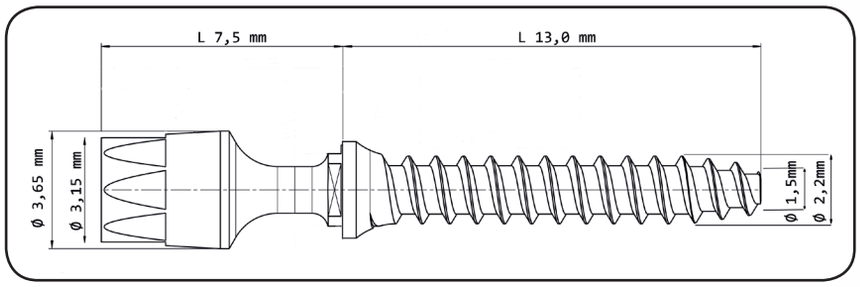
For supraconstruction such as
- **Bars (e.g. SFI-Bar®)**
- **Telescopes**

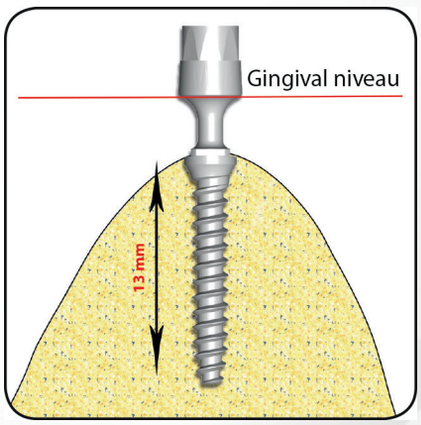
The recommended drilling depth is the implant length plus 2 – 3 mm subject to bone density. The crestal opening needs to be widened specifically using the REVOIS® counter sink drill - and the implant to be placed considering the gingival niveau- as shown in the figure to the middle right.



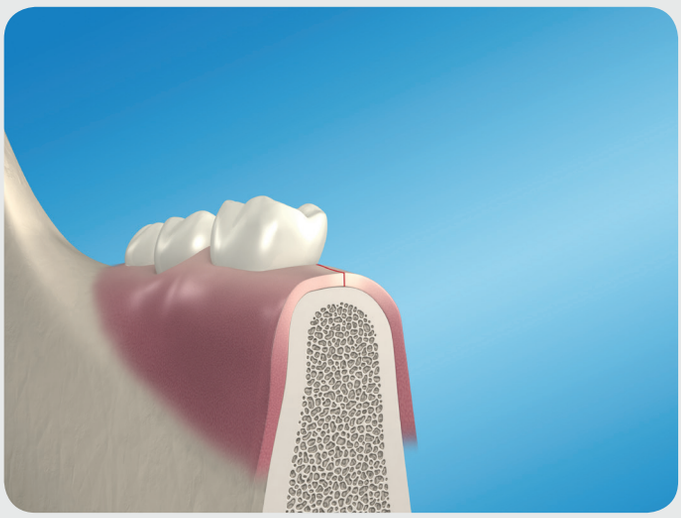
For the temporary implant,

The recommended drilling depth is the implant length (13 mm). Please also consider the gingival niveau (see figure to the lower right).



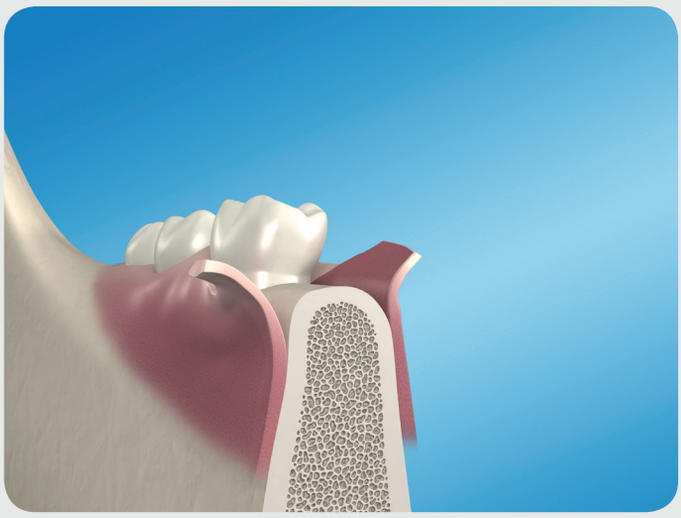


REVOIS® compact : Surgical Procedure



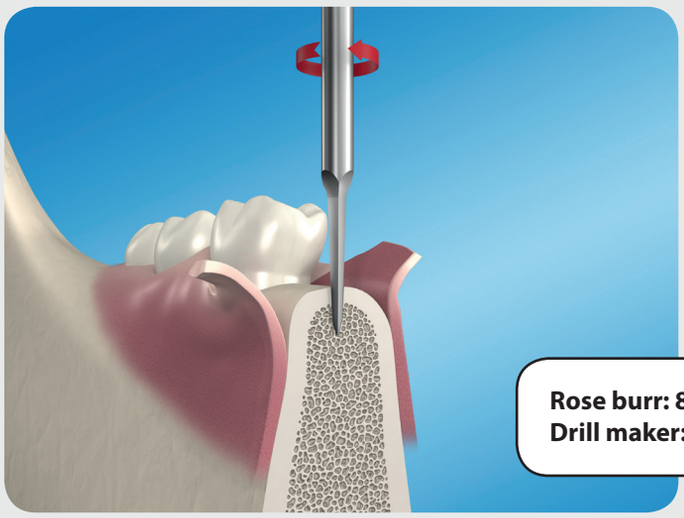
Starting point.

Single tooth replacement, right mandibula.



Incision and surgical preparation of the gingiva.

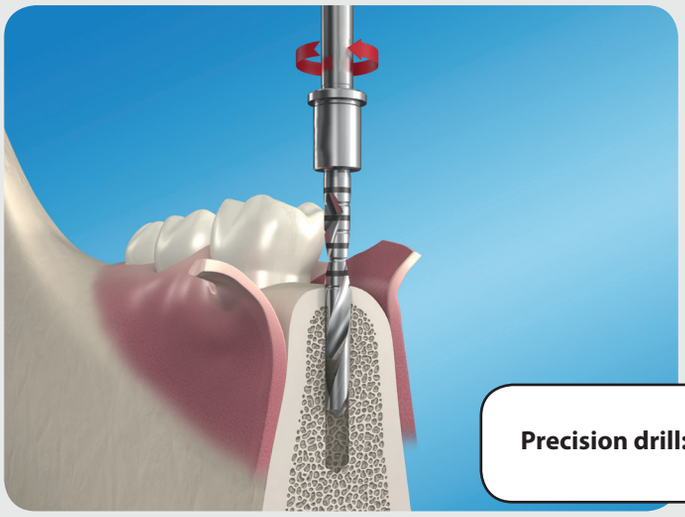
Alternatively, you can use a gingival punch.



Positioning with the drill marker.

Alternatively, a rose burr may be used.

Rose burr: 800 - 1000 rpm
Drill maker: 800 rpm



Optional pre-drilling with the 1.5 mm precision drill.
Drilling with the 2.5 mm precision drill.
With all drilling, take caution for sufficient cooling of the drills, to keep the surgical thermal trauma to a minimum. The use of optional drill stops reduces the risk to injury underlying tissue structures.

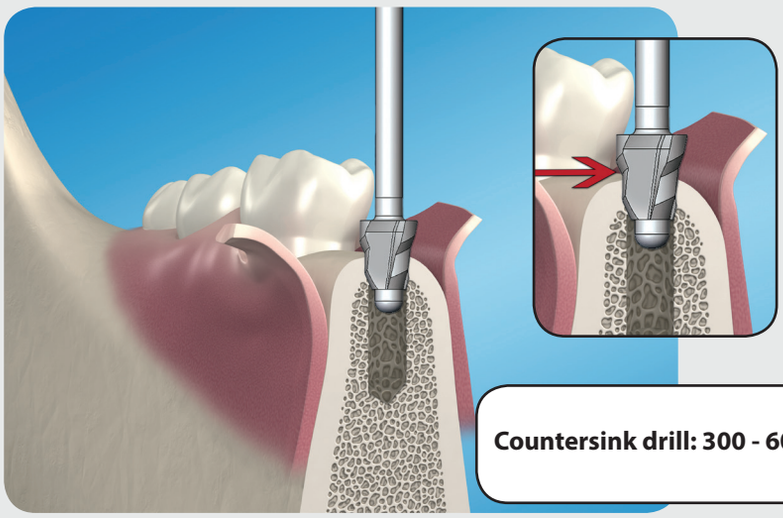
Precision drill: 1000 rpm

For the recommended drilling depth, please refer to page 7 (planning).

For single tooth replacement and anchoring for bridges, the implant bed preparation is now complete.

Note:
The implant head and all tooling used above need to be free of bone contact at all times.

For the later use of bars (such as **SFI-Bar®**) or **telescopes,** the implants with their shoulder need to be inserted deeper, and accordingly, the following *additional drilling* step is required:

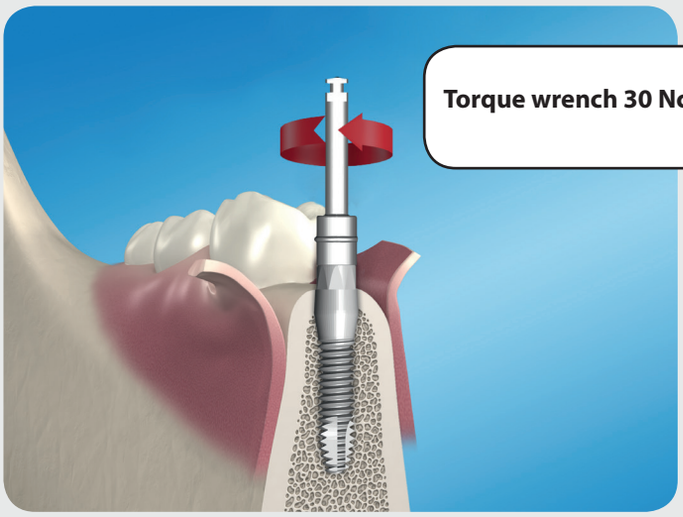


The crestal opening needs to be widened using the REVOIS® counter sink drill.

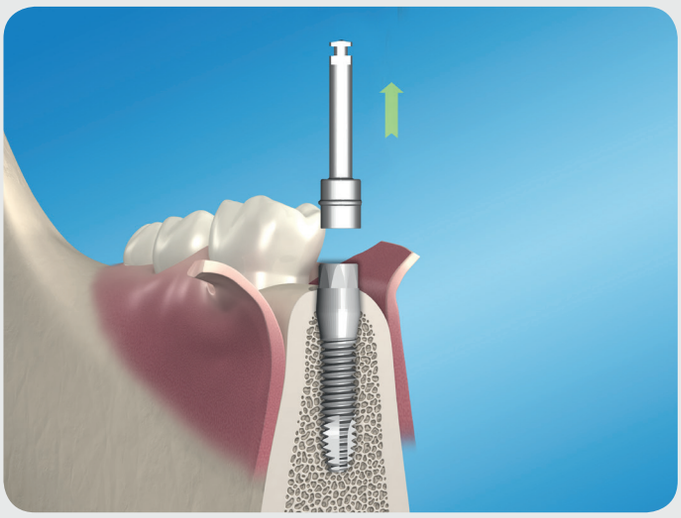
The arrow in the enlarged picture to the left shows the mark on the counter sink for the optimal drilling depth.

Countersink drill: 300 - 600 rpm

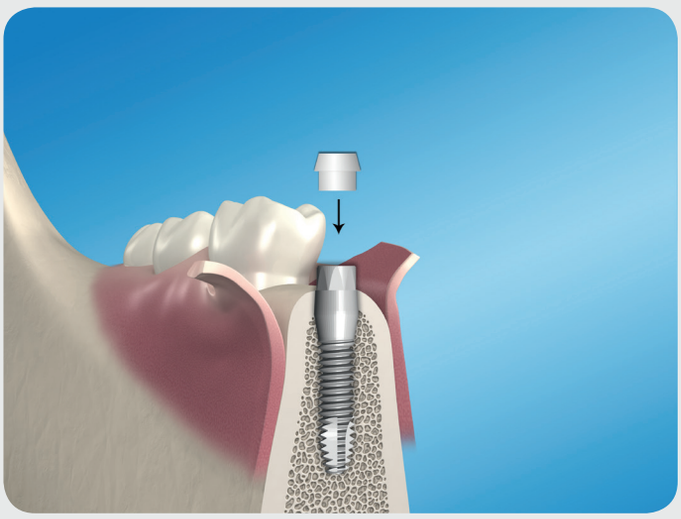
Insertion of the **REVOIS®** compact implant



Take the pre-mounted implant out of the sterile blister and manually insert the implant into the prepared cavity. Then unscrew the transfer post. Continue inserting the implant with the insertion tool or with a torque wrench not exceeding forces of 30 Ncm into its final position.



Remove the insertion tool.



Remodel the gingiva using established techniques.

If not directly progressing with the prosthetic work, use wax and the plastic cap (mounted supra-gingivally) to seal and close the implant til the next patient visit.

Alternatively proceed with impression taking or bar mounting.

Decision for one-time or multiple-times processing

The pre-mounted implant is taken out of the sterile blister and manually inserted into the prepared cavity.

Final insertion is done with the insertion tool (ISO adapter) and a torque not exceeding forces of 30 Ncm. Please consider the drilling and insertion tips on page 7 (planning).

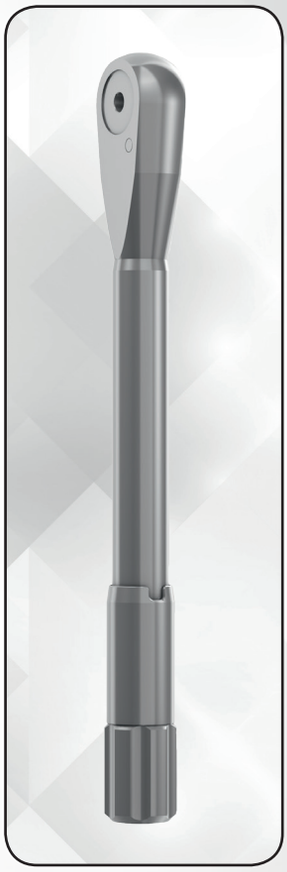
Implant stability needs to be confirmed through an outbound-resistance of at least 20 Ncm prior to proceeding with impression taking and the subsequent prosthetic work.

If implant stability is not reached, re-position the implant with the torque wrench at 30 Ncm in its recommended position, and seal and cover the implant with wax and the cap, respectively. Remodel the gingiva and allow for a healing period of typically 3-6 months.

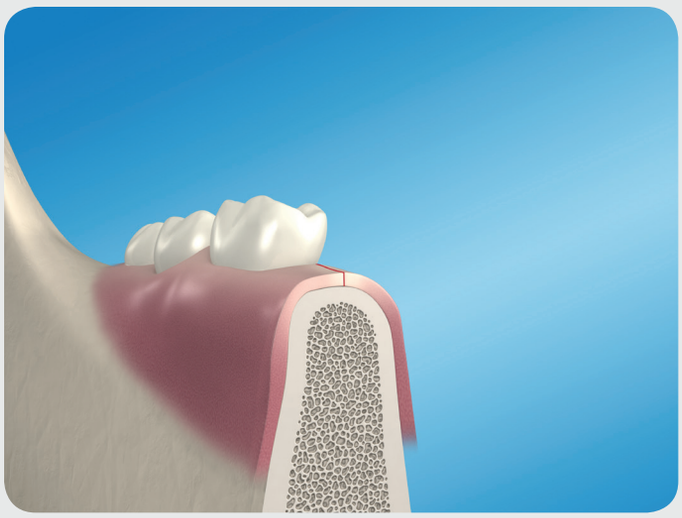
The impression-taking using open- or closed-tray techniques is explained on the following pages.

Torque wrench: 20 - 70 Ncm

The torque wrench is delivered non-sterile. To ensure proper functioning, it needs to be taken apart after each use and cleaned, disinfected and sterilized following validated methods and according to applicable laws. Please refer to the instructions for use of the respective manufacturer.

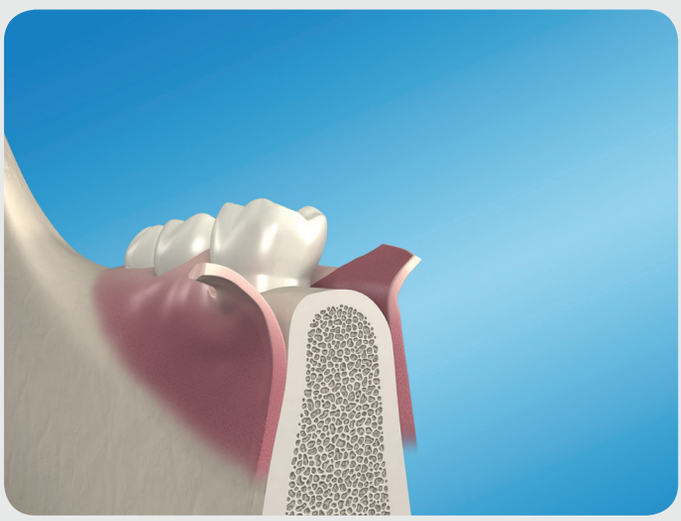


Surgical Procedure for the **REVOIS® compact** temporary implant



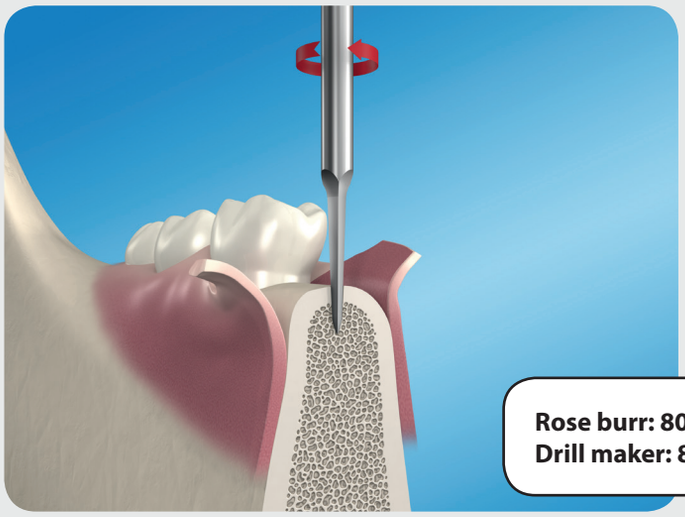
Starting point.

Single tooth replacement, right mandibula.



Incision and surgical preparation of the gingiva.

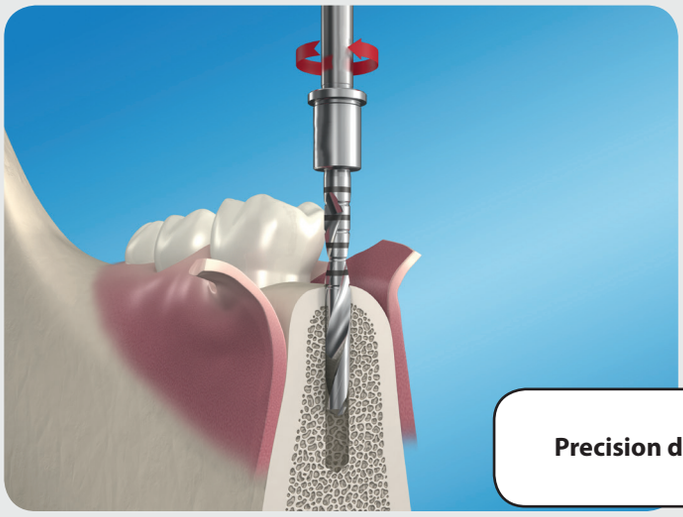
Alternatively, you can use a gingival punch.



Positioning with the drill marker.

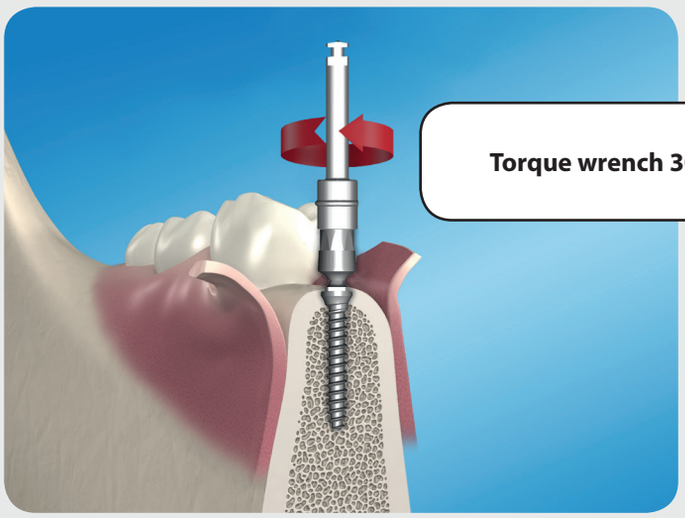
Alternatively, a rose burr may be used.

Rose burr: 800 - 1000 rpm
Drill maker: 800 rpm



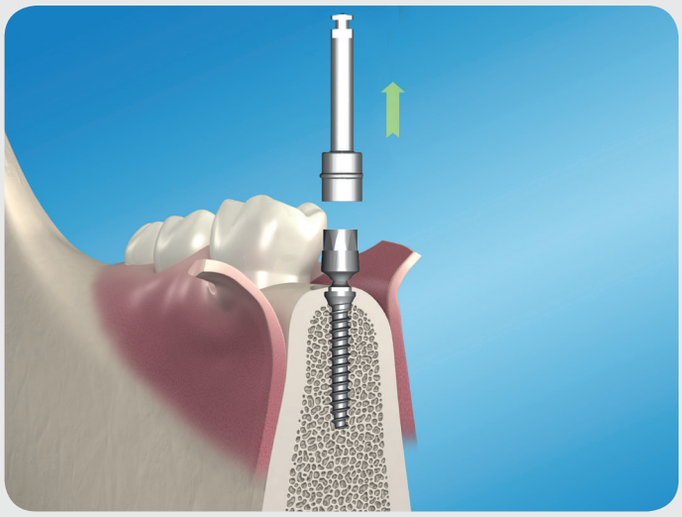
Drilling with the 1.5 mm precision drill.
With all drilling, take caution for sufficient cooling, to keep the surgical thermal trauma to a minimum. The use of optional drill stops reduces the risk to injury underlying tissue structures. For the recommended drilling depth, please refer to page 7 (planning).

Precision drill: 1000 rpm

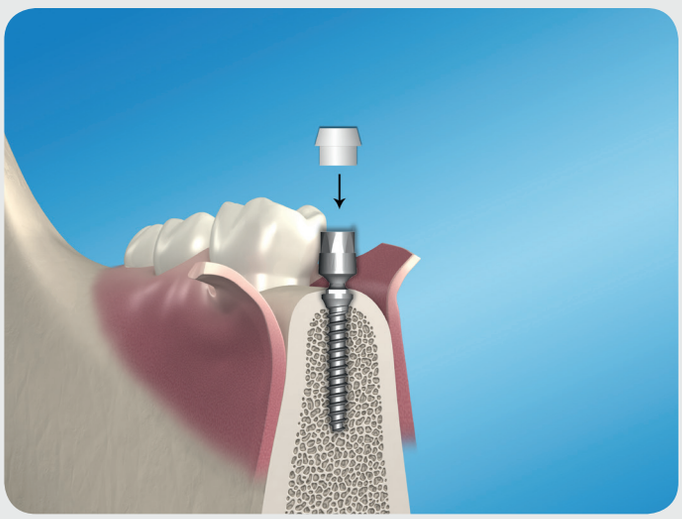


Torque wrench 30 Ncm

Take the pre-mounted implant out of the sterile blister and manually insert the implant into the prepared cavity. Then unscrew the transfer post. Continue inserting the implant with the insertion tool or with a torque wrench not exceeding forces of 30 Ncm into its final position.



Remove the insertion tool.



Remodel the gingiva using established techniques.

If not directly progressing with the prosthetic work, use wax and the plastic cap (mounted supra-gingivally) to seal and close the implant til the next patient visit.

Alternatively proceed with impression taking or bar mounting.

Confirm implant stability as described on page 11.

If confirmed, re-insert impression post and screw, and proceed with impression taking and prosthetic work, respectively.

The figure to the left shows the REVOIS® compact temporary implant with impression post and screw. As described in the following, one may also use the components for the closed-tray impression taking.

Hand-tight 10Ncm

Impression taking with REVOIS® : compact

You can choose between:

Closed-tray impression

Sleeve
Gold or titanium
with rotation lock
Exception: for bridges
use sleeves
without rotation lock

REVOIS® compact
Implant

Open-tray impression

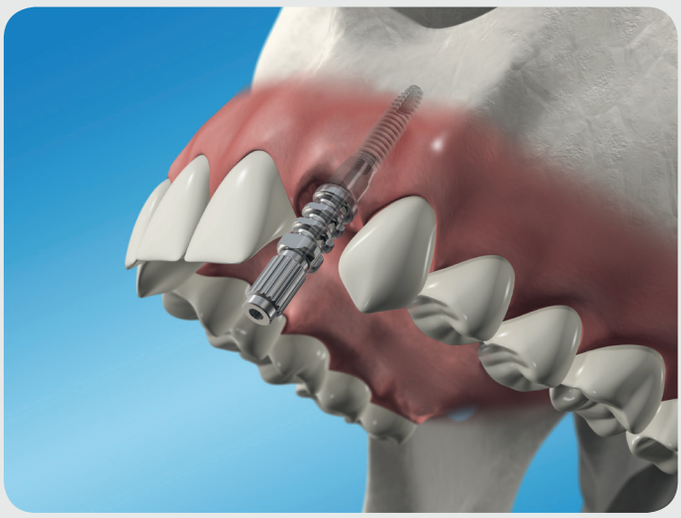
impression screw

Impression post
with rotation lock

REVOIS® compact
Implant

Drawing above is valid also for the **REVOIS® compact** temporary implant.

Open-tray impression taking with REVOIS® : compact

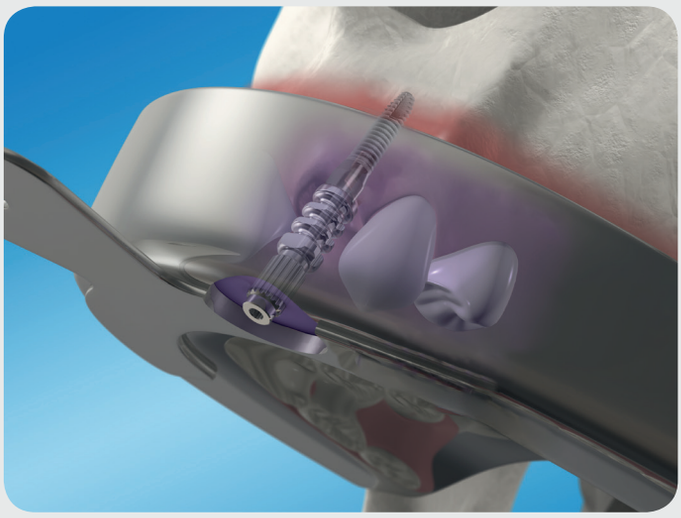


Open-tray impression taking with **REVOIS® compact.**

The impression post with rotation lock (or a respective sleeve) is fixed with the impression screw onto the implant using forces not exceeding 10 Ncm.

The outer octagon of the implant head implies the direction of the post.

Note:
Ensure the interface is clean on both, implant and post. Ensure proper fit / anti-rotation stability.

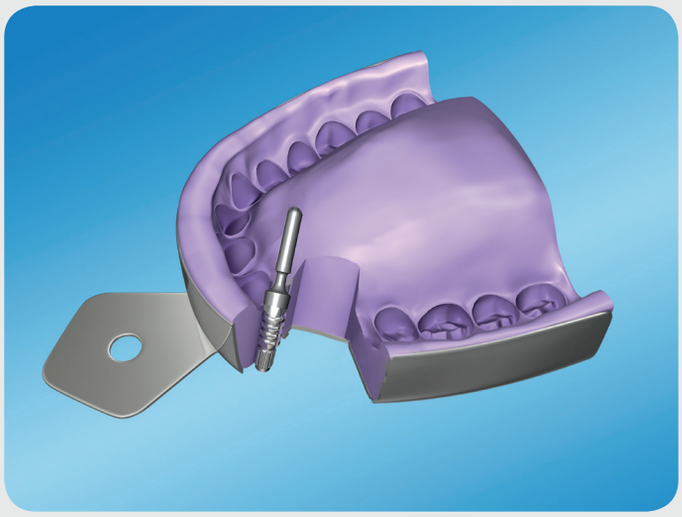


Apply the impression mass with a syringe around the impression elements. Consider an elastomeric impression material, silicone or polyether, following the instructions for use of the respective manufacturer.

Continue with the impression taking (individual impression body). Once the impression mass is hardened out, first remove the impression screw.

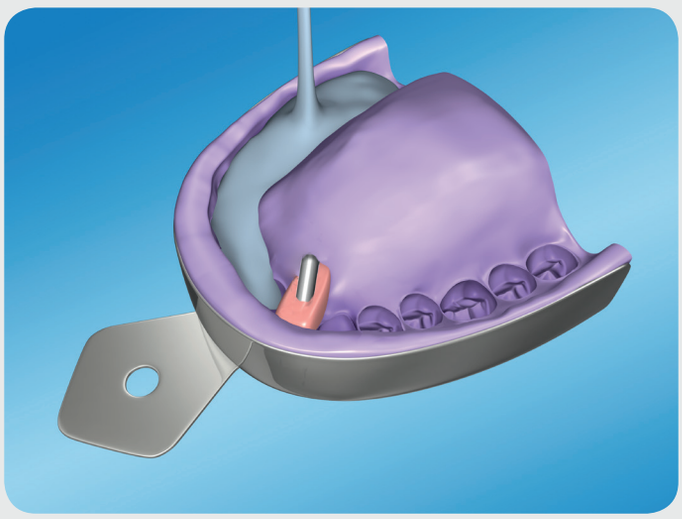
Creation of the working model following open-tray impression

To ensure high quality, precision and hygiene, we recommend to use each impression post only once.



Left in the impression cast you can see the impression post.

To create the working model, the laboratory analogue is placed onto the impression post and fixed with the impression screw.



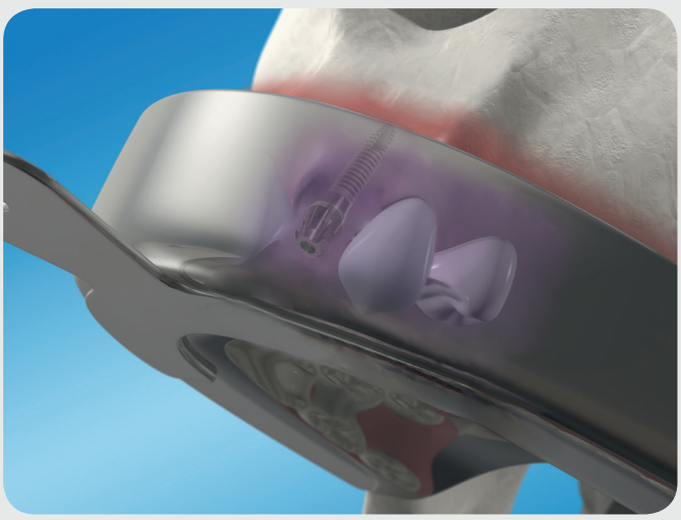
Cover the laboratory analogue as needed with a gingiva mask and pour the impression cast using appropriate plaster (type 4), following the instructions of the manufacturer.

After sufficient hardening of the casting material, carefully remove the impression scoop from the working model followed by the subsequent prosthetic work.

Closed-tray impression taking with REVOIS® : compact

Titanium- or Gold-sleeve:
The titanium- or gold-sleeve is placed directly onto the implant. The outer octagon of the implant implies the direction of the sleeve.

Note:
Ensure the interface is clean on both, implant and post. Ensure proper fit / anti-rotation stability. Seal the screw channel of the sleeve reversibly with wax.

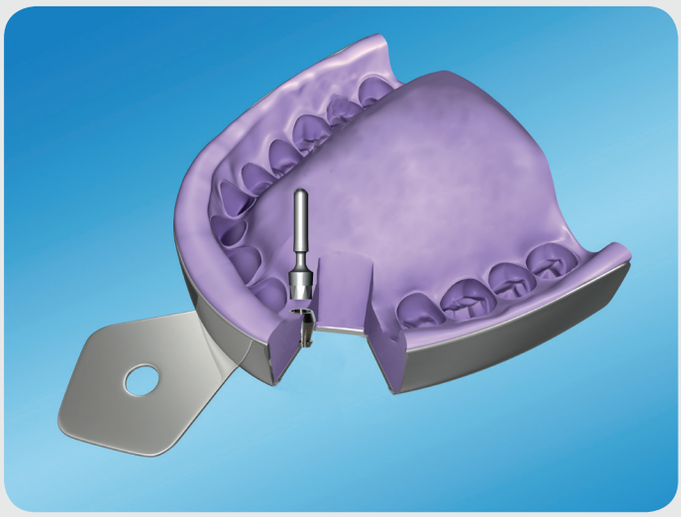


Apply the impression mass with a syringe around the impression elements. Consider an elastomeric impression material, silicone or polyether, following the instructions for use of the respective manufacturer.

Make sure there is sufficient impression mass around the impression elements. The titanium- or gold-sleeve remains in the impression mass.

Creation of the working model following closed-tray impression

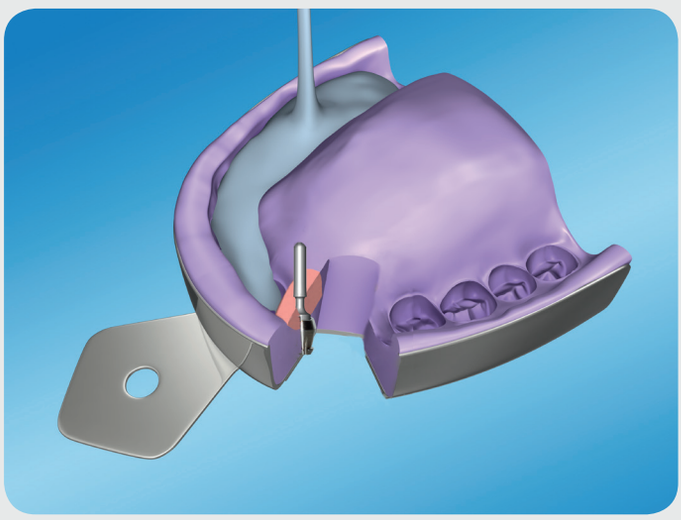
To ensure high quality, precision and hygiene, we recommend to use each sleeve only once.



Left in the impression cast you can see the titanium- or gold-sleeve.

To create the working model, the laboratory analogue is placed directly into the sleeve.

Ensure proper fit / anti-rotation stability.



Cover the laboratory analogue as needed with a gingiva mask and pour the impression cast using appropriate plaster (type 4), following the instructions of the manufacturer.

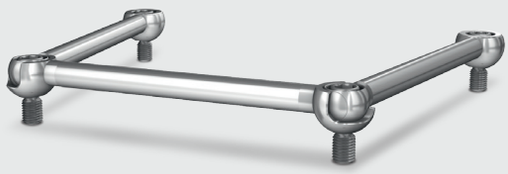
After sufficient hardening of the casting material, carefully remove the impression scoop from the working model followed by the subsequent prosthetic working steps.

Prosthetic options with REVOIS® : compact

Single crowns and bridges

Gold and titanium
sleeves
Lock / no lock

Bars, e.g. SFI-Bar®



Press ceramics

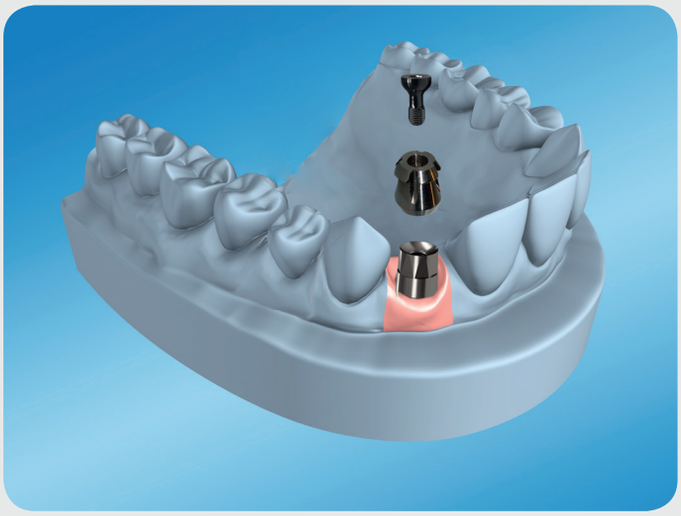
Telescope

Note:
The surgical protocol and the implant insertion depth is to be adapted for the intended prosthetic work. Please refer to the planning tips on page 7 of this manual.

Prosthetic components – The sleeves (gold or titanium)

Options for restauration.

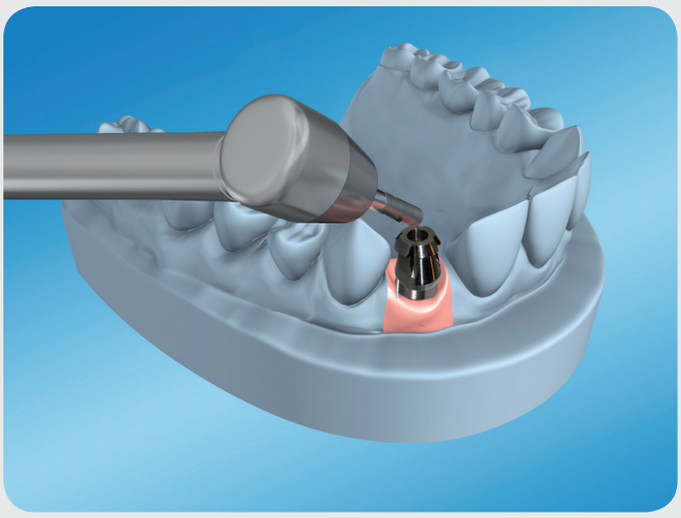
The titanium or gold sleeves can be individualized chair- or labside. Individual profiling is possible to achieve situs-optimized shapes and profiles, and an excellent aesthetic result. When creating a multi-unit reconstruction, it is recommended to perform an (occlusal) impression coping to control the exact positions of the sleeves in the mouth.



Individualization of the sleeves.

Place the sleeve onto the octagon of the laboratory analogue in the working model, and fix it with the retention screw applying 15-20 Ncm.

According to the intended reconstruction use a sleeve with or without lock.



When individualizing the sleeve it is recommended to prepare maintain a circumferential gorge.

Ensure that the inbus screw remains fully covered by sleeve material if you reduce the height of the sleeve.

Note: The implant sleeve interface must not be modified (and also not be blasted) to ensure precise fit and best-possible force transmission.

Fabrication of cement-retained crowns and bridges

For the fabrication of cement-retained single crowns (with gold- or titanium-sleeve with rotation lock) or bridges (with gold- or titanium-sleeve without rotation lock) screw-fix the sleeves directly onto the implants.

For the restaurative working steps, the creation of a working model with gingiva mask is recommended. Generate a Wax-up model considering aesthetic and phonetic goals, and take an impression employing silicone pre-walls. Screw the sleeves to the laboratory analogues. The individualization of the sleeves as well as the fabrication of provisory crowns or bridges takes place in accordance with the pre-walls from the wax-up model.

Note: The implant abutment interface must not be modified (and also not be blasted) to ensure precise fit and best-possible force conduction.

Modellation / Shaping

For the secondary crown, one may use auto-polymerisate as basis. Strictly follow the instructions for use of the respective manufacturer. Using a wax-up and applying silicone pre-walls the individualisation of the reconstruction can be optimally controlled.

Fabrication of a metal-ceramic scaffold

Fabricating a metal-ceramic scaffold, make sure to work towards a reduced anatomic and physiological shape. Consider the thermal expansion coefficient of the respective materials / products.

The provisory attachment of the modellation requires the consideration of the flow characteristics and follows standard procedures. With embedding, pouring, and outbedding always consider the instructions for use of the manufacturers.

Fit-control and finalization

Complete the scaffold and diligently ensure pass-fit edges / lips. Then control the fit of the scaffold with the patient.

Finally fix the scaffold with the inbus screw 0.9 mm, applying a torque of 20 Ncm. Reversibly occlude the screw channel and cement the fabricated prosthetics.

Fabricating the scaffold

Creation of an individual wax model.

Create a wax model following standard procedures for crowns and bridges. With embedding and pouring always consider the instructions for use of the respective manufacturer.

Mounting of the Prosthetics

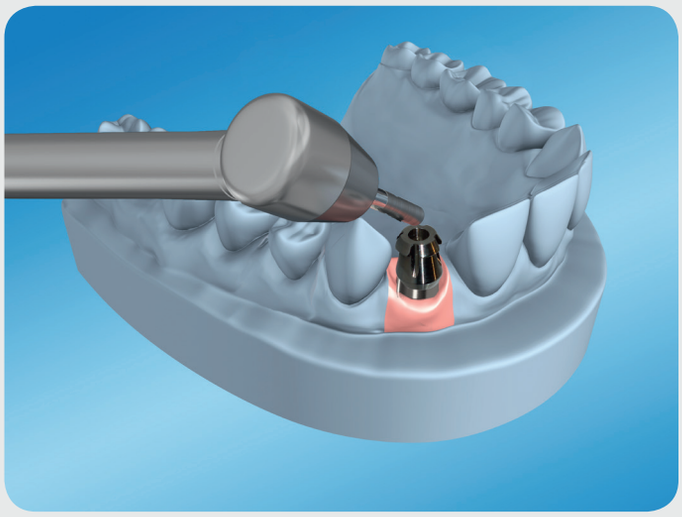
Cementing the provisory crown.

To provide the patient with an interim crown supporting a high quality of life, create a provisory prosthesis following standard procedures. Reversibly occlude the screw channel with a material of your choice. Cement the temporary crown using an appropriate temporary cement and following its manufacturer`s instructions for use.

Cementing the final crown.
Remove the provisional crown from the patient`s mouth. Ensure the retaining screw is properly fixed by applying forces of 25 Ncm. Reversibly occlude the screw channel, e.g. with light-activated elastic glue, to retain an easy access to the screw head. Place the fabricated final prosthesis and check it for proper and stress-free fit, occlusion, form, phonetics, aesthetics, and colouring.

Cement the final crown using an appropriate cement and following its manufacturer`s instructions for use.

Press ceramics



When individualizing the sleeve it is recommended to prepare a circumferential gorge.

Note:
The implant sleeve interface must not be modified (and also not be blasted) to ensure precise fit and best-possible force transmission.

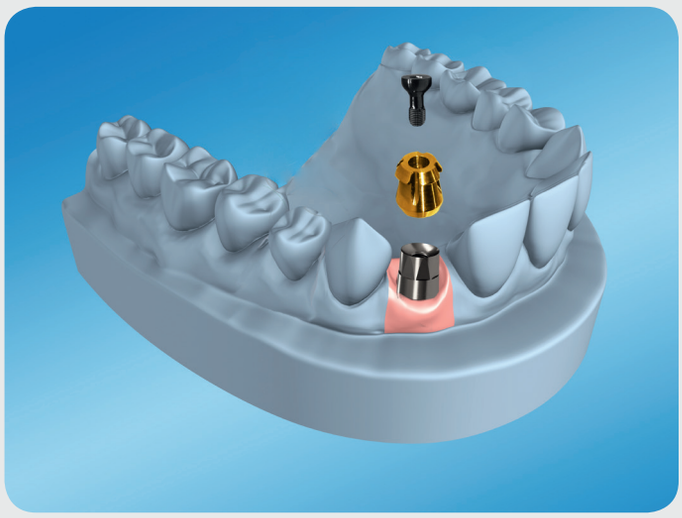
For the working steps in the dental laboratory, use a torque of maximally 15-20 Ncm, only.

Creation of an individual **wax model** should follow standard procedures, followed by embedding, pressing, layering, and finalizing. Always consider the instructions for use of the manufacturer as well as the recommendations for wall thickness and aesthetics.

Cementing the final crown

Reversibly occlude the screw channel, e.g. with light-activated elastic glue, to retain an easy access to the screw head. Place the fabricated prosthesis and check it for proper and stress-free fit, occlusion, form, phonetics, aesthetics, and colouring. Cement the final crown using an appropriate cement and following its manufacturer`s IFU.

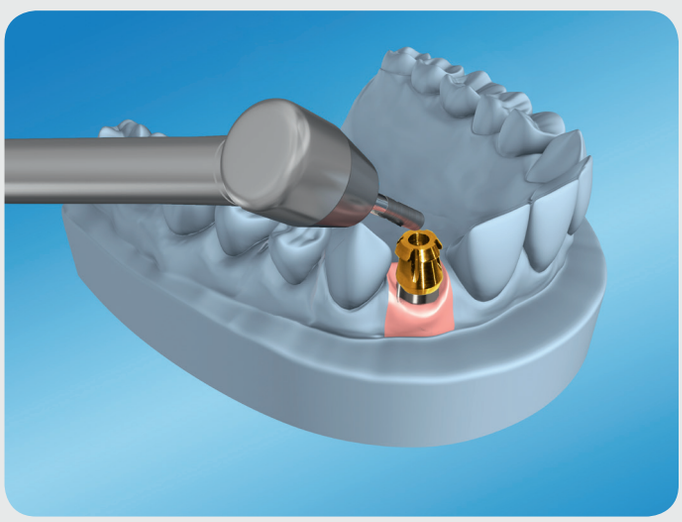
Telescope



We recommend to use the gold sleeve for the fabrication of telescopes.

When individualizing the sleeve it is recommended to prepare maintain a circumferential gorge.

Note:
The implant sleeve interface must not be modified (and also not be blasted) to ensure precise fit and best-possible force transmission.
For the working steps in the dental laboratory use torque of maximally 15-20 Ncm.



Create the parallely-sided primary part of the telescope by sanding the sleeve.

Note:
The implant sleeve interface must not be modified (and also not be blasted) to ensure precise fit and best-possible force transmission.

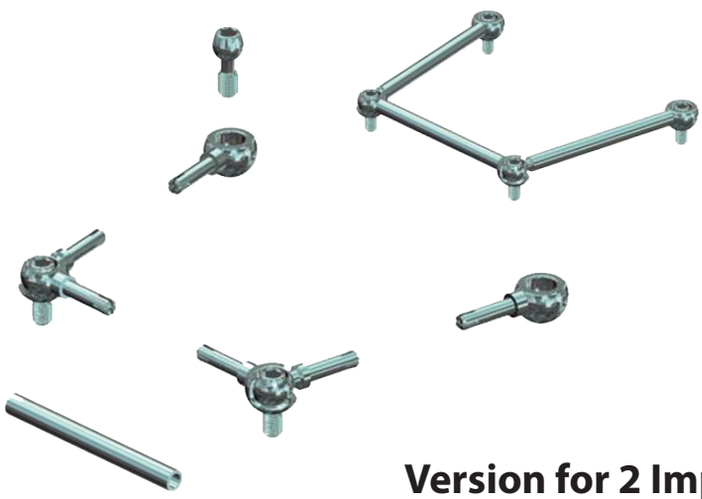
Then create the secondary parts of the telescope and the secondary prosthesis following standard procedures and the instructions for use of the manufacturer.

SFI-Bar® - the pre-fabricated modular bar system

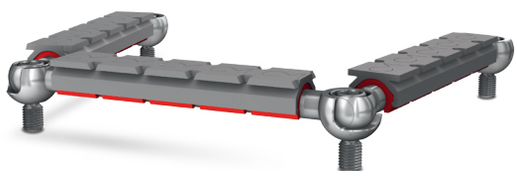
The **REVOIS® compact** Interface design is optimized for the easy chair- or labside use of **SFI-Bar®.**

SFI-Bar® is an innovative modular bar system for a removable prosthesis anchored on 2 to 6 implants in the upper or lower jaw bone.

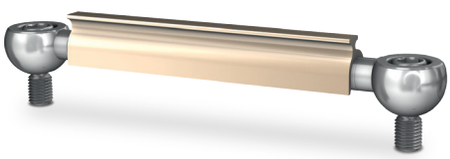
Version for 4 Implants

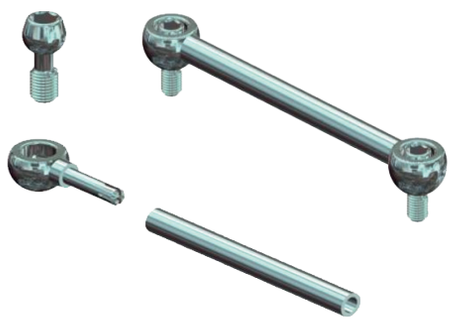


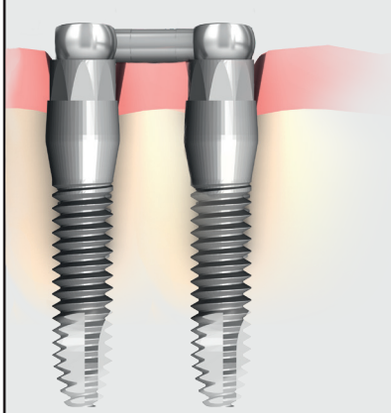
With a small number of pre-fabricated, modular components, chairside placement of a bar immediately following REVOIS® implants insertion (PRO or compact) becomes possible. Time and money saving, bars become an option again in many clinical situations when implants are considered.



Version for 2 Implants







The stress-free fit is an elementary requirement for the long-term success of implant-based, bar-retained prosthetic reconstruction promoting axial force transmitted and implant osseointegration. Only vertical pressure is transmitted and as such promotes the intented interconnection between jaw bone and implants.

There are 2 housing concepts available for SFI-Bar:

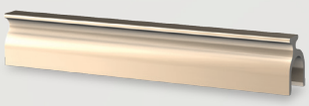
a) titanium-made housing (T), adjustable and with exchangeable retention inserts, different by length and retention force. The kit is delivered with 6 retention inserts (yellow = soft retention; red = normal retention). May be used as from 3 implants.

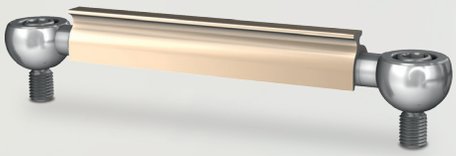
b) Gold-made housing (E), asymmetric, made from Elitor® gold alloy, with adjustable lamellas and one standard length of 30 mm. Mandatory with 2 implants, optional up to 6 implants.

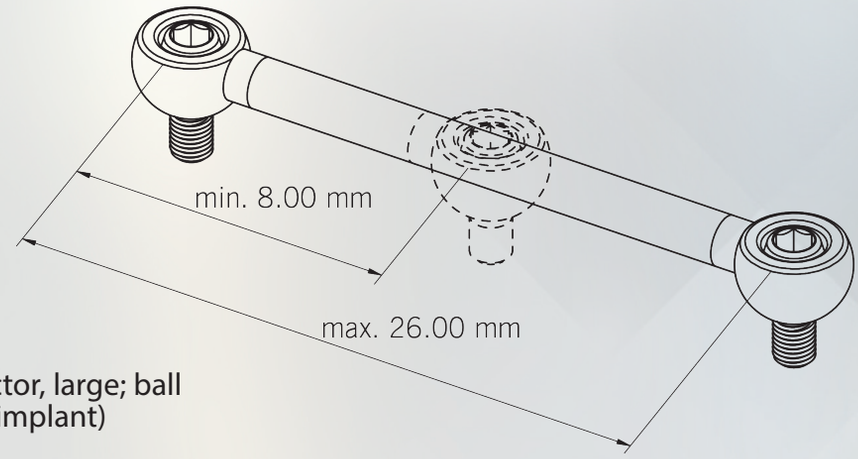
Optimal force transmission with SFI-Bar® – Convincing results

The force transmitted is optimally divided by the SFI-Bar® across the bar and between the underlying implants - due to its design of flexible connection between the implants – comparable to the steering mechanism of a car. The pre-fabricated components of SFI-Bar® can be quickly adapted to each patients` individual situation. Reasonable inclinations are corrected with no additional effort contributing to minimize the lateral wear on the implants, and thus supporting an appropriate environment for osseointegration.

The housing concept of SFI-Bar®







Elitor® housing (E) – 68,60% gold alloy

- well-known alloy
- assymetric design of the retention element to safe space and integration height needed
- permits flexible, aesthetic results with bars
- ease of use: acoustical and perceivable "snap" when placed correctly
- to be used with 2 to 6 implants
- individual and stepless force adjustment (activation)

Material

SFI-Bar®
(bar sleeve; fixation screw; ball connector, large; ball connector small; half pipe connector; implant)

TiAl6 V4 ELI (grade 5 titanium)

Female housing, asymmetric E (gold housing)
Mounting: polymerization / glueing
E=Elitor®

Female housing with retention inserts T (tinanium housing)
Mounting: polymerization / glueing
T=titanium

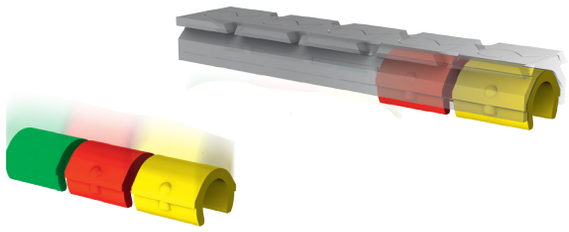
Retention inserts G

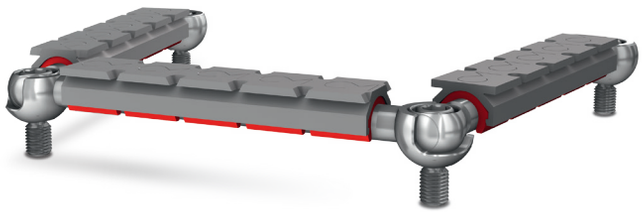
G=Galak, mouth-widthstanding plastic

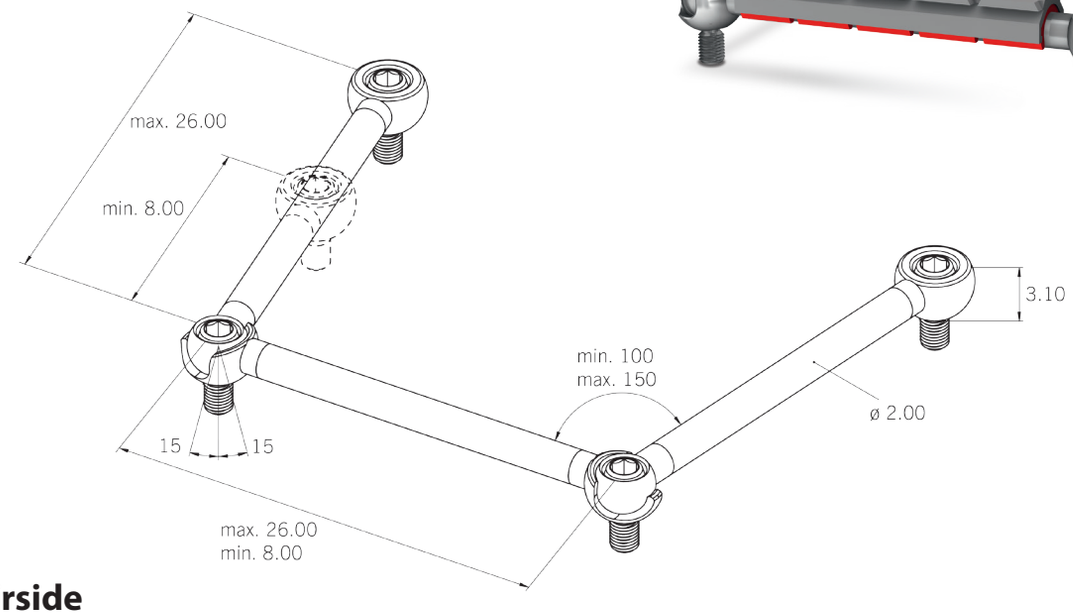
S = Syntax TiAl6 V4 ELI (grade 5)
Ti > 89.478 %, Al 6.0 %, V 4.0 %
E = Elitor®
Au 68.60 %, Pt 2.45 %, Pd 3.95 %, Ag 11.85 %, Cu 10.60 %, Ir 0.05 %, Zn 2.50 %
TS – TL 880 – 940 °C
T = Reintitan
Ti > 98.9375 %
G = Galak

Titanium housing (T) – grade 4 titanium

- long-lasting material, outstanding preciseness
- exchangeable retention inserts made from high-performance polymer, in three different strengths
- different lengths (total 47.5 mm, may be divided by 12)
- ease of use and safety feature: acoustical and perceivable "snap" when placed correctly
- to be used with 3 to 6 implants

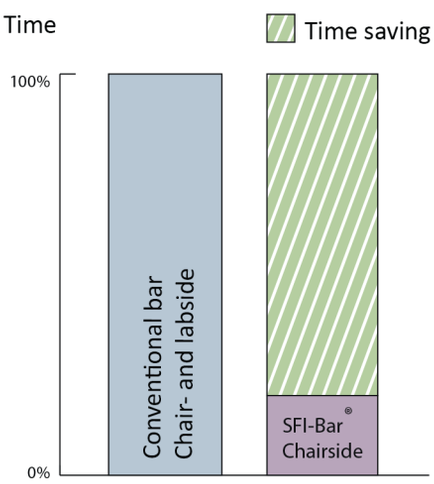




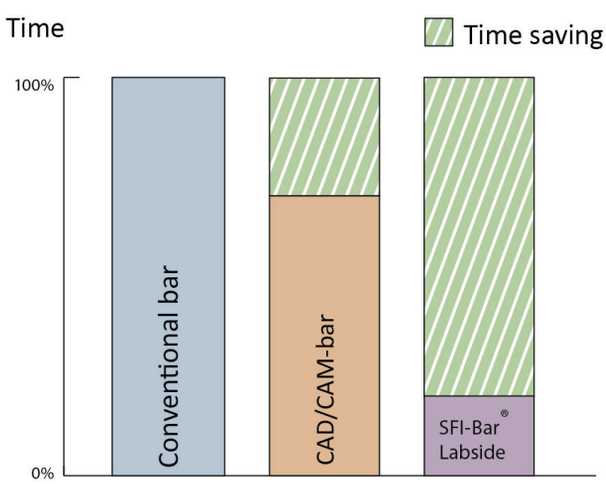


Chairside

The pre-fabricated, modular SFI-Bar® can be adapted chairside, and thus its use reduces processing time by up to 80%!

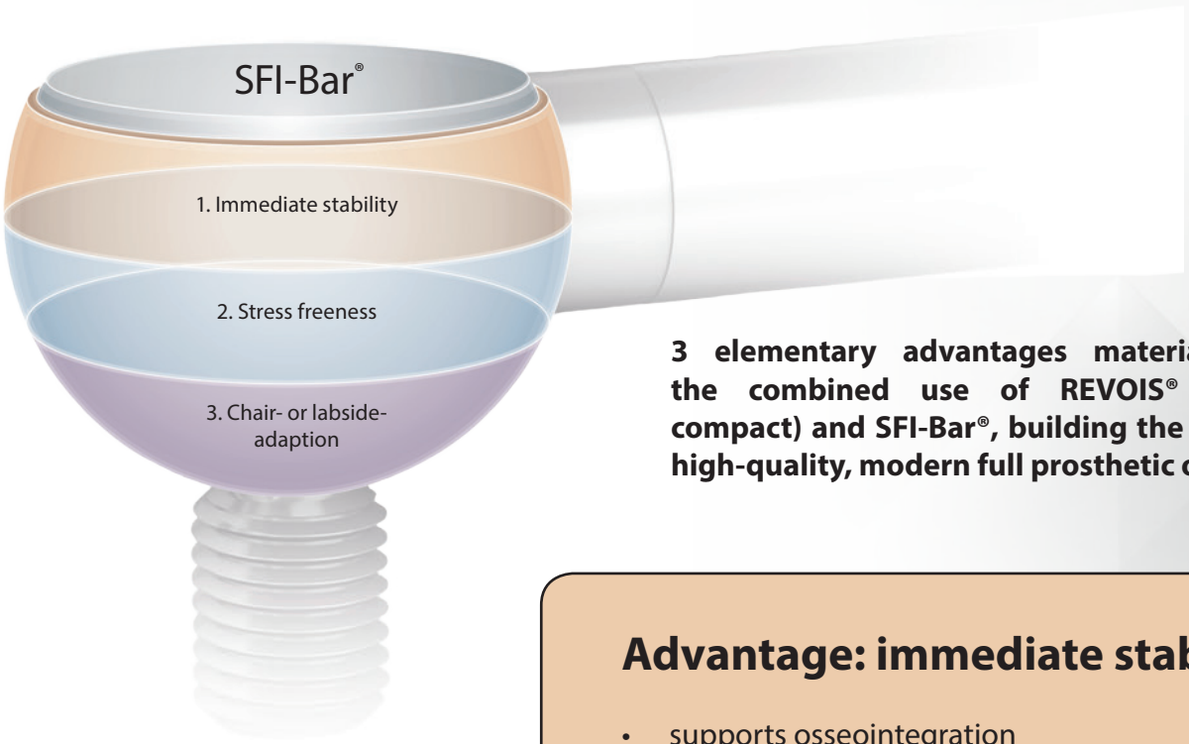


Labside



Comparing to conventional bars and CAD/CAM bars, for the adaptation of the pre-fabricated, modular SFI-Bar® only a fraction of time is needed.

REVOIS® Dental implantat System and SFI-Bar®: Summary



3 elementary advantages materialize with the combined use of REVOIS® (PRO or compact) and SFI-Bar®, building the basis for a high-quality, modern full prosthetic option.

Advantage: immediate stability

- supports osseointegration
- reduces bone height reduction
- "all at once" possible, even with a bar
- increased patient acceptance due to optimized chewing and wearing comfort

Advantage: stress freeness

- reducing the risk for secondary implant loss
- permits physically flexible interconnections between implants
- minimizes lateral stress
- permits optimal force distribution
- reduces material wearout

Advantage: Flexibility for chair- or labside adaptation

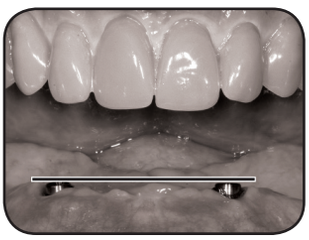
- economic benefit chairside
- universal and fully flexible due to the modular pre-fabrication concept (2-6 implants)
- time and resource saving
- labside: no extra device investment needed
- avoidance of error-prone techniques

SFI-Bar® 2-Implant

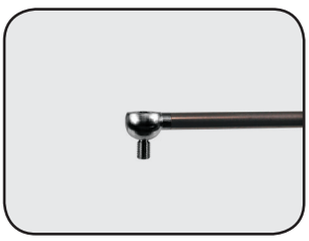
Description of the process steps

Precautions

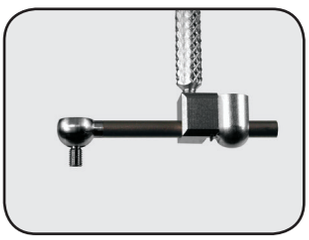
- Parts are delivered non-sterile.
- Instruct the patient for regular cleaning of the bars to avoid soft tissue infections.
- Used chairside, void of aspiration.
- Never sand or cut in the patient`s mouth.
- The inserts (patrices) need to be placed parallelly to each other *and* to the insertion direction.
- overlapping structures must be blocked-out.



1. Position the bar at least 1 mm above the gingival niveau and parallelly to the occlusion level.



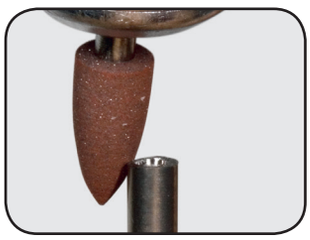
2. Place the bar sleeve, the ball connector, large.



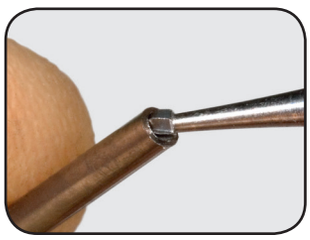
3. Place the bar sleeve measuring device onto the bar sleeve such that its convex part can be put over the implant. Then turn the fixation screw and place a wire as aspiration aid.

4. In the mouth, hand-tightly attach the ball connector large with the retention screw onto the implant, using the hex driver. Loosen the fixation screw of the bar sleeve measuring device. Now move the bar sleeve measuring device over the other implant. Press slightly and tighten the fixation screw again ensuring the bare sleeve is well-placed onto the ball connector.

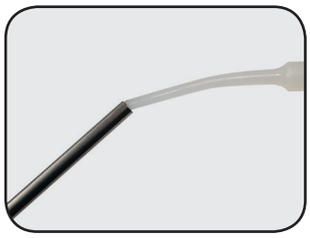
5. Loosen the opposite fixation screw and remove the bar sleeve with the bar sleeve measuring device from the mouth. Cut the bar sleeve with a cutting wheel (thickness 0.3 mm) attached to the flat side of the bar sleeve measuring device.
Carry protective glasses.



6. Remove edges.



7. Remove edges.



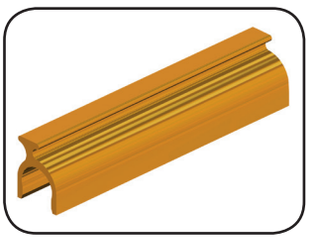
8. Prophylaxis: Seal the hollow spaces and rims with antibacterial, highly viscous silicone.

9. Place the second ball connector, large, onto the bar sleeve and screw-fixate the SFI-Bar® with onto the implant, applying a torque of 25 Ncm. Take the necessary aspiration prevention measures.

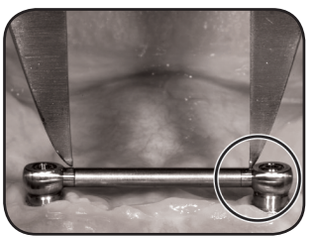
Control: The SFI-Bar® is placed stress-free if screw-fixation onto the implants is possible without major effort.

Mounting the housing directly in the mouth

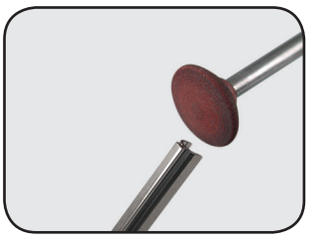
(assuming the patient has an existing, full arch prosthesis without reinforced scaffold)



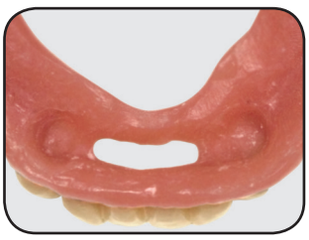
10. Housing E, asymmetric, adjustable, divideable.



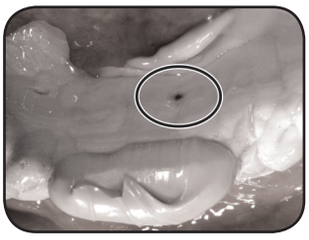
11. In the mouth of the patient, measure the entire length of the bar between the balls of the ball connectors.



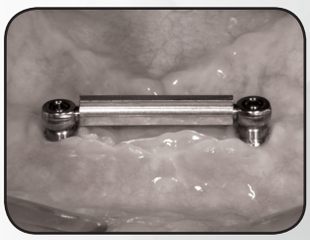
12. Cut the gold housing as needed and remove the edges all around.
Carry protective glasses.



13. Open the prosthesis lingually creating suffient space for the housing.

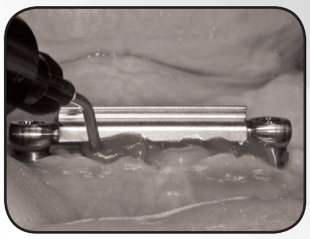


14. Control proper fit of the prosthesis.



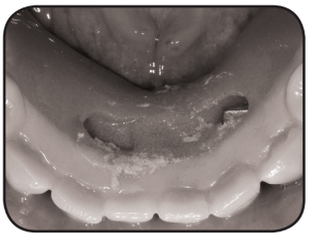
15. Temporarily, place a separation layer between housing and bar prior to polymerization.

Orient the asymmetric retention of the gold housing following aesthetic and functional aspects.

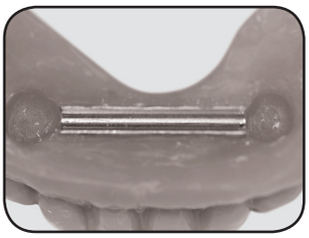


16. Block out overlapping zones around the bar.

Important: Lamellas have to be half-free of plastic, to guarantee an optimal, elastic and longlasting function. In addition, this allows activation of the lamellas later on, using appropriate tooling.



17. Place the prosthesis and carefully fixate the gold housing provisory with plastic. The final mounting should be done in the dental laboratory under optimal conditions for material evolution and individualization.

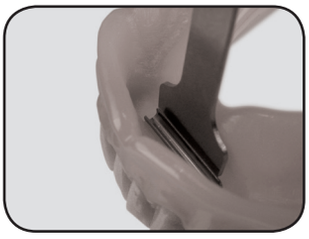


18. Ready-mounted housing.

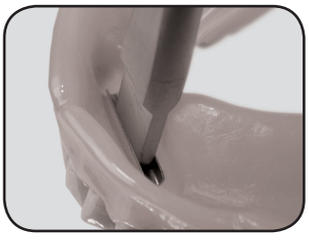
19. Restauration completed in the mouth of the patient.

Note:
For the fabrication of a completely new prosthesis in the dental laboratory, we recommend the creation of an individually enhanced scaffold.

Activation / adjustment and disactivation:



20. The activitation is done using the activator instrument, pressing slightly inwards.



21. The disactivation of a housing with a too high retention force is done with the disactivator makro carefully, pressing into the housing until the intended friction is reached.

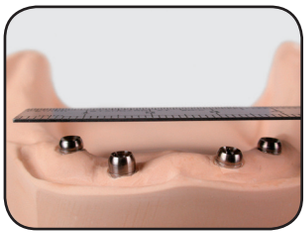
Note:
The gold housing is milled and its alloy is very stable. This is of advantage for longtime stability.

SFI-Bar® 4-Implant

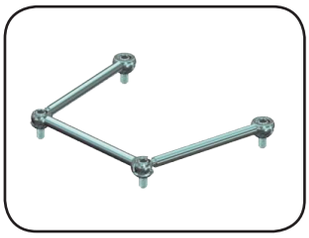
Description of the process steps

Precautions

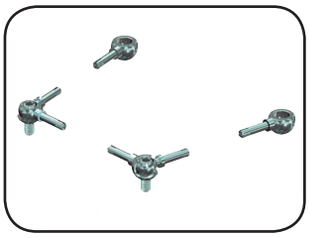
- Parts are delivered non-sterile.
- Instruct the patient for regular cleaning of the bars to avoid soft tissue infections.
- Used chairside, void of aspiration.
- Never cut or sand in the patient`s mouth.
- The inserts (patrices) need to be placed parallely to each other and to the insertion direction.
- overlapping structures must be blocked-out.



1. Position the bar at least 1 mm above the gingival niveau and parallely to the occlusion level.



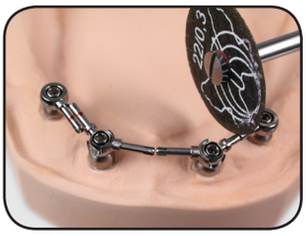
2. Disassembly the pre-mounted SFI-Bar®.



3. Watch out not to interchange the pieces.

4. Using the hex driver, mount, align and screw-fix the ball connectors large onto the posterior implants, and the ball connectors small onto the anterior implants.

5. As needed shorten the cones between two ball connectors. To do so, mark the cut-off point and cut the cones symmetrically. Important note: minimal distance *between implants* is 8 mm. Distance between two cones ends should be as minimal as possible.

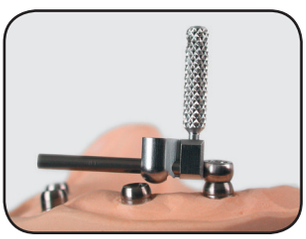


6. Cut the cones on the model.

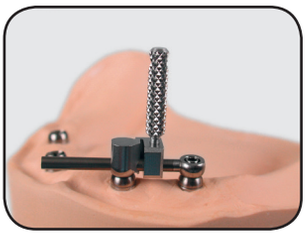
7. Carefully remove edges all around. Do not sand or cut in the patient`s mouth.
Carry protective glasses.

8. To align the cones, slightly loosen the fixation screws of the ball connectors.

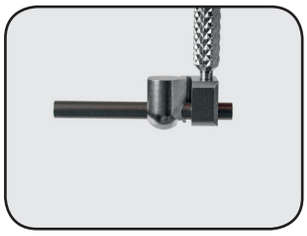
9. Slide the bar sleeve measuring tool onto the bar sleeve and fixate it by turning the fixation screw.



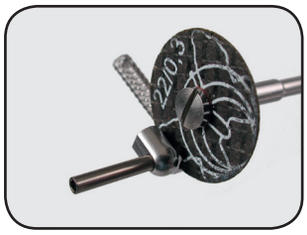
10. On the model, slide the bar sleeve with the bar sleeve measuring tool onto the cone of the ball connector, so that the convex part of the bar sleeve measuring tool is placed over the implant.



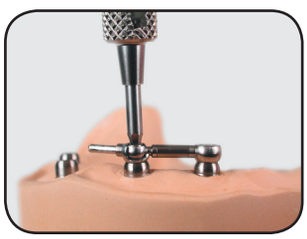
11. Carefully loosen the fixation screw and slide the bar sleeve measuring tool over the implant. Slightly press and tighten the fixation screw, again. The bar sleeve has to fully attach to the ball connector.



12. Remove the bar sleeve measuring tool from the model.

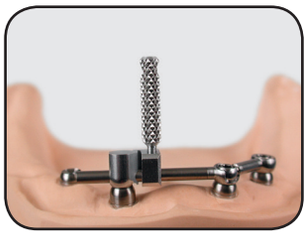


13. Cut the bar sleeve with a cutting wheel (thickness 0.3 mm) attached to the flat side of the bar sleeve measuring device. Carefully removes edges all around. Do not sand or cut in the patient`s mouth.
Carry protective glasses.

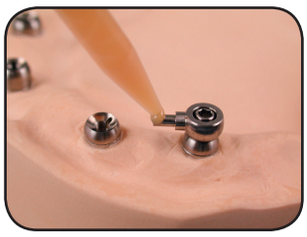


14. Slide the bar sleeve cut onto the cones of both ball connectors. Fixate the ball connectors on the implants using the hex driver (mounted in the Thomas key).

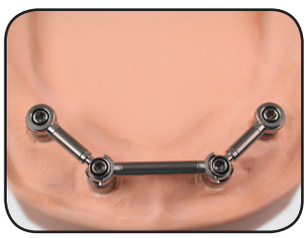
Control: The SFI-Bar® is placed stress-free if screw-fixation onto the implants is possible without major effort.



15. Follow the same procedure as before to adapt the other 2 bar sleeves & ball connectors as needed.



16. For small parts you may use AGC Cem glue to fix the bar sleeve to one side avoid dismantling in the mouth prior to the definitive mounting.



17. SFI-Bar® is now ready mounted onto the model and ready for the polymerization to the prosthesis.

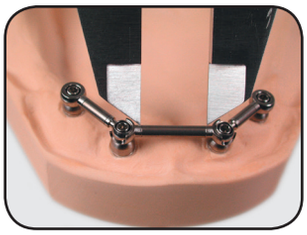
Placement in the mouth.

Fixate the SFI-Bar® using the SFI-Bar® screws onto the REVOIS® implants/implant adaptors.

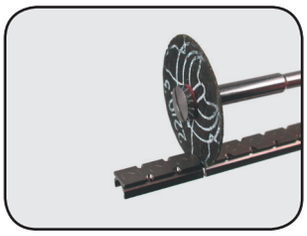
Use the hex driver and apply a torque of 25 Ncm.

Always take the appropriate measures against aspiration.

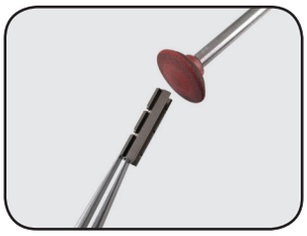
a) Titanium housing (T)



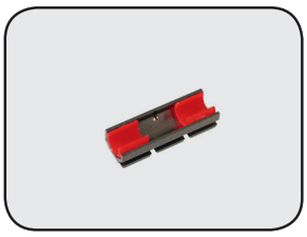
18. Measure the maximally possible length for the bar sleeve between the implants (the shoulders of the ball connectors).



19. Cut the housing in one of its furrows (cutting width 0.3 mm) following the principle of maximal length. Do not sand or cut in the patient`s mouth. Carry protective glasses.

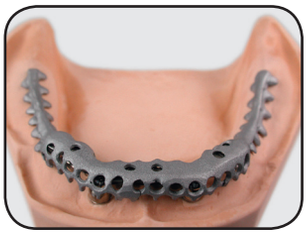


20. Remove edges all around. Do not sand or cut in the patient`s mouth.
Carry protective glasses.



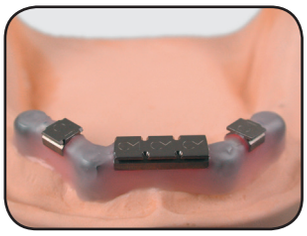
21. Mount 2 retention inserts at both ends of the housing.

22. Place the housing over the SFI-Bar. Block-out overlapping structures, dublicate the model and create an enhanced scaffold.



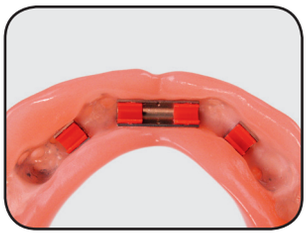
23. Finalize the scaffold.

Temporarily place a separation layer between housing and bar prior to polymerization.



24. Block out overlapping structures in the area of the SFI-Bar® and the implants with soft wax.

The titanium housing needs to be fully surrounded by plastic.



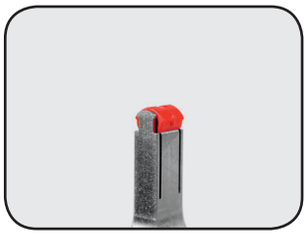
25. Ready fabricated prosthesis.

Adjusting the retention force

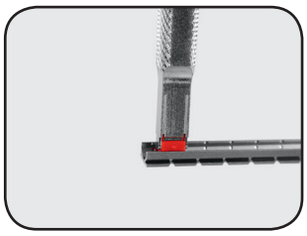
Removing the retention insert.

26. Using forceps compress both ends of the lamella. This unplugs the retention insert from the housing and allows its removal. A rentention insert removed should not be used again as the retention furrow may be damaged.

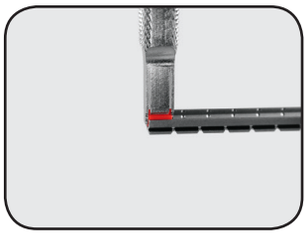
Placing the retention insert.



27. Place a retention insert of choice onto the insert positioner. The insert is held safely between the two lateral lamellas of the instrument.



28. Applying a slight pressure while sliding in the housing, seek the right position for the insert.



29. Once the insert has reached its final position it will plug in the housing recognizable from the "click".

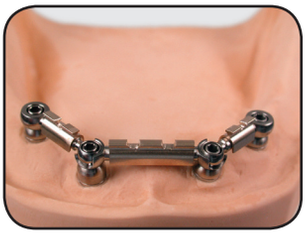
Note:
Retention inserts used during the chairside or labside processing must not be used in the patient`s mouth.

As per the individual situation, retention inserts of different strengths may be combined between each other. For the 2-4 first weeks use only retention inserts with low retention to ease one patient`s adaptation to the new prosthetic device.

Newly introduced retention inserts may show their long-term retention force only after 2 weeks. The retention force may decay over the course of the first 2 weeks.

For long housings always use at lease one retention insert on each end to ensure the best possible force transmission.

b) Gold housing



30. Define the length of the housing needed, cut the housing accordingly and remove edges all around. Do not sand or cut in the patient`s mouth.
Carry protective glasses.

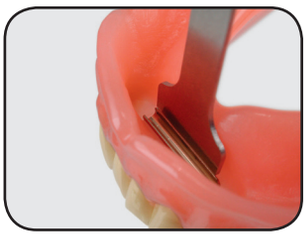
Labside, one may mill additional retention furrows for the plastic polymerization into the gold housing.

31. Align the asymmetric retention of the gold housing following aesthetic and functional considerations. Place the housing and block out overlapping structures.

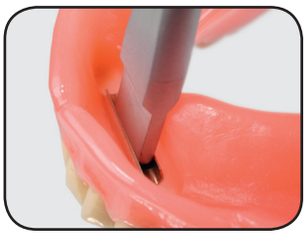
32. Duplicate the model and fabricate an enhanced scaffold.

33. Prior to mounting the gold housing, temporarily place a separation layer between the bar and housing and block out remaining overlapping structures around the SFI-Bar® and the implants.

Activation / Disactivation:



34. Carefully activate the housing by pressing the activator tool inwards.



35. For disactivation of a housing set too tight carefully, press the disactivator makro in the housing until the intended friction reduction has been achieved.

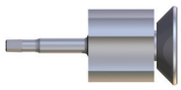
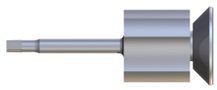
Note:

The gold housing is milled and its alloy very stable – of benefit for the longevity of the prosthesis.

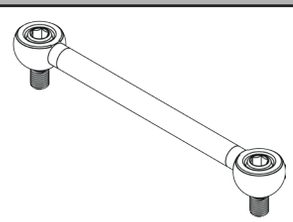
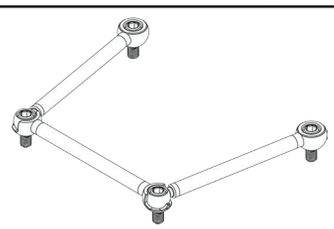
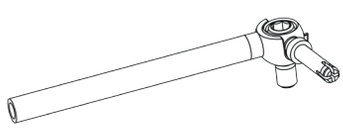
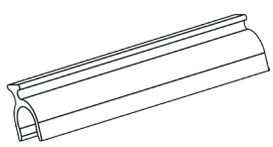
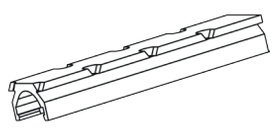
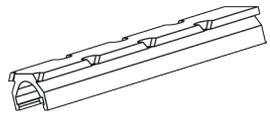
Important:
Lamellas need to be half-free of plastic to allow for their elastic properties and longevity. This is also important for the later retention force adjustment using the appropriate tooling.

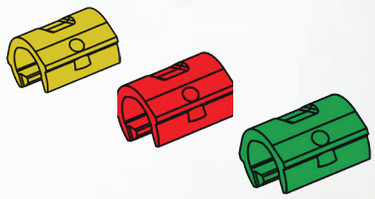
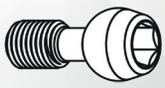
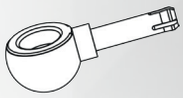
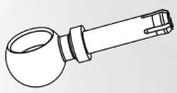
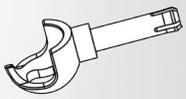
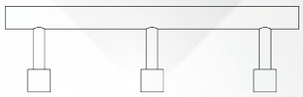
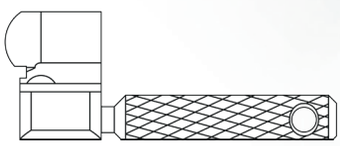
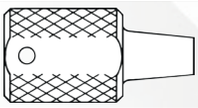
Parts' overview: REVOIS® : compact

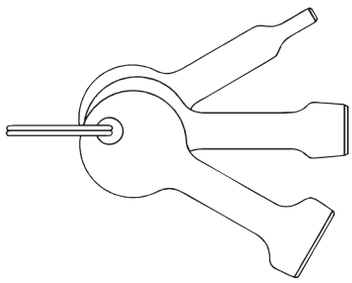
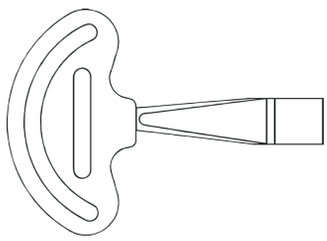
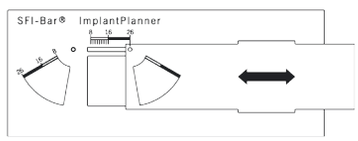
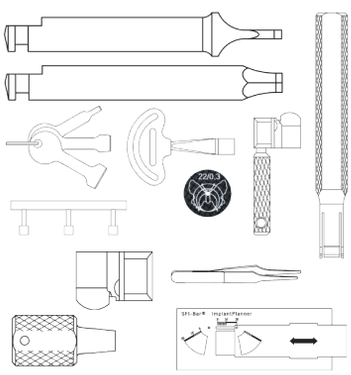
Article	Item number	Ø mm	Length mm	Picture
Implant pre-mounted	MD6213115	3.0	7	
Implant pre-mounted	MD6213116	3.0	9	
Implant pre-mounted	MD6213117	3.0	11	
Temporary implant premounted	MD6212140	2.2	13	
Titan sleeve, no lock	MD6221130			
Titan sleeve, lock	MD6221132			
Gold sleeve, no lock	MD6225130 (auf Anfrage)			
Gold sleeve, lock	MD6225131			
Plastic cap (2 pieces)	MD6221131			
Laboratory analogue	MD6221432			
Inbus screw SW 0.9	MD6237120			
Rose bur	MD6241205	5.0		
Precision drill 1.5	MD6241215	1.5		
Precision drill 2.5	MD6241250	2.5		
Countersink drill	MD6243450			
Drill marker	MD6001200	1.5		
Torque ratchet 20 - 70Ncm	MD6001075			
Hex tool, short	MD6001025	1.25	23	

Article	Item number	Ø mm	Length mm	
Hex tool, short	MD6001026	1.25	30	
Hex tool, manual	MD6000522	1.25	10	
Hex tool manual	MD6000523	1.25	20	
ISO-adapter insertion tool	MD6243300			

SFI-Bar®

Article/Set	Item number	Description	Picture
2-implant kit	MD6002100	2 ball connector big 2 fixation screws 1 bars sleeve (without implant adapter)	
4-implant kit	MD6002101	2 ball connector big 2 ball connector small 2 ball half shell 4 fixation screws 3 bars sleeve (without implant adapter)	
Add-on Kit	MD6002102	1 ball connector small 1 ball half shell 1 fixation screws 1 bar sleeve (without implant adapter)	
Matrix asymmetrical Elitor® L30	MD60021206	To be polymerised into the prosthesis plastic	
Matrix titanium complete L 47.5	MD60021207	To be polymerised into the prosthesis plastic	
Matrix housings titanium L 47.5	MD60021208	Without retention inserts. To be polymerised into the prosthesis plastic	

Article/Set	Item number	Description	Picture
Retention inserts	MD60021210 MD60021211 MD60021212	yellow: soft retention red: normal retention green: strong retention packaging unit: packet with 6 pieces	
Bar sleeve	MD60021213	individuell shortening	
Fixation screw	MD60021214	fixates the ball attachment large onto the implant, as well as the ball attachment small and the half pipe hull onto the implant.	
Ball connector, large	MD60021215	for SFI-Bar® 2- and 4-Implant	
Ball connector, small	MD60021216	For SFI-Bar® 4-Implant, use combined with half pipe shell	
Half pipe shell	MD60021217	For SFI-Bar® 4-Implant, use combined with ball connector small	
Relief wire	MD60021221	tin, secures the vertical resilience. Integration between matrix and bar during the plastic polymerisation.	
Transfer axle	MD60021222	for the master model production	
Bar sleeve gauge	MD60021223	permits an exact definition of the length of bar sleeve in the mouth and acts as holding tool when depositing, at the same time.	
Screwdriver hex	MD60021226	for fixation screw	
Thomas key	MD60021227	for screwdriver and screwdriver hex	

Article/Set	Item number	Description	Picture
Insert positioner	MD60021228	for integration of the retention insert	
Activator set	MD60021229	for matrices Elitor®	
Disactivator mabro	MD60021230	for matrices Elitor®	
Implant planning tool	MD60021232	approximately to plan the position of the implant	
Instrument set	MD60021233	screwdriver screwdriver Hex Thomas key transfer axle steg sleeve gauge cutting gauge insert positioner implant planner tweezers activator set disactivator makro cutting Discs No. 1 (3 pieces)	

Have we drawn your interest and attention?

We would like you to explore and convince yourself of the advantages of the **REVOIS® Dental Implantat System.**

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- Webshop: **www.revois-shop.com**

Our instructions for use are available at:
www.revois-dental.com/gba

or contact the AUROSAN customer center:
service@aurosan.de / +49 (0)201-50658151.

Understanding your needs and preferences will enable us, the Team of AUROSAN Dental, to provide you with (only) what you need, and to become an industry partner of choice to you. We accompany you and your patients during the journey with REVOIS®. We guarantee the safety stock needed according to current legal requirements for many years.

Our Team is qualified and used to customer-specific, always ethical action.

SFI-Bar® is a registered brand from

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The **REVOIS® Dental Implantat System Manual** consists of different modular parts. If except from this REVOIS® compact Manual, you wish to receive the other parts, please let us know. Also, if you like to receive new moduls such as case studies, new REVOIS®-related publications or other educational series published under AUROSAN or **REVOIS®,** we will happily include you in the distribution list.

Any feedback, ideas for product development or improvements, patient safety etc. is highly welcome. We define our actions and focus through the input and feedbacks we receive from our customers and partners.

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