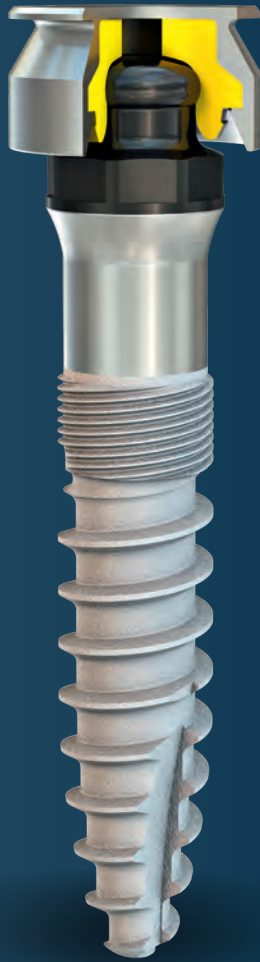


MINICONE



IPS

IMPLANT SYSTEMS

Minicone Catalog/Manual

Welcome to Medentika®

Anyone who meets Medentika® personnel will get to know a Team. A team that since the foundation of the company collectively contributes knowledge and experience. A team that perfects products with élan. A team passionate about their work.

Medentika® has character. And it is this character that now forms the basis for morally sound handling. In a world that is becoming more and more subject to the laws which drive market forces, we feel that this position is not only right but important. What characterises Medentika® is also our belief in the power of our ideas and in the innovative strength of our products. We are Medentika® – and if the Medentika® label is on the packet, there is more than an implant component inside: we provide you with the knowledge and experience we have been incorporating in our products since the foundation of Medentika®. We offer our customers our élan, which we use to perfect our products on a daily basis. We take this task seriously and we also embrace it with passion.

The result is that our customers receive an original implant manufactured with the highest interface precision with an extremely wide range of prosthetics. This catalogue reflects our attitude in every single product.

Our implants and prosthetic components open up new, even more diverse restoration options and provide your patients with greater comfort and increased functionality.

With this in mind: we look forward to seeing you again!

Thomas Jaberg » Bernd Gaddum
and the entire Medentika® team



MINICONE

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Minicone – the slim and permanent implant solution

The Medentika® Minicone implant has been developed for intraosseous insertion in the upper or lower jaw. The Minicone is a one-piece, root-shaped implant with an irradiated and etched, rough, pure surface, including integrated prosthetic Optiloc patrix.

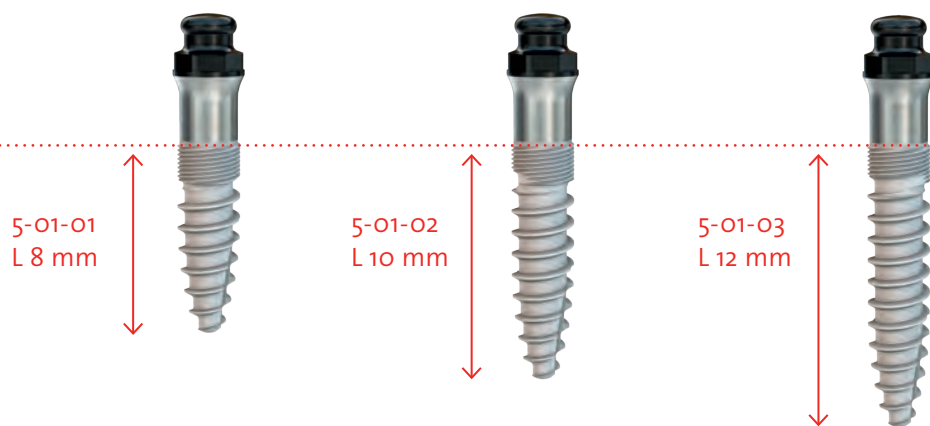


The components of the Minicone implant system are parts of the entire system and may only be used in combination with the specific original components and instruments. The Minicone features instruments especially designed to be compatible with each other for the insertion and prosthetic care of the implants.

Note

Before use, users must be very confident in the use of the product for the planned indication and application. Furthermore, sufficient expertise in preoperative implant planning and dental implantology is required. Our products are subject to constant further development. In this respect, we reserve the right to make product changes in relation to the design and composition.

The Minicone D 2.6 mm is available in three different lengths:



Advantages of the Minicone

Medentika® is extending its implant line with the Minicone. The Minicone implant is suitable for ensuring more stable fixing in the jaw.



Implants can be inserted into even severely reduced bone material and can in many cases be immediately loaded.



The Minicone implant improves quality of life for the patient thanks to the shorter treatment times and in cases where the patient's health does not permit major surgery.



The cost-effective alternative treatment and the minimally invasive approach reduce the strain on the patient.



The user benefits from the clearly arranged and nonetheless variable instruments.

MINICONE

The one-piece Medentika[®] implant

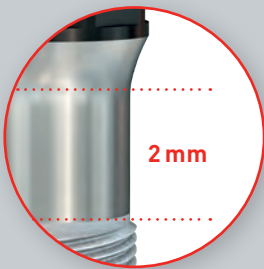
Integrated octagonal

to retain and insert the implant through the insertion instrument.



Gingival region

Conical neck region that may only be positioned within or slightly above the gingiva.



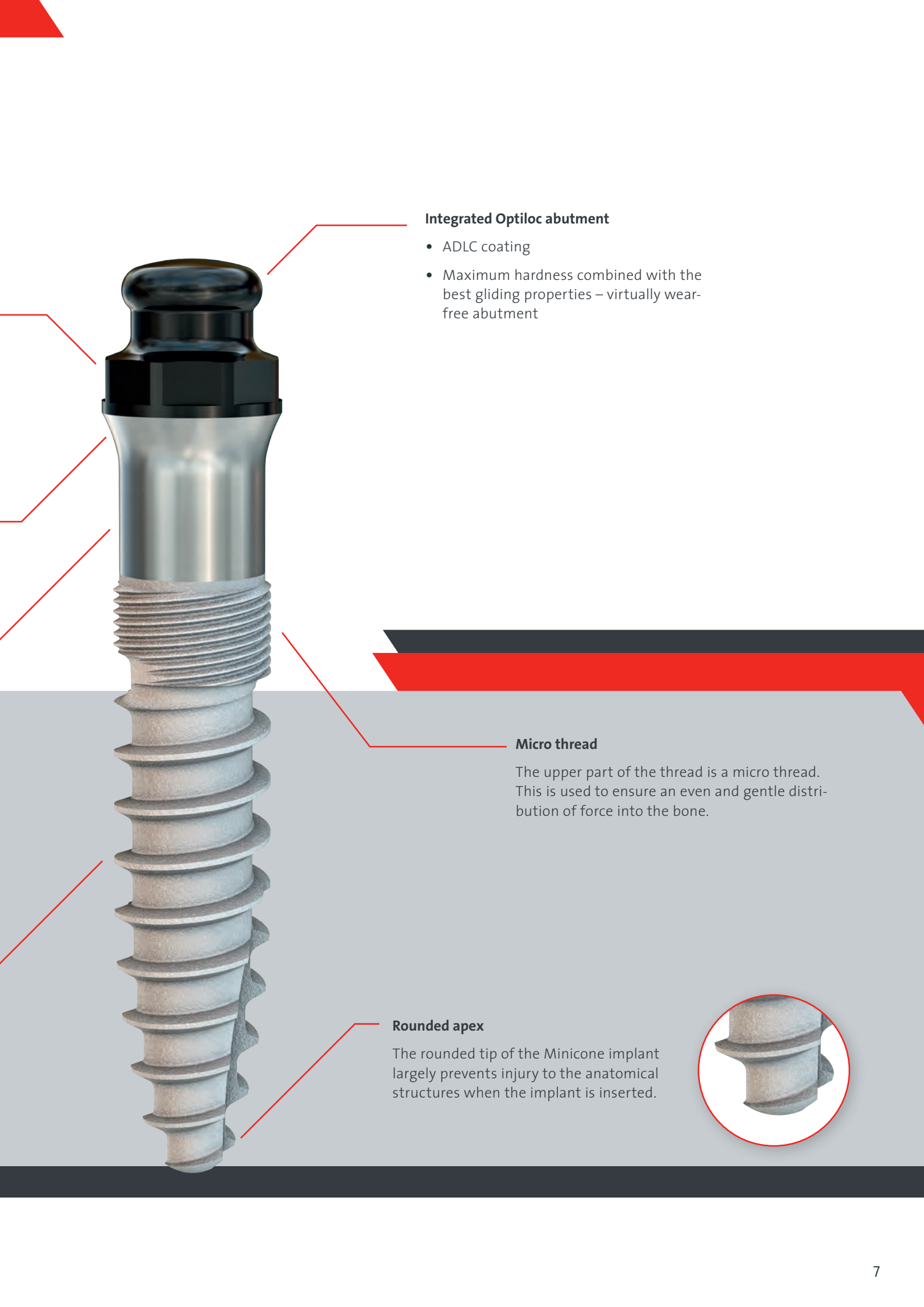
Variable insertion range

The cylindrically machined neck region can be positioned in the bone or the gingiva, depending on requirements or bone condition. The diameter of the neck region is designed to match the diameter of the standard drill.

Macro-thread

The lower, largest part of the thread is a self-tapping macro-thread. With its progressive thread flanks, this is primarily designed to achieve the necessary primary stability.

Short insertion time thanks to a thread pitch of 0.6 mm per turn.



Integrated Optiloc abutment

- ADLC coating
- Maximum hardness combined with the best gliding properties – virtually wear-free abutment

Micro thread

The upper part of the thread is a micro thread. This is used to ensure an even and gentle distribution of force into the bone.

Rounded apex

The rounded tip of the Minicone implant largely prevents injury to the anatomical structures when the implant is inserted.



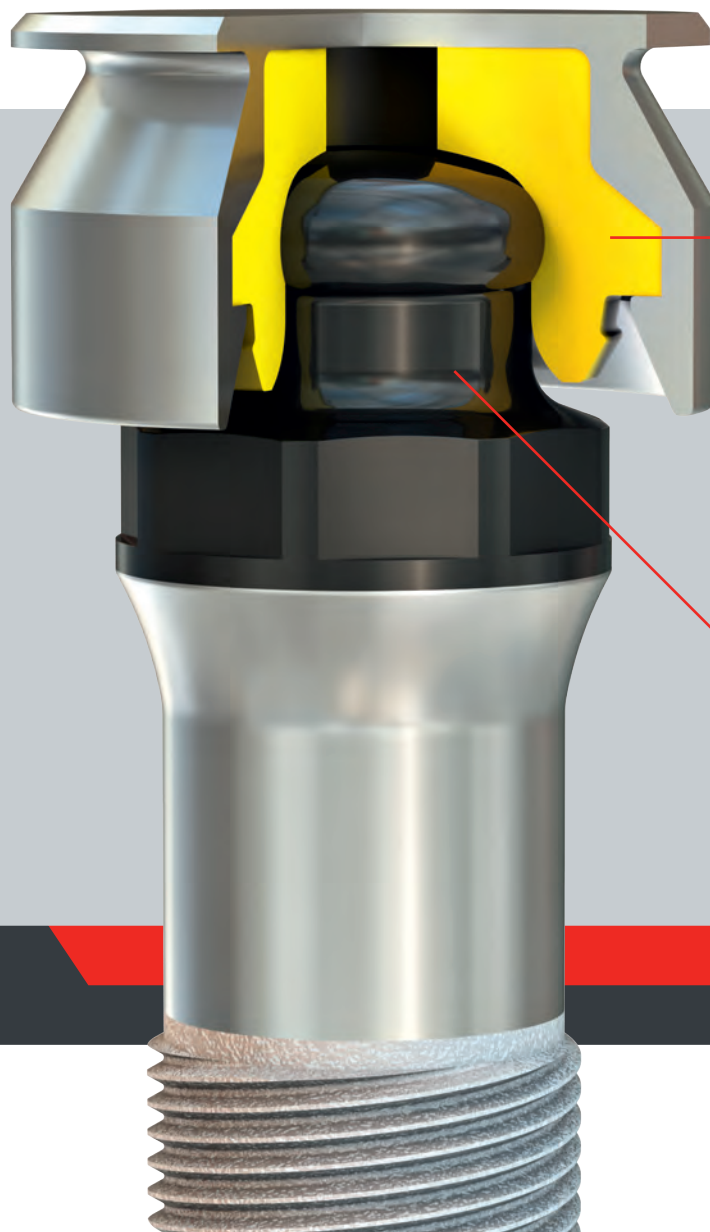
Optiloc Matrix System

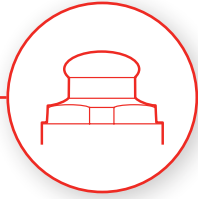
The Optiloc Matrix System with its newly developed technology is a factory-made connection element to secure removable restorations to Optiloc abutments.



Freedom of movement

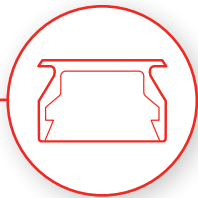
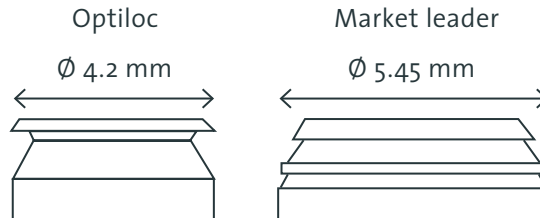
The Optiloc Matrix allows small movements of the prosthesis without disengaging the restoration. However, unlike other matrix systems, the Optiloc always returns to the initial position.





Minimum size

Slimmer than the market leader, lower than ball attachments. Optimum dimensions now also allow the matrix to be placed where only minimum space is available.



Matrix housing

The very slender titanium matrix housings are the ideal solution where only minimum space is available.



Retention insert with outstanding handling

The retention inserts made of the high-performance plastic PEEK are manufactured very precisely and can absorb lateral pressure by the patent-protected design.

Retention inserts can be inserted and removed within 5 seconds. Accessories, such as the very low impression matrix or easy-to-use matrix housing extractor guarantee stress-free handling.



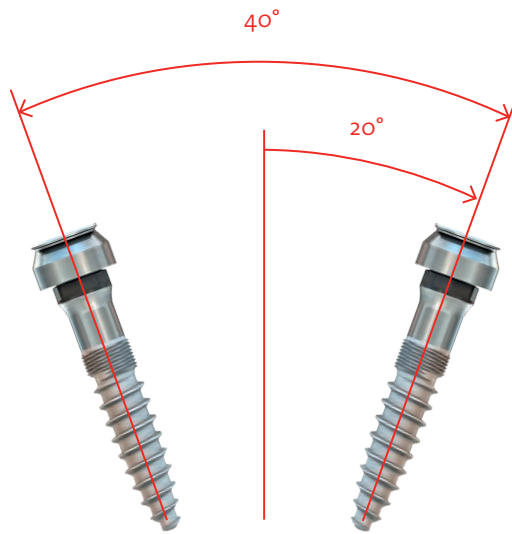
ADLC coating

The surface quality of the ADLC coating (amorphous diamond-like carbon) sets new standards. Maximum hardness in combination with optimum sliding reduces abrasion on the abutment and damage to the retention inserts.

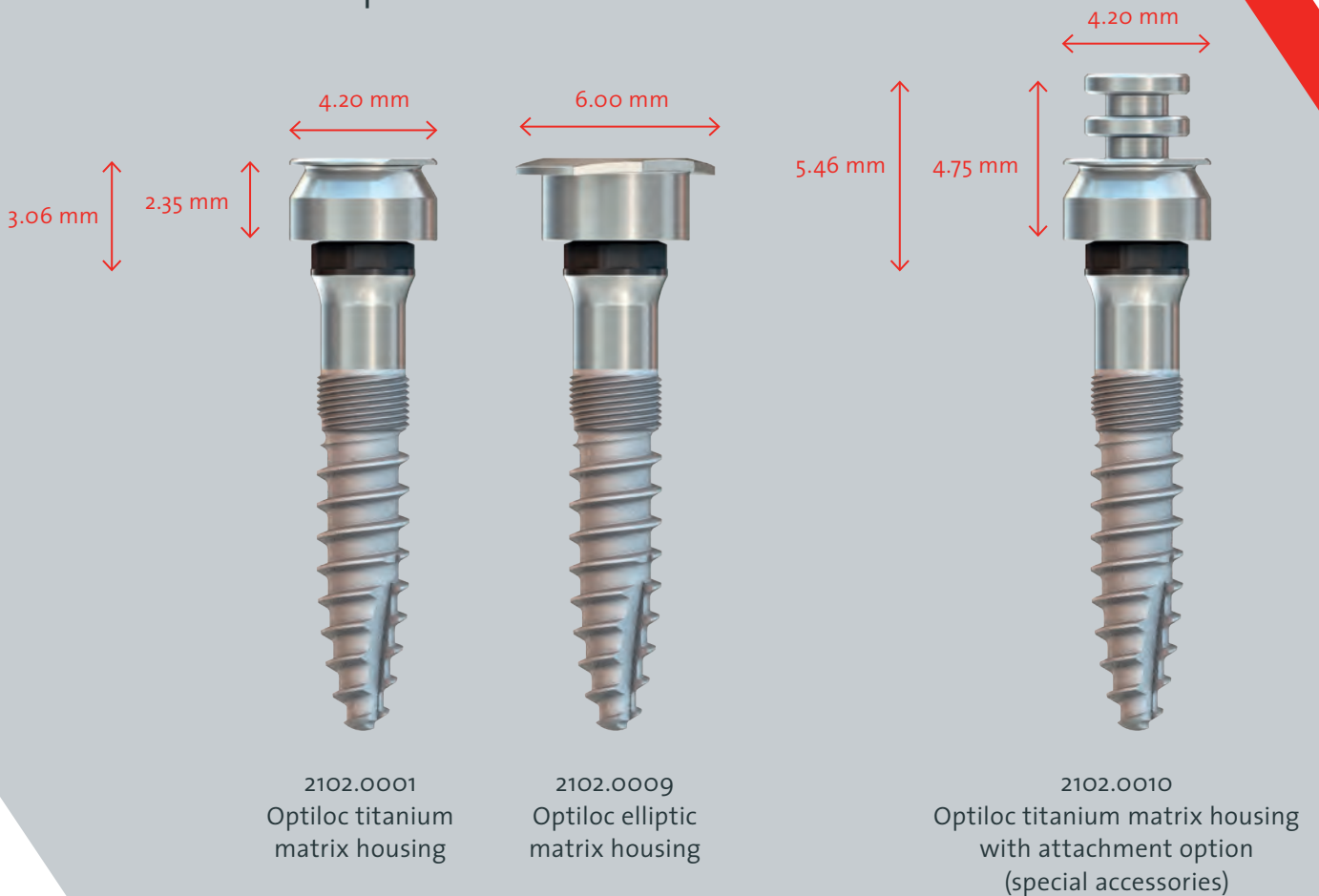
Optiloc Matrix System

Enhanced divergence compensation

The Optiloc matrix system can be used to compensate for divergences of up to 40° between the implants.



Dimensions of the Optiloc matrices



Surgical tray



Maximal
reduced
instruments

The surgical tray is very clearly arranged because of the significantly reduced number of instruments and with the instrument set it offers maximum flexibility for preparing the implant bed.

Paralleling aid



Placement instrument
implant manual and
ratchet



Placement instrument
implant contra-angled
handpiece



Needle drill



Standard drill



Cortical drill



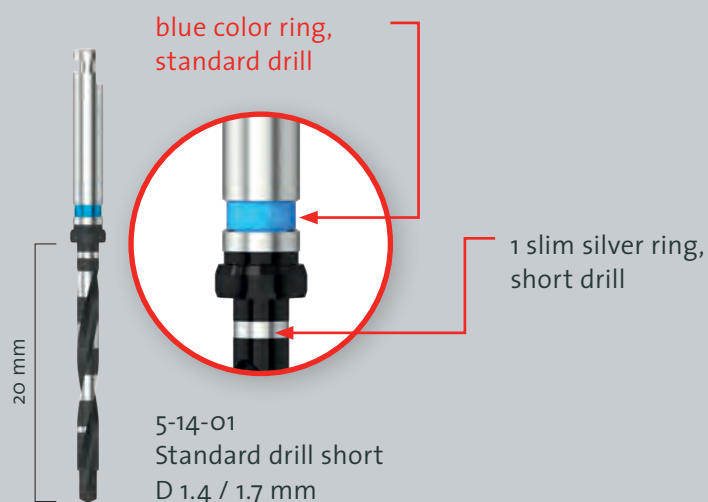
Torque ratchet



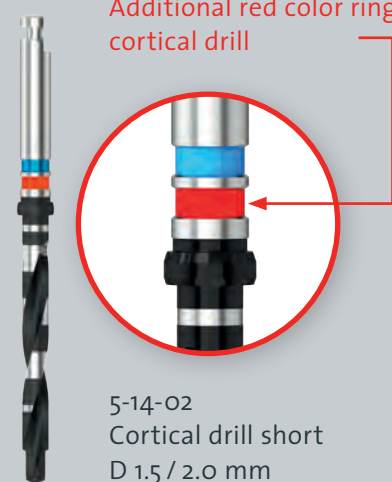
Drill length and marking

The drills, designed to be compatible with each other, allow the diameter of the implant bed to be individually adjusted to bone quality. Bone preparation should be adjusted to the individual bone quality with optimized drilling sequences. The Minicone may only be used with a single drill hole.

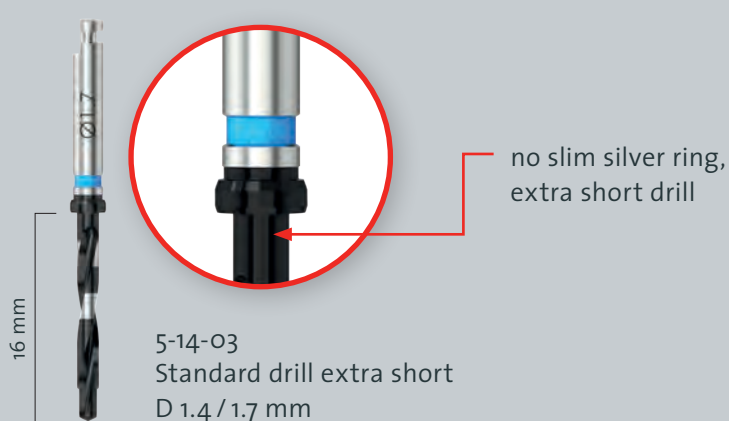
Short drill



Additional red color ring, cortical drill



Extra short drill

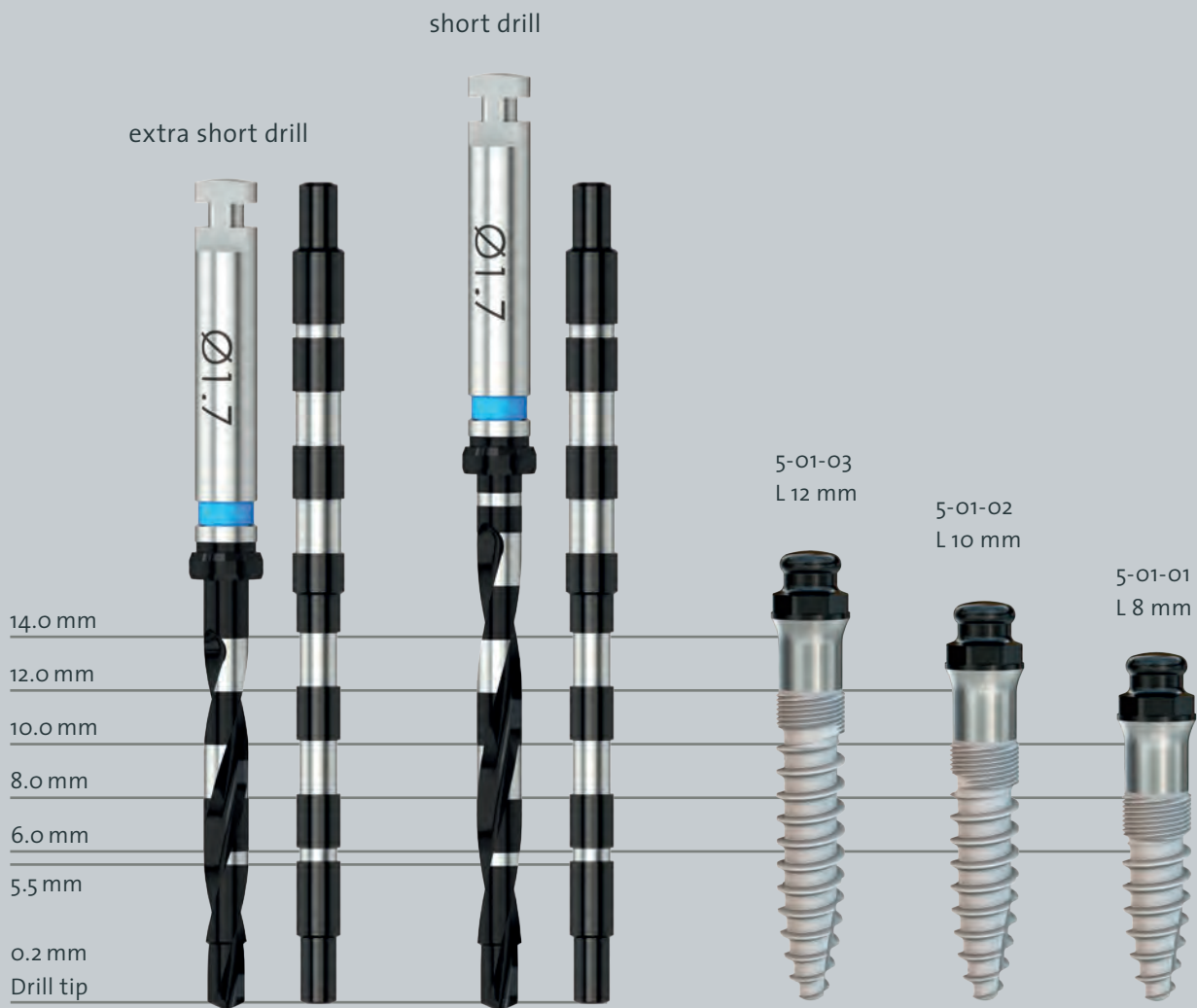


The following basically applies to Minicone:

- Standard drill: If using the standard drill for the final deep drilling, the following always applies: Implant diameter minus 0.9 mm for an implant \varnothing 2.6 mm = 1.7 mm final drilling for medium bone quality.
- Cortical drill: If using the cortical drill for the final deep drilling, the following always applies: Implant diameter minus 0.6 mm for an implant \varnothing 2.6 mm = 2.0 mm final drilling for hard bone quality.

Depth marking

The black surface coating with the light depth markings ensures better contrast during drilling and for the paralleling aids and thereby makes the depth markings easier to identify.



Please note:

The defined drilling depths do not include the drill tip of 0.2 mm. Please note their lengths if only minimum space is available to anatomical structures.

Drilling protocol

Allowing for different bone quality

The drilling protocol of the Minicone Instruments is atraumatic and minimally invasive and is especially designed for the specific bone quality. It allows the drill depth to be individually regulated to achieve maximum primary stability with just one drill.

Example drilling protocol

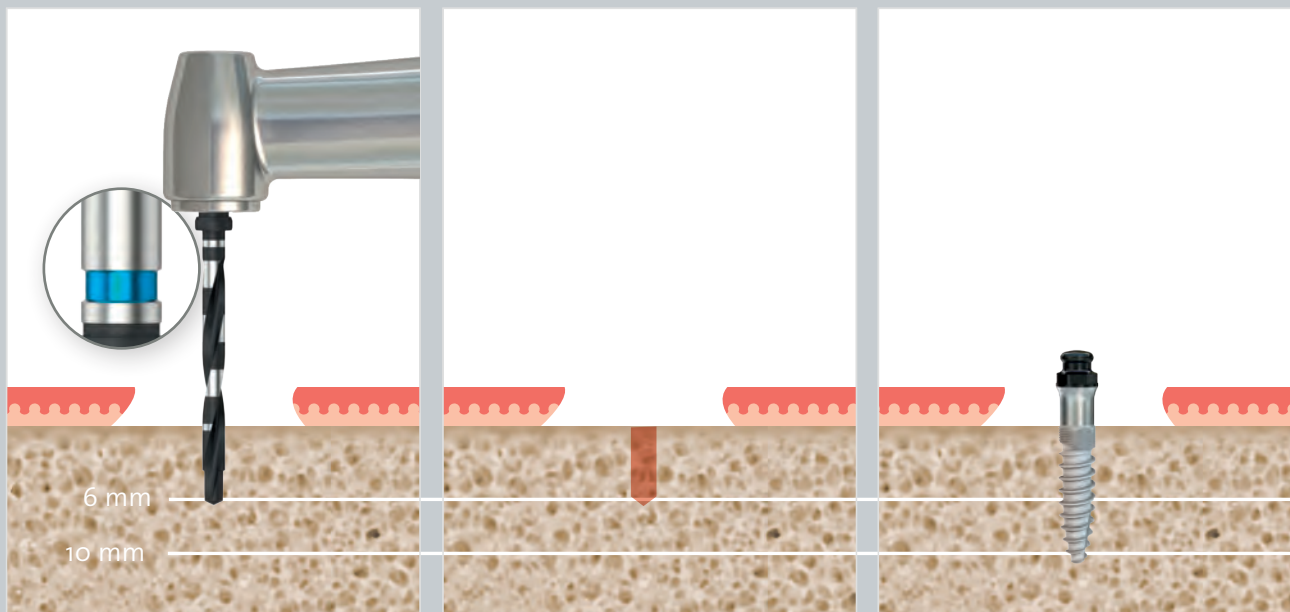
(Example for D 2.6 x 10 mm Minicone Implant)

Medium bone quality

For bone quality type 3, we recommend not drilling to full implant length for all implant lengths, but to a depth of 6 mm.*

The implant bed preparation would end here in this case.

For bone quality type 2, the full implant length can be drilled.*



* In general, the drilling depth data are only approximate values and must be checked and, if necessary, individually adapted in clinical practice, depending on the implant length and the definitely found bone quality.
E.g. In the case of cortical bone reaming with the cortical drill may be sufficient in the coronal region.

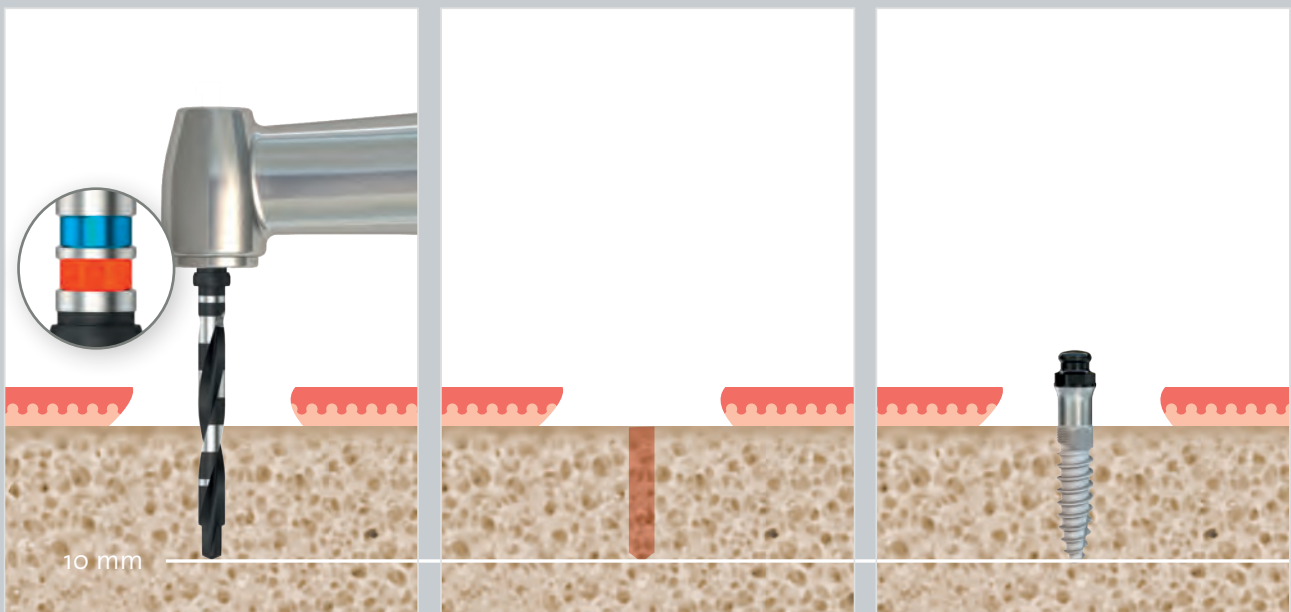
Please note:

Minicone implants are not indicated for insertion into soft bone (D4).

Example drilling protocol
(Example for D 2.6 x 10 mm Minicone Implant)

Hard bone quality

Bone quality type 1 and continuous cortical bone can be drilled with the cortical drill to the full implant length.*



Surgical procedure

Example for D 2.6 x 10mm Minicone Implant

Incision phase

The incision phase serves to form a mucosa flap to expose the bone around the implantation point. A mucosa flap is formed and the incising phase varies from case to case.

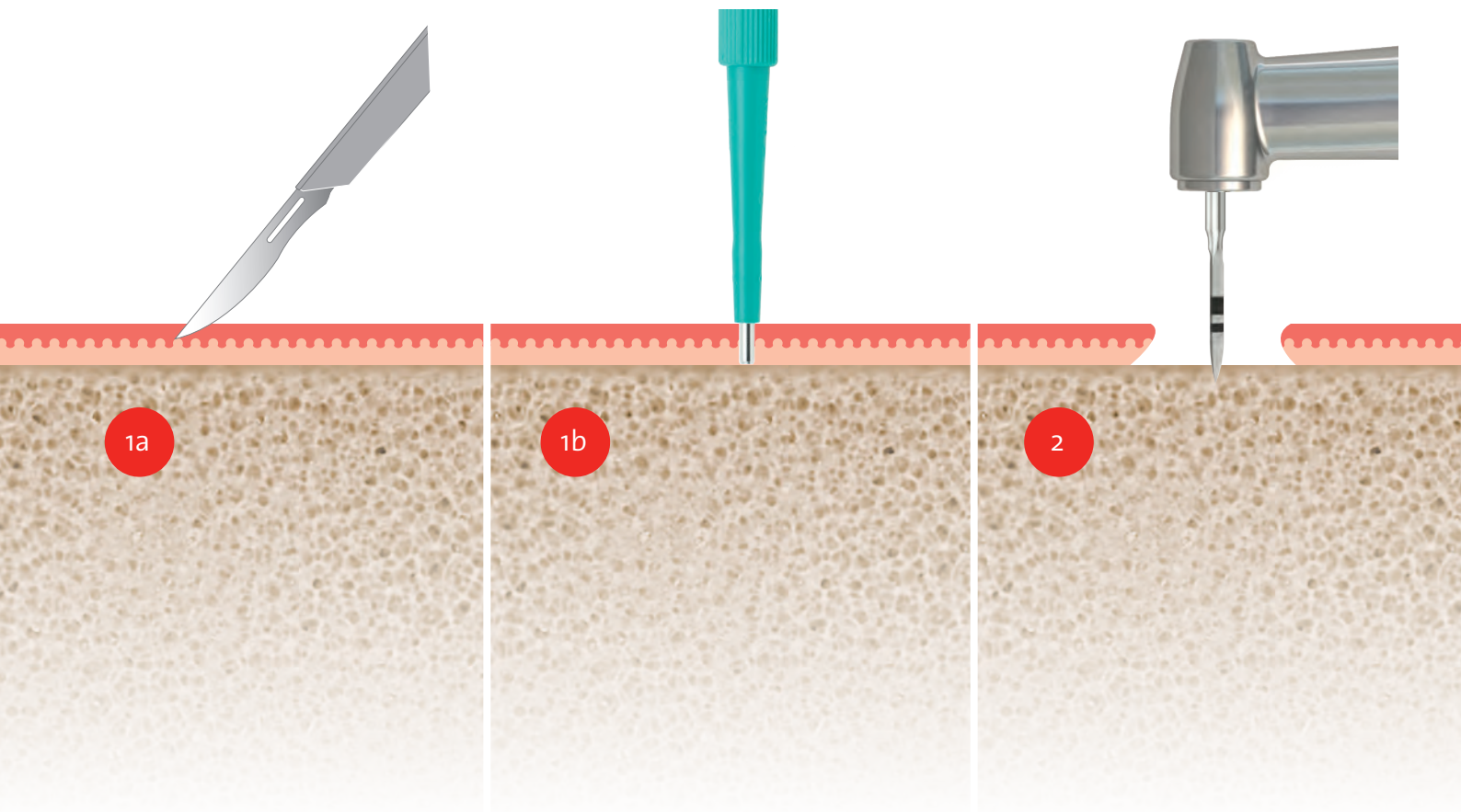
Soft tissue punch

Alternatively, the implantation point can be exposed with a minimally invasive approach using a D 2.0 mm soft tissue punch.

NB: It is important to ensure that no residues of mucosal tissue are transported into the bony implant bed. After inserting the implant, it is important that the gingiva is sealed tight in the region of the implant neck.

Marking bore hole with the needle drill

The depth is marked after the implantation site is exposed with the needle drill D 1.6 mm.



Deep drilling with the standard drill

The subsequent deep drilling in bone quality D2 / D3 is always performed directly with the final drill, in this case with D 1.4 / 1.7 mm.

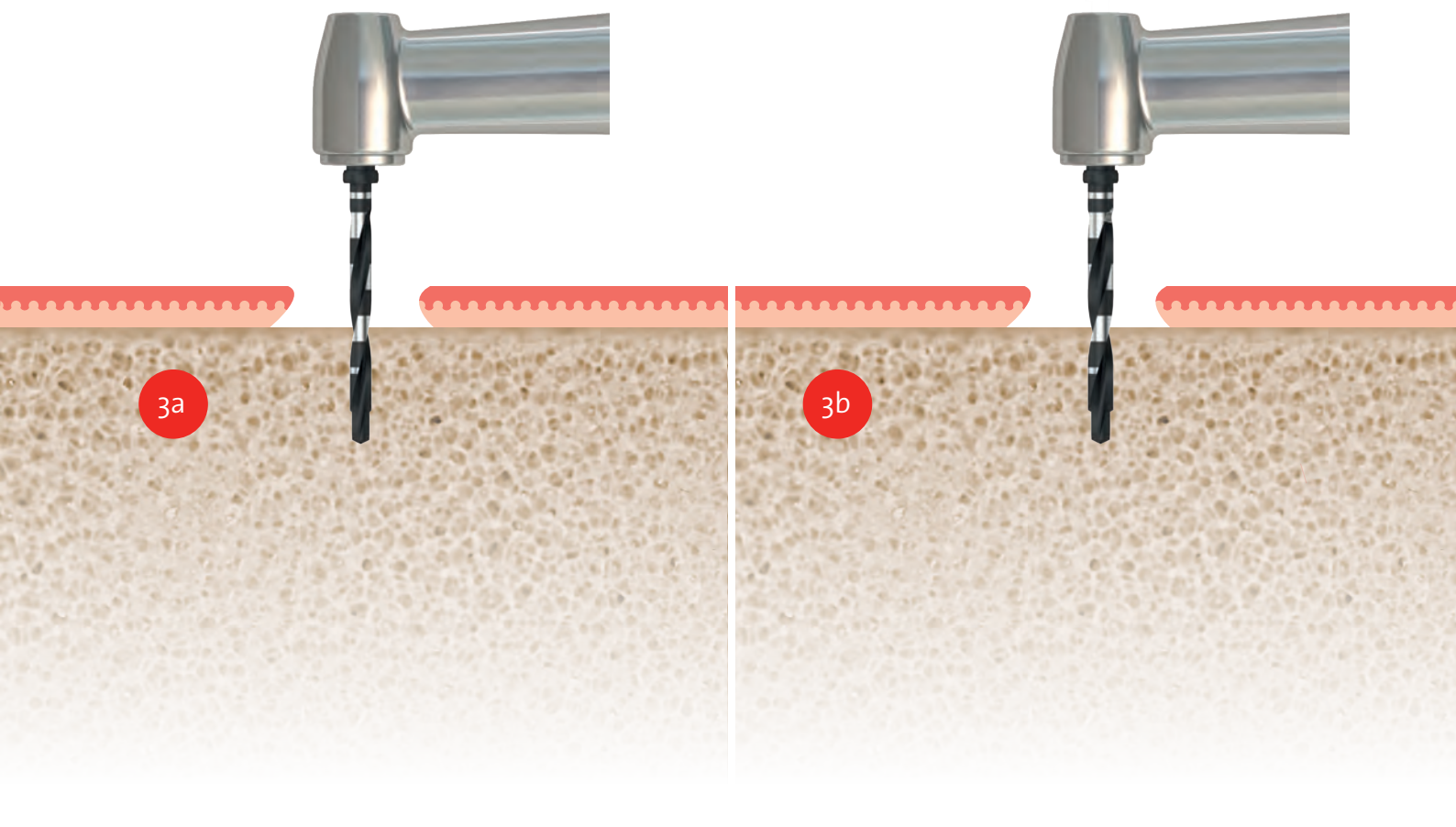
To check the depth, there are laser markings corresponding to the specific implant lengths.

The maximum speed is 800 rpm.

Deep drilling with the cortical drill

If the cortex is extremely compact, the cortical drill D 1.5 / 2.0 mm can be used for the final deep drilling.

Depending on the patient's bone quality, it is not essential to drill the entire length.



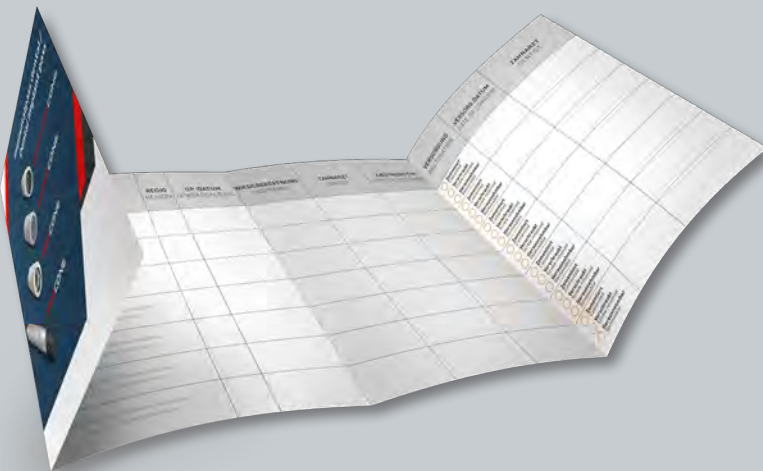
Implant packaging



The packaging consists of a blister pack with titanium tubes in which the implant is placed. The blister pack, shrink-wrapped in a peel bag, serves as a sterile barrier. A labeled paper box forms the outer packaging. The implant is sterilized by radiation and may not be used after the expiry date.

For documentation purposes the accompanying labels should be stuck into the patient's file and the implant certificate.

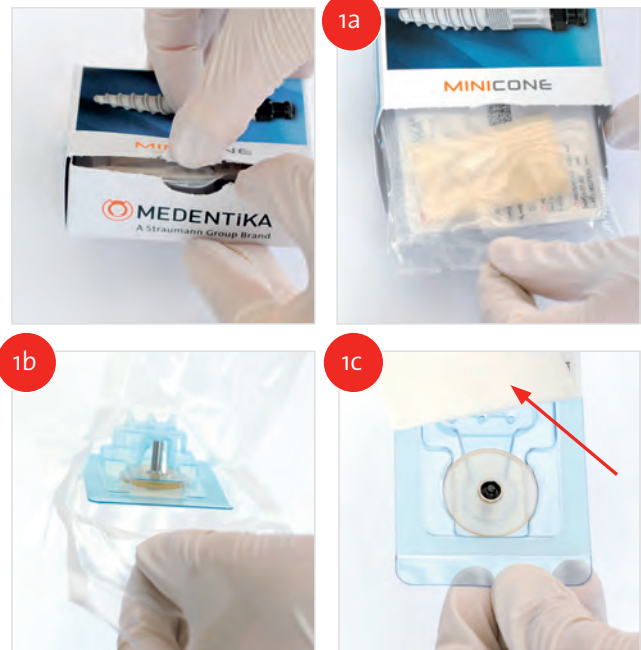
Implant pass



Implant direct removal

Preparing the implant for removal

- Take the peel bag out of the pack.
- Open the peel bag.
- Remove the Tyvek film from the blister pack to expose the implant.



Secure the placement instrument in the final position

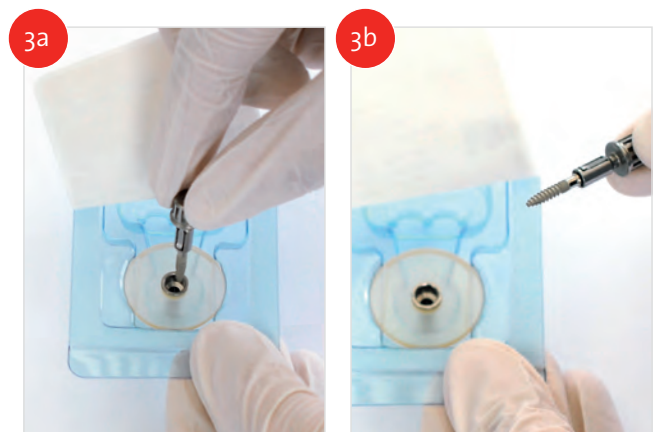
Use the placement instrument (5-13-01 or 5-13-02) to remove the implant from the titanium tube.

Turn the placement instrument into the final position until it lightly snaps into place.



Remove the implant from the titanium tube

The implant secured on the placement instrument can be removed from the titanium tube.



Implant insertion

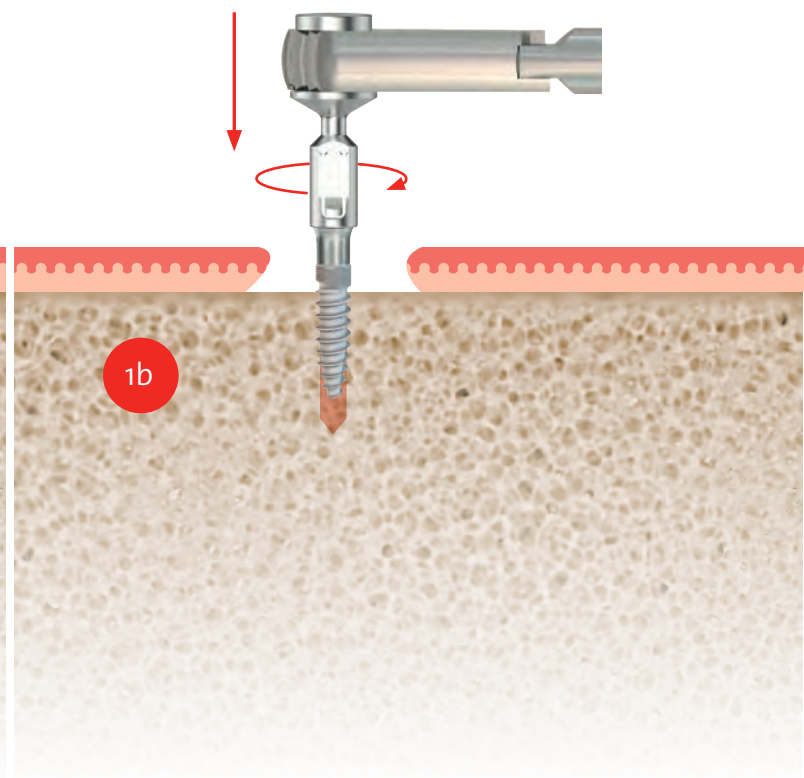
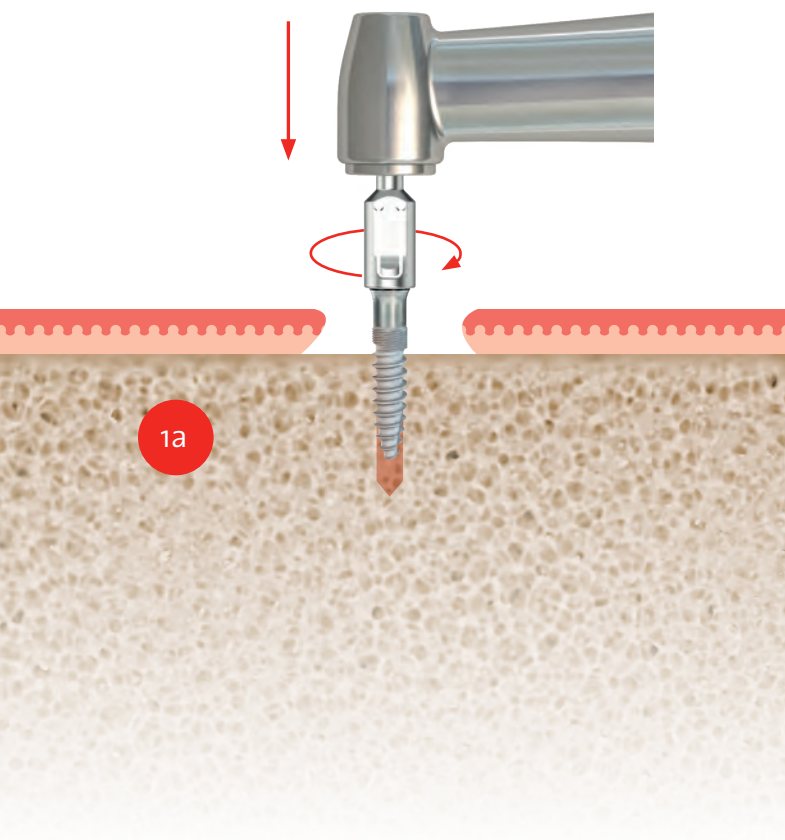
Insert the implant

The implant can either be rotated into position with the contra-angled handpiece or manually / with a ratchet.

If the implant is inserted with the contra-angled handpiece, the maximum permissible speed and torque are 50 rpm and 45 Ncm respectively.

If the implant is inserted with the ratchet and the manual insertion instrument, the ratchet should be set to a torque of 45 Ncm.

If the torque is higher because of bone quality for example, we recommend carefully screwing the implant out and then extending the implant bed with the cortical drill.

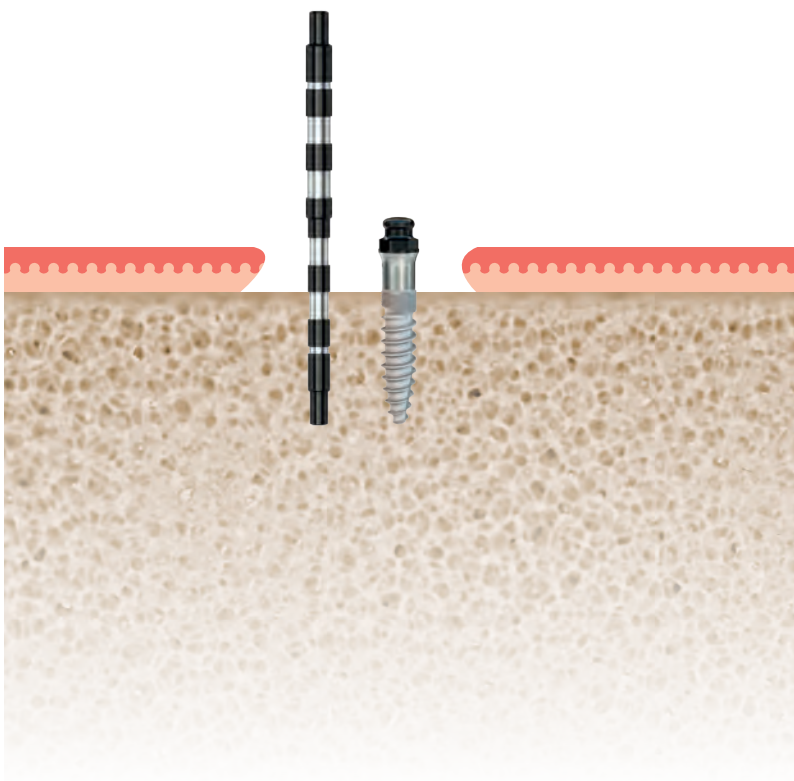
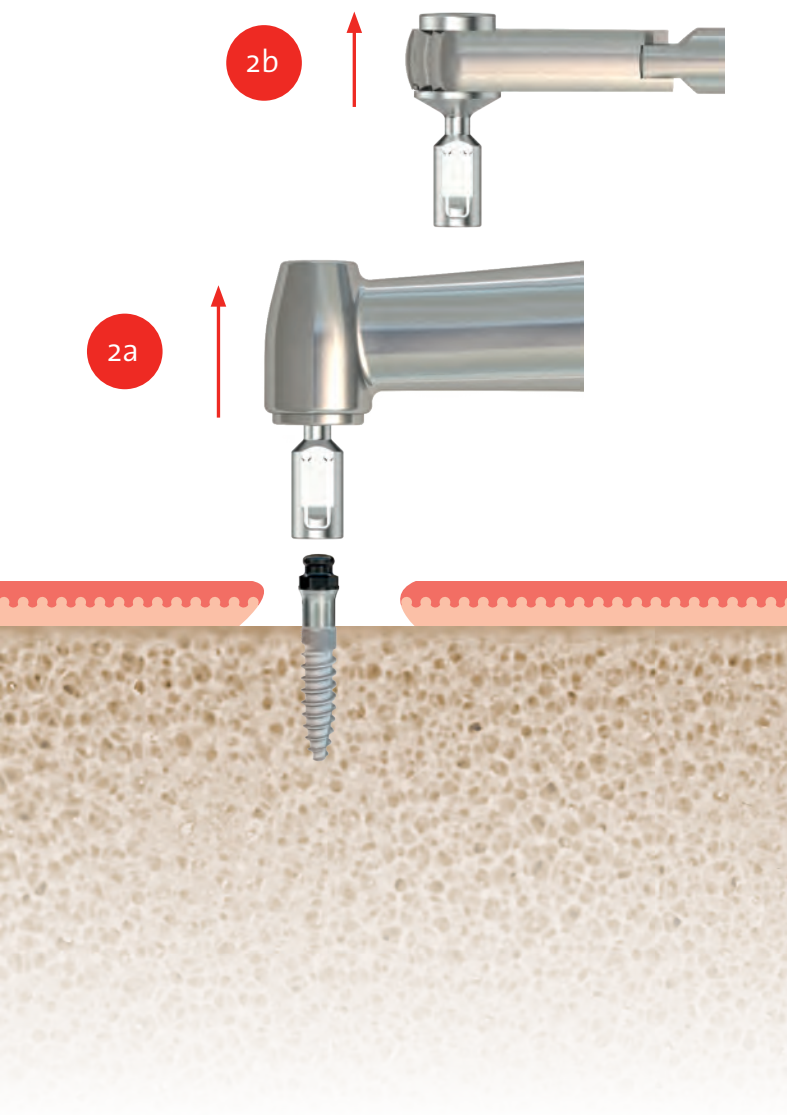


Remove the placement instrument

Once the implant has reached its final position, the placement instrument is carefully removed from the implant.

Paralleling aid

The paralleling aid allows you to orient the implant axis if inserting several implants.



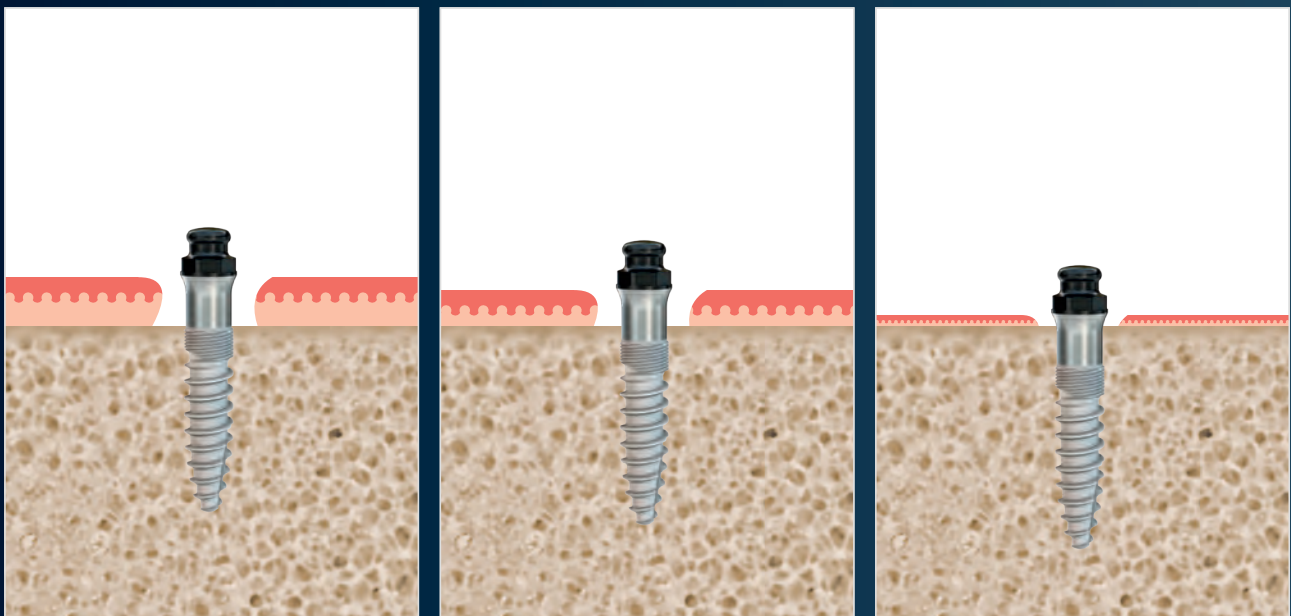
Implant positioning

Can be customized depending on the clinical situation.



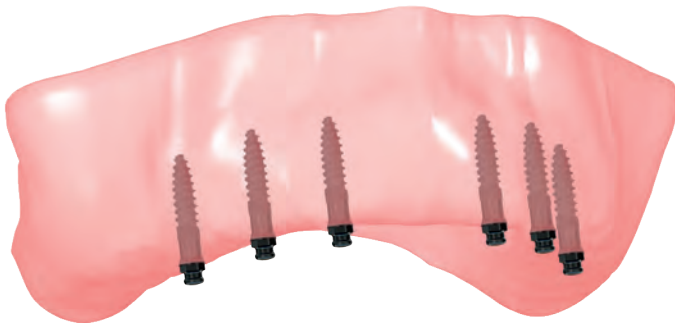
The cylindrically machined neck region at a length of 2 mm can be positioned in the bone or the gingiva, depending on requirements / bone condition. This allows a flexible approach to different gingival heights. The diameter of the neck region is designed to match the diameter of the drill.

When inserting the implant, ensure that the coated Optiloc section is supragingival.





Implant positioning



To secure total prostheses in the lower jaw, we recommend at least four implants, and at least six in the upper jaw.

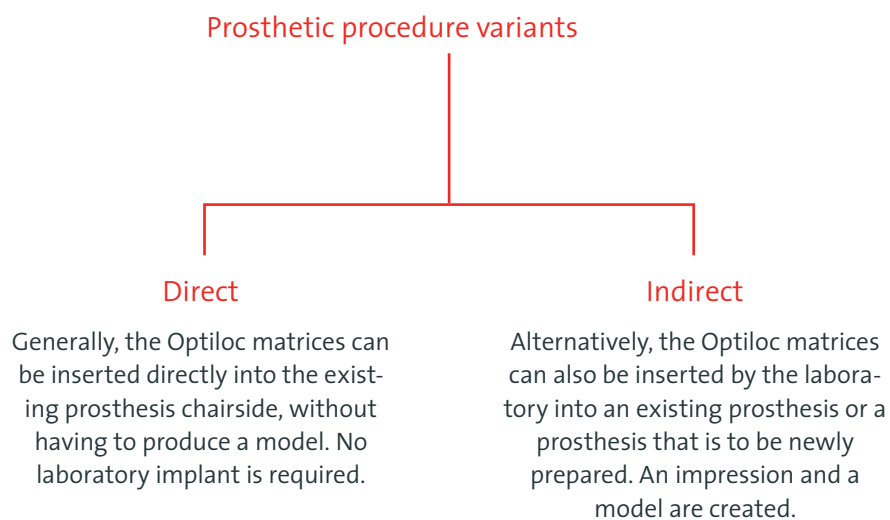


Note

- a) To ensure immediate implant loading, a torque of at least 35 Ncm must be achieved. The maximum permissible torque during insertion is 45 Ncm.
- b) Depending on the implant diameter, the implant must be surrounded by at least 1.0 mm bone and be inserted in the bone along the entire length of the irradiated and etched section.
- c) When positioning the implants, it is important to ensure that there is sufficient distance and to consider the size of the matrices and anatomical structures.

Prosthetic procedure

The prosthetic procedure conforms with the market standard and well-established matrix systems.



Important

When inserting the Optiloc matrices (direct or indirect) it is essential that any undercut areas of the implant neck region are carefully blocked out using the Optiloc Mounting Collar, as it is otherwise no longer possible to remove the prosthesis.

Prosthetic matrix system

OPTILOC RETENTION INSERT

To secure the Optiloc matrix you have the choice between 6 color-coded retention inserts with different retention forces, which easily master divergences up to 20 degrees per implant.



Extra-light



Light



Medium



Strong



Extra-strong

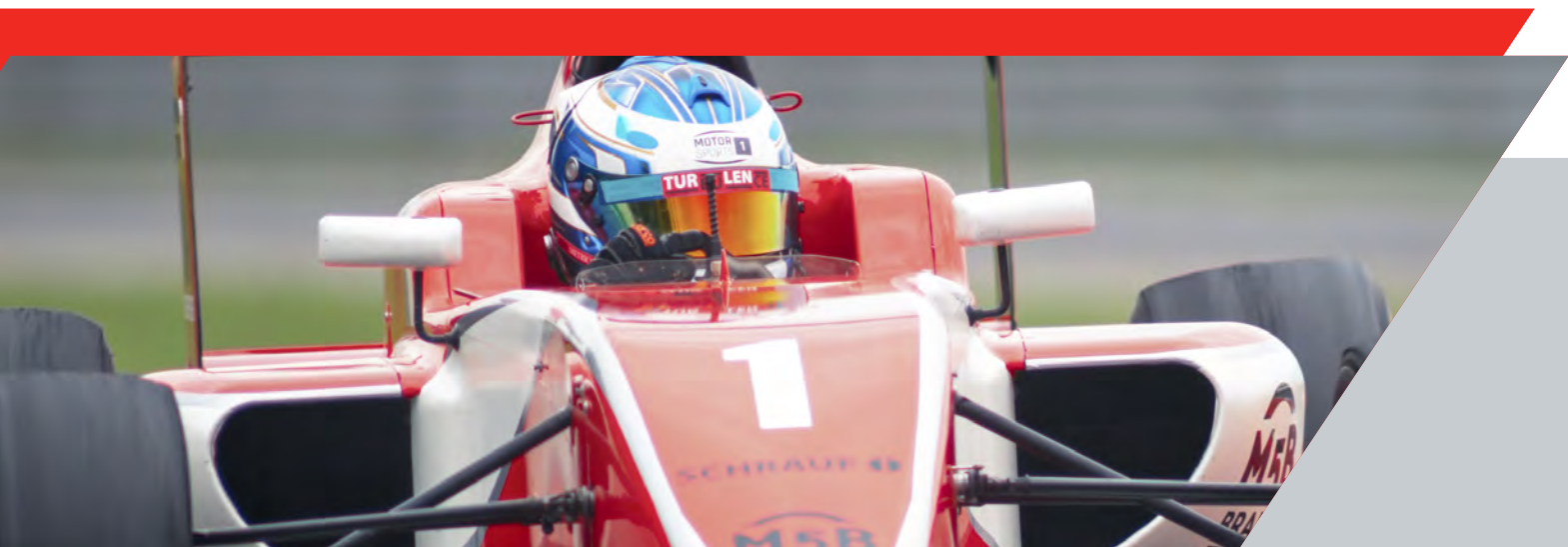


Ultra-strong

OPTILOC MATRIX HOUSING

The matrix housing is available in different titanium variants. In combination with the Optiloc part, the matrix system boasts optimum service life and functionality.

The additional variants feature stronger retention: this is ideal wherever even higher stability in the prosthesis base is essential.



Prosthetic aids

OPTILOC MOUNTING COLLAR

The mounting collar is used for fixing the matrix directly in the patient's mouth. The silicone collar is positioned below the retaining profile and is then positioned on the Optiloc section. The matrix housing including the retention insert is then inserted, so that there is compression between the mounting collar and the matrix housing.



MINICONE FORMING MATRIX

The Minicone Forming Matrix is inserted onto the Minicone Implant in the patient's mouth. A "click" is felt and heard when it is properly positioned.

The Minicone Forming Matrix is supported by the octagonal shape of the Minicone Implant, to ensure a precise impression. The Minicone Forming Matrix is height adjustable so that an impression can be taken even with an existing prosthesisener Prothese abformen zu können.



OPTILOC FORMING/FIXING MATRIX

Option for minimum vertical space

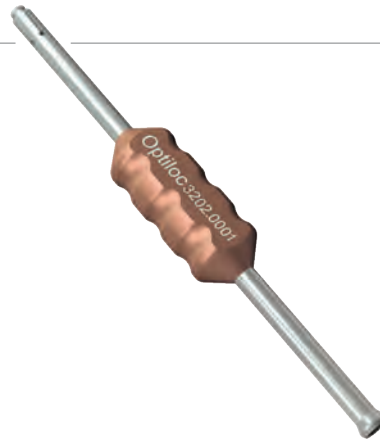
The Optiloc Forming/Fixing Matrix can be used if there is limited height.



Optiloc instruments

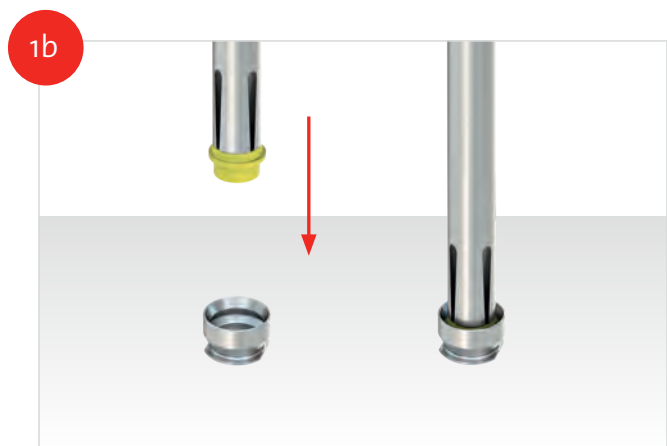
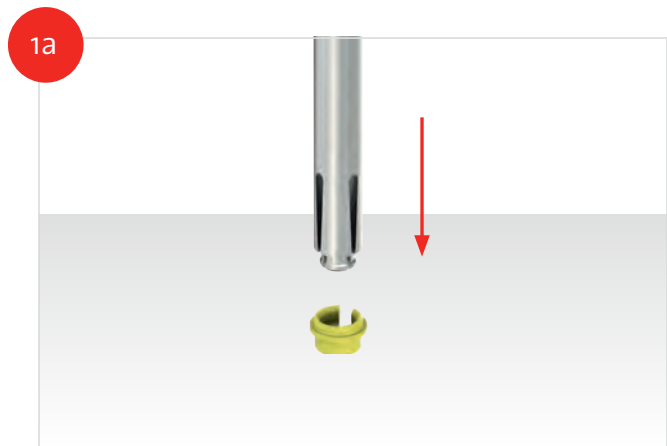
Optiloc Mounting and Demounting Tool for Retention Inserts

The brown instrument consists of a punch and a gripper with which the retention inserts can be replaced.



Insertion

- a) Pick up the retention insert with the punch. The retention insert lightly snaps into position.
- b) Push the retention insert into the matrix housing parallel to the matrix housing. The retention insert "clicks" into position.



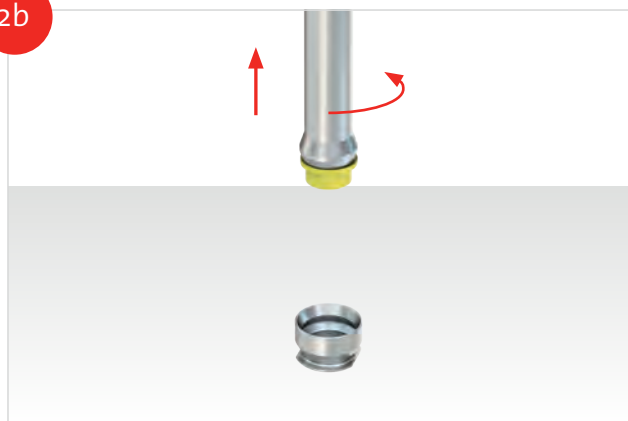
Removal

- a) The gripper is aligned parallel to the matrix and snapped into place by lightly pressing over the outer surface of the retention insert.
- b) The retention insert is slightly rotated to remove it from the matrix housing.
- c) Use the special recess in the handle of the Optiloc matrix housing extractor to remove the retention insert from the instrument by tilting it slightly.

2a



2b



2c



Optiloc instruments

Optiloc Model Analog Reposition Aid + Laboratory Driver

The reposition aid helps to position the model analog into the impression.



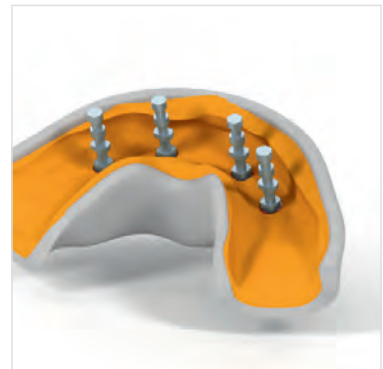
Minicone Laboratory Implant

The laboratory implant has the same dimensions in the neck region as the Optiloc part of the Minicone, guaranteeing that the impression material cannot cause any irritation when repositioning the model analog in the impression.



Application

Pick up the laboratory implant with the opposite side of the Optiloc Model Analog Reposition Aid and then position the laboratory implant in the impression.



Optiloc Matrix Housing Extractor

The matrix housing can be replaced within 5 seconds using the extractor.

The special construction prevents the handle from heating up.

Slot at the end of the handle

This slot allows the retention insert removed from the restoration to be released from the demounting tool.

The retention insert is advanced into the device slot and released by tilting it to the side.

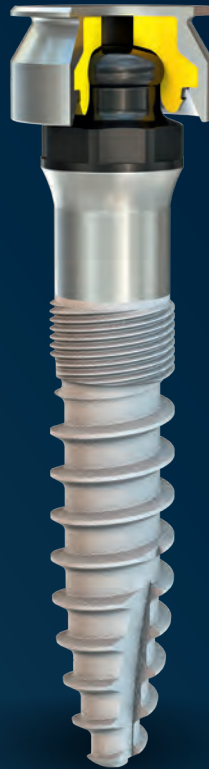


Application

Heat the head of the extractor and then warm the matrix housing for 2 – 3 seconds. Remove the Optiloc Matrix Housing with the beak-shaped end of the extractor.







MINICONE

IPS
Implant Systems



Minicone implant

D 2,6 mm

- D 2,6
- Titanium Grade 5 CF
- Sterile packaged



Length	8 mm	10 mm	12 mm
Article No.	5-01-01	5-01-02	5-01-03

Needle drill

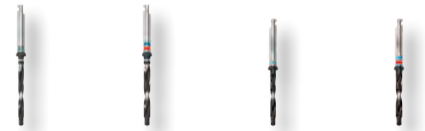
- Stainless steel



Type	Needle drill
Article No.	0-14-77

Drills for Minicone D 2,6

- Stainless steel
- ADLC coated



Type	Standard drill	Cortical drill	Standard drill	Cortical drill
Diameter (mm)	1,4/1,7	1,5/2,0	1,4/1,7	1,5/2,0
Version	short	short	extra-short	extra-short
Length	L 20 mm	L 20 mm	L 16 mm	L 16 mm
Article No.	5-14-01	5-14-02	5-14-03	5-14-04

Tweezers

- diamond coated
- Stainless steel



Article No.

22.014.03

Placement instrument Implant

- Manual and ratchet
- Stainless steel



Type

Minicone

Version

short

Article No.

5-13-01

Placement instrument Implant

- Contra-angle
- Stainless steel



Type

Minicone

Version

short

Article No.

5-13-02

Soft tissue punch

- Sterile packaged



Diameter

D 2,0 mm

Article No.

BP-20F

Paralleling aid

- Titanium Grade 5 CF



Type

long

Diameter (mm)

1,7/2,0

Version

with depth marking

Article No.

5-13-03

Torque ratchet

- with infinitely variable torque setting
- 10-40 Ncm
- Hardened stainless steel



Article No.

0-13-28

Surgical tray Minicone



Version	without contents		extra-short drills
Article No.	0-13-78	0-13-83	0-13-97

Surgical tray / short drill

Number	Description				Quantity
5-13-01	Placement instrument	Implant	Manual and ratchet	short	1 pc.
5-13-02	Placement instrument	Implant	Contra-angle	short	1 pc.
0-13-28	Torque ratchet	with infinitely variable torque setting		10-40 Ncm	1 pc.
0-14-77	Needle drill				1 pc.
5-14-01	Standard drill			short	1 pc.
5-14-02	Cortical drill			short	1 pc.
0-13-78	Surgical tray				1 pc.
5-13-03	Paralleling aid	Minicone	with depth marking		1 pc.

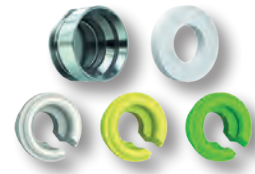
Surgical tray / extra short drill

Number	Description				Quantity
5-13-01	Placement instrument	Implant	Manual and ratchet	short	1 pc.
5-13-02	Placement instrument	Implant	Contra-angle	short	1 pc.
0-13-28	Torque ratchet	with infinitely variable torque setting		10-40 Ncm	1 pc.
0-14-77	Needle drill				1 pc.
5-14-03	Standard drill			extra-short	1 pc.
5-14-04	Cortical drill			extra-short	1 pc.
0-13-78	Surgical tray				1 pc.
5-13-03	Paralleling aid	Minicone	with depth marking		1 pc.

Prosthetics

Optiloc® Processing package

- Matrix housing, titanium
- Retention insert white
Retention force: light
- Retention insert yellow
Retention force: medium
- Retention insert green
Retention force: strong
- Mounting collar, silicone
- 2 pcs per package



Titanium

Material
matrix housing

Article No.

5202.0001

Please note: The entire product overview is available in section Optiloc.

Laboratory implant

- Titanium Grade 5 CF



Article No.

5-05-01

Minicone Forming Matrix

- POM



Content

4 piece

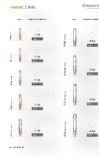
Article No.

2102.0013

Picture	Part no.	Part description	Specifications	Amount per package
	5102.0000	Optiloc Equipment Box	Incl. 3 tools Instrument brown 3202.0001 Instrument blue 3202.0002 Instrument grey 3202.0003 (without load)	1 pc
	5202.0001	Optiloc Processing package titanium	<ul style="list-style-type: none"> • Titanium matrix housing • Retention insert white • Retention insert yellow • Retention insert green • Mounting collar, silicone 	2 pcs
	2102.0001	Optiloc Matrix housing, titanium	Matrix housing: titanium	4 pcs
	2102.0009	Optiloc Matrix housing, elliptic	Titanium	4 pcs
	special accessory 2102.0010	Optiloc Matrix housing, titanium with attachment option	Matrix housing: titanium	4 pcs
	special accessory 2102.0003	Optiloc Retention insert red	PEEK Retention force: extra-light	4 pcs
	2102.0004	Optiloc Retention insert white	PEEK Retention force: light	4 pcs
	2102.0005	Optiloc Retention insert yellow	PEEK Retention force: medium	4 pcs
	2102.0006	Optiloc Retention insert green	PEEK Retention force: strong	4 pcs
	2102.0007	Optiloc Retention insert blue	PEEK Retention force: extra-strong	4 pcs
	special accessory 2102.0008	Optiloc Retention insert black	PEEK Retention force: ultra-strong	4 pcs
	2102.0024	Optiloc Model analogue	Aluminium	4 pcs
	2102.0012	Optiloc Forming / fixing matrix	PEEK	4 pcs
	2102.0023	Optiloc Processing spacer	POM	4 pcs
	2102.0011	Optiloc Mounting collar, silicone	Silicone	10 pcs
	3202.0002	Abutment screw driver (lab) + model analog reposition aid (blue)	Aluminium, steel	1 pc
	3202.0001	Optiloc Mounting and demounting tool for retention inserts (brown)	Aluminium, steel	1 pc
	3202.0003	Optiloc Matrix housing extractor (grey)	Aluminium, steel	1 pc

Accessories

X-ray foils Minicone



Article No.

0-24-16

Implant ID card



Article No.

PM06_02_0002



Editor
Medentika® GmbH

As at: September 2020

We are certified:
DIN EN ISO 13485
Medical Device Directive 93/42/EWG,
Annex II

CE0483

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