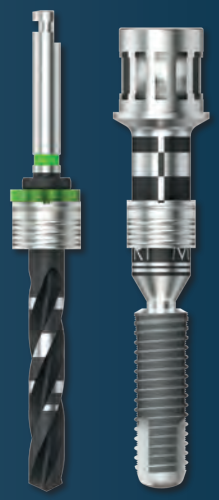
IPS

IMPLANT SYSTEMS

Guided Surgery MedentiGuide Microcone



MEDENTiKA®

A Straumann Group Brand

MedentiGuide

MedentiGuide drill sleeves support the surgeon in preparing the implant bed for Medentika® implants.

Their use must be planned with a specially designed 3D planning system and surgical drilling template. You can plant the surgery with standard planning programs.

Treatment planning based on three dimensional imaging procedures (CT, DVT) enables high precision treatment planning and means that the treatment outcome can be accurately predicted.

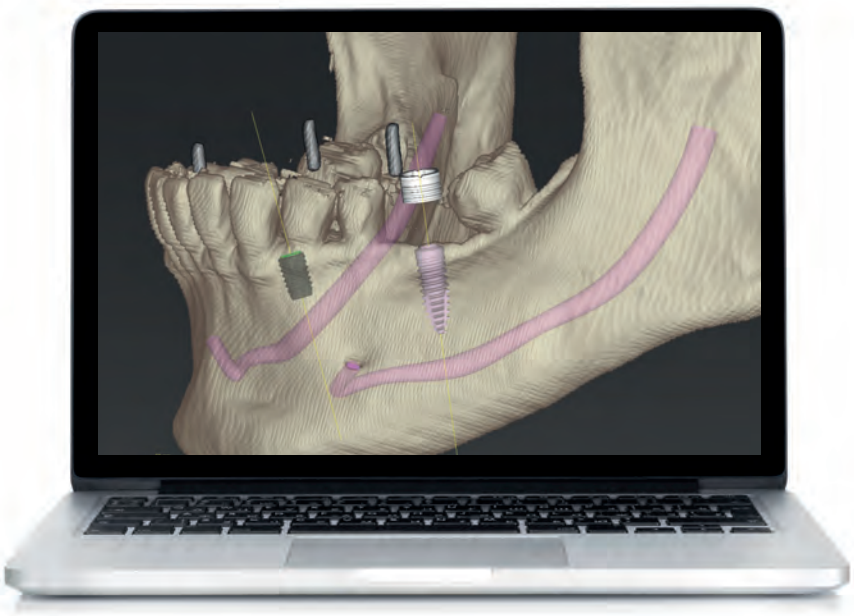
An individual drilling template can be produced on the basis of the digital planning data. This ensures the exact and precise transfer of the planning outcome to the patient's mouth.

The advantages over conventional planning include:

- Precision three-dimensional planning and implantation, taking into account the desired restoration
- Automatic collision control that displays if the distances to the implants or nerves are too short
- Information on peri-implant bone quality so that conclusions can be drawn on the expected primary stability

Note:

Medentika® GmbH accepts no liability for the correct planning, implementation and production of the drilling template. Sufficient knowledge of the 3D planning system being used and the Medentika® implant system is essential. It is imperative that the user is very confident in the use of 3D planning systems before using the MedentiGuide drill sleeves. Furthermore, sufficient expertise in preoperative implant planning and dental implantology is required.



These software manufacturers* currently support the MedentiGuide System

dental wings
A Straumann Group Brand

3shape

exocad

SICAT

smop
powered by swissmeda

PLANMECA
Planmeca Romexis

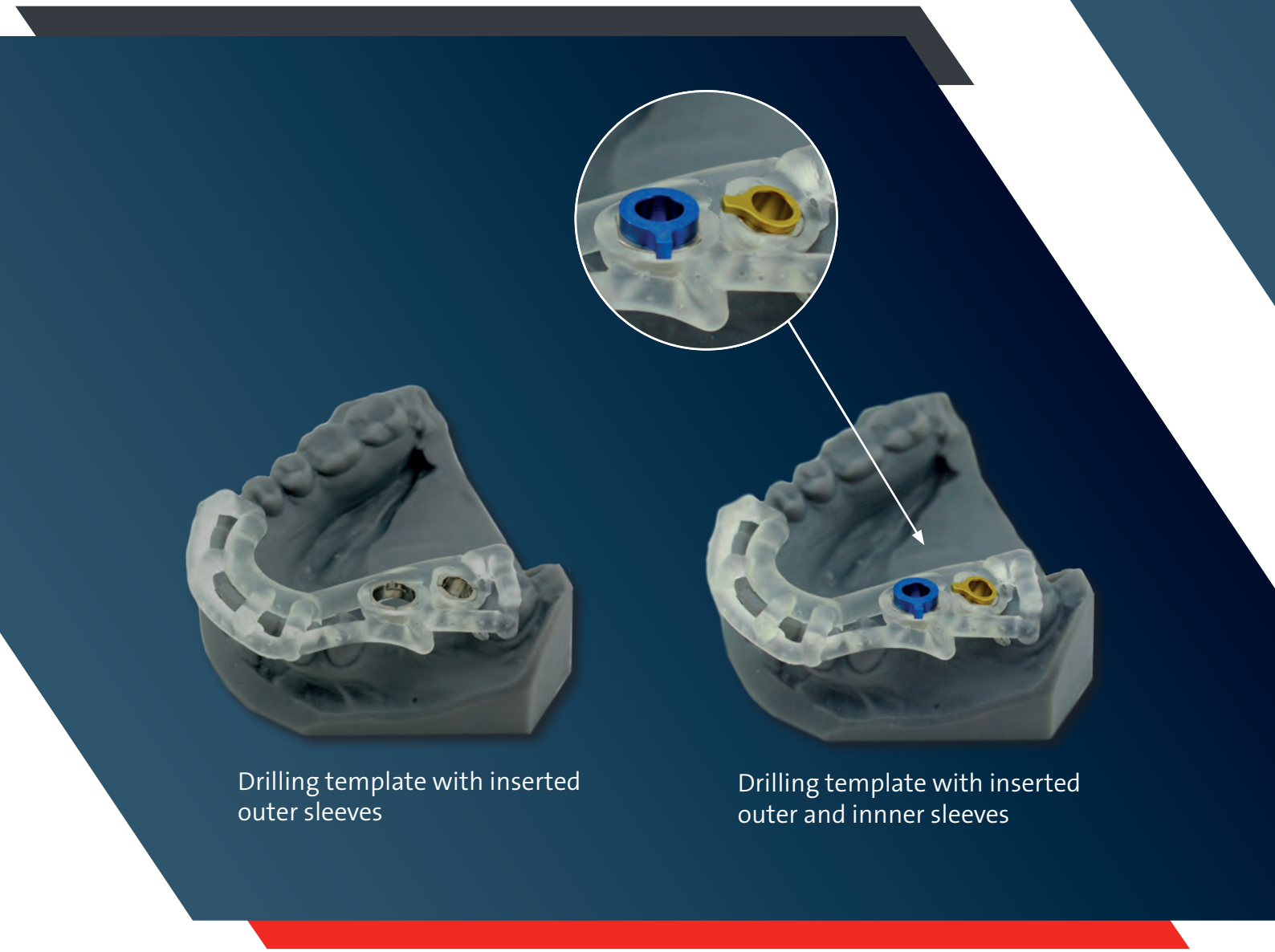
*to some extent this depends on the availability of the updates of the specific manufacturer.

Drilling template

An individual drilling template can be produced on the basis of the digital planning data. This ensures the exact and precise application of the planning outcome to the patient's mouth.

MedentiGuide drill sleeves can be used in drilling templates of various designs. The templates may be produced using suitable milling or printing systems with CADCAM technology or using alternative procedures.

NB:
The drilling template must be firmly and securely seated on the jaw with no gaps.

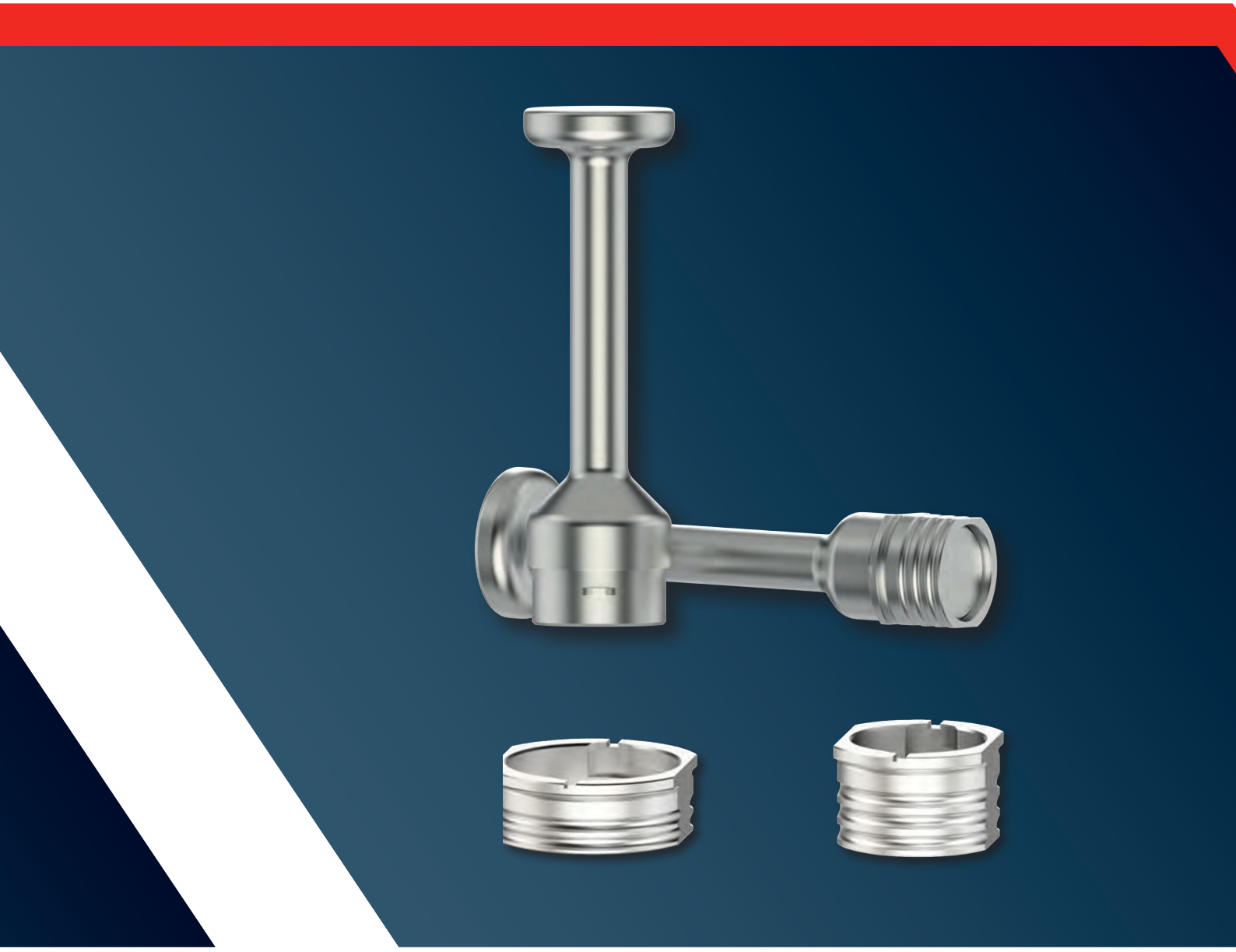


Drilling template with inserted outer sleeves

Drilling template with inserted outer and innner sleeves

Insertion tool MedentiGuide

The appropriate insertion tool is used to ensure that the outer sleeve is inserted securely into the template.



Surgical Tray

Easy to use: No additional surgical tray is required with the MedentiGuide drill sleeve system. The drill sleeves are adapted to the Microcone standard drill. This significantly simplifies the preparation of the implantation and considerably reduces the material and storage costs.

The MedentiGuide insertion tools are optionally available to guide the implants through the drill sleeves.

Drill lengths

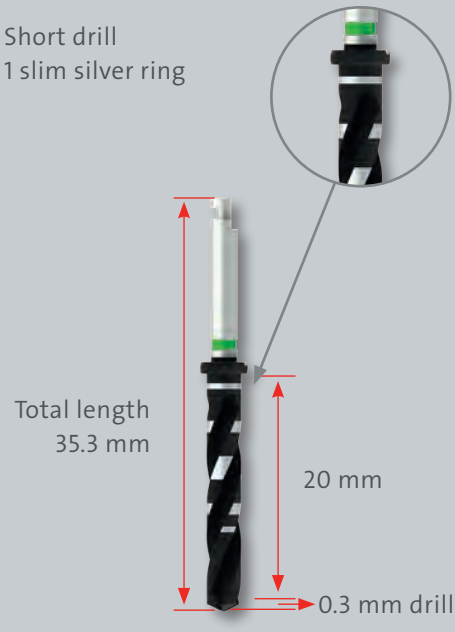
The MedentiGuide System supports two drill lengths: 20 mm and 25 mm. In the planning phase it is important to ensure that the correct drill length is selected.

PLEASE NOTE:
The MedentiGuide drill sleeves are only designed for standard drills. The defined drilling depths do not include the drill tip of 0.3 mm. Please note their lengths if only minimum space is available to anatomical structures.

Example for Microcone D 3.5 mm:

Standard drill
Ø 3.0 mm, bone quality D3 / D4

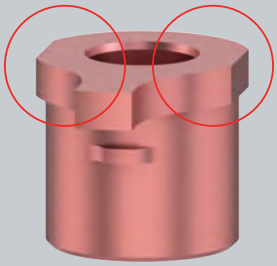
TWO DRILL LENGTHS:



Sleeve in sleeve

MedentiGuide Drill Sleeves are a “sleeve in sleeve” system, made up of various outer sleeves and matching inner sleeves. MedentiGuide drill sleeves can be used in drill sleeves of various designs.

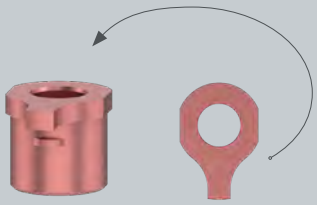
The templates may be produced using suitable milling or printing systems with CADCAM technology or using alternative procedures. The MedentiGuide sleeve system works with a bayonet lock. The lock engages clockwise and thus in the rotational direction of the drill.

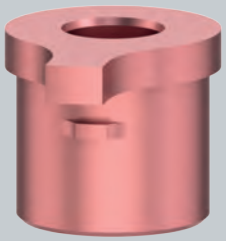


Inner sleeve
Cortical drill

Please note:

The inner sleeve cortical drill has **two flat sides.**

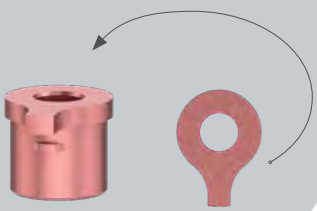




Inner sleeve
Standard drill

Please note:

The inner sleeve standard drill has **no flat side**.



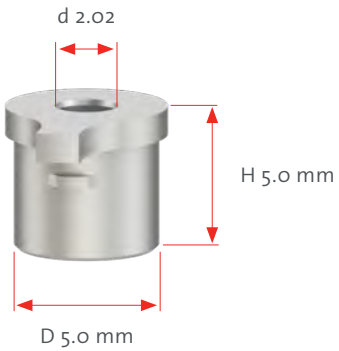
MedentiGuide
Drill sleeves

The inner sleeves are colour-matched to the corresponding colour-coded implants for easy recognition.

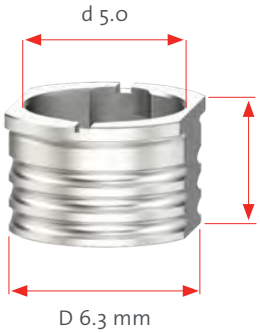
Sleeve	Art. No.	Description	Outer diameter	Inner diameter	Implant diameter	Drill
	0-32-06	Standard outer sleeve	D 6.3	d 5.03	D 3.0 - 4.5 mm	
	0-32-07	Large outer sleeve	D 8.3	d 7.03	D 5.0 mm	
	0-32-08	Adapter sleeve	D 7.0	d 5.03	D 5.0 mm	
	0-32-09	Pilot drill	D 5.0	d 2.03	Pilot	1-14-01 1-14-04
	0-32-10 0-32-22	Standard drill Cortical drill	D 5.0	d 2.53 d 2.83	D 3.0 mm	1-14-02 1-14-05
	0-32-11 0-32-23	Standard drill Cortical drill	D 5.0	d 3.03 d 3.33	D 3.5 mm D 4.5/3.5 mm	2-14-01 2-14-09
	0-32-12 0-32-24	Standard drill Cortical drill	D 5.0	d 3.53 d 3.83	D 4.0 mm	2-14-03 2-14-11
	0-32-13 0-32-25	Standard drill Cortical drill	D 5.0	d 4.03 d 4.33	D 4.5 mm	2-14-05 2-14-13
	0-32-14 0-32-26	Standard drill Cortical drill	D 7.0	d 4.53 d 4.83	D 5.0 mm	2-14-07 2-14-15

Implants D 3.0 – 4.5 mm

Inner sleeve
e.g. pilot drills

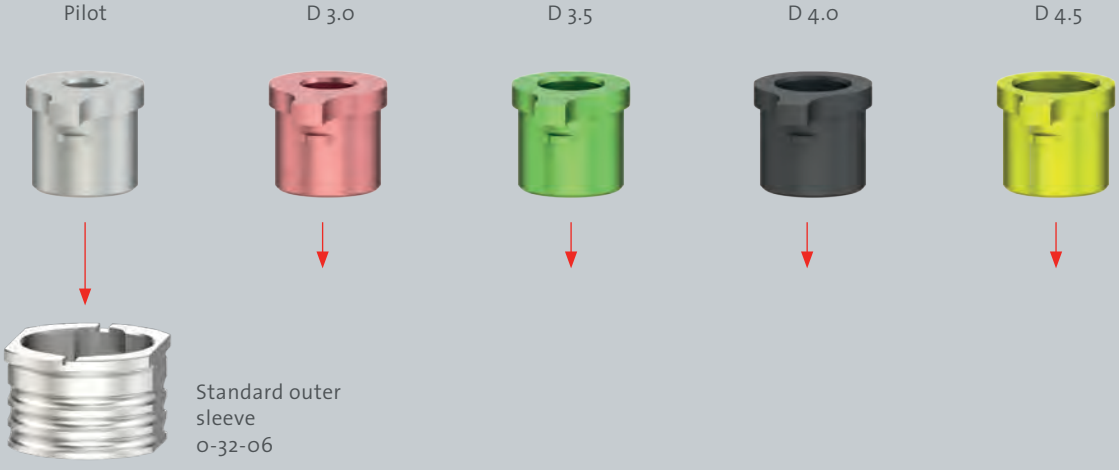


Standard outer sleeve
For implants measuring
D 3.0-4.5 mm



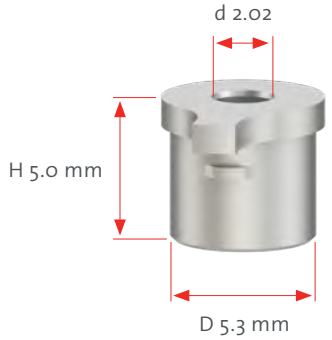
The **standard outer sleeve** is used in conjunction with the Microcone Implants D 3.0 - D 4.5.

MICROCONE IMPLANTS D 3.0 - D 4.5 MM

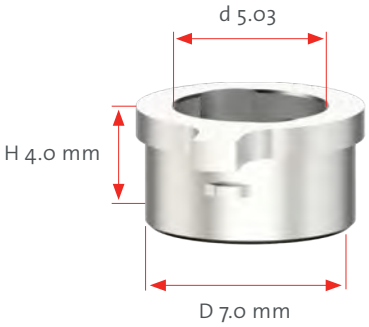


Standard outer sleeve
0-32-06

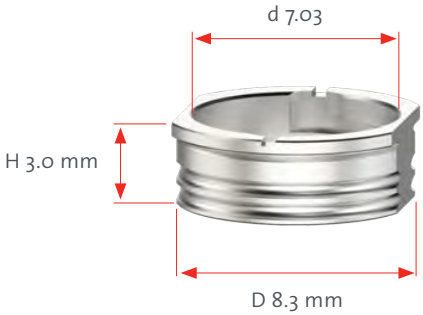
Implants D 5.0 mm



Inner sleeve
e.g. pilot drills



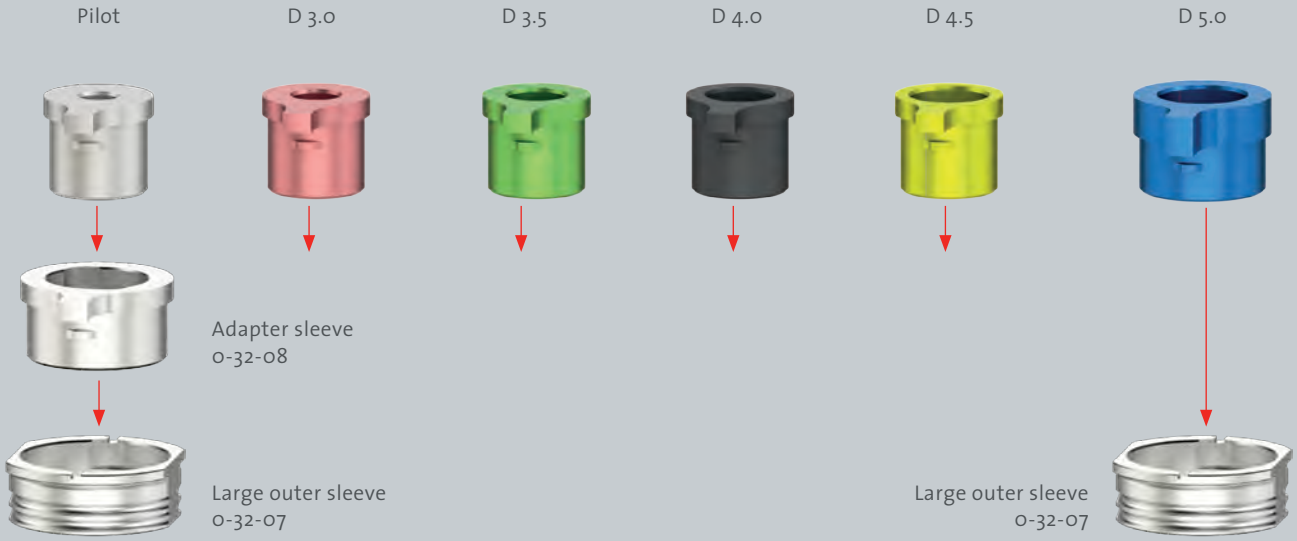
Adapter sleeve
To hold the
standard inner sleeve



Large outer sleeve
For implants D 5.0 mm

The **large outer sleeve** must be used for the Microcone implants D 5.0.

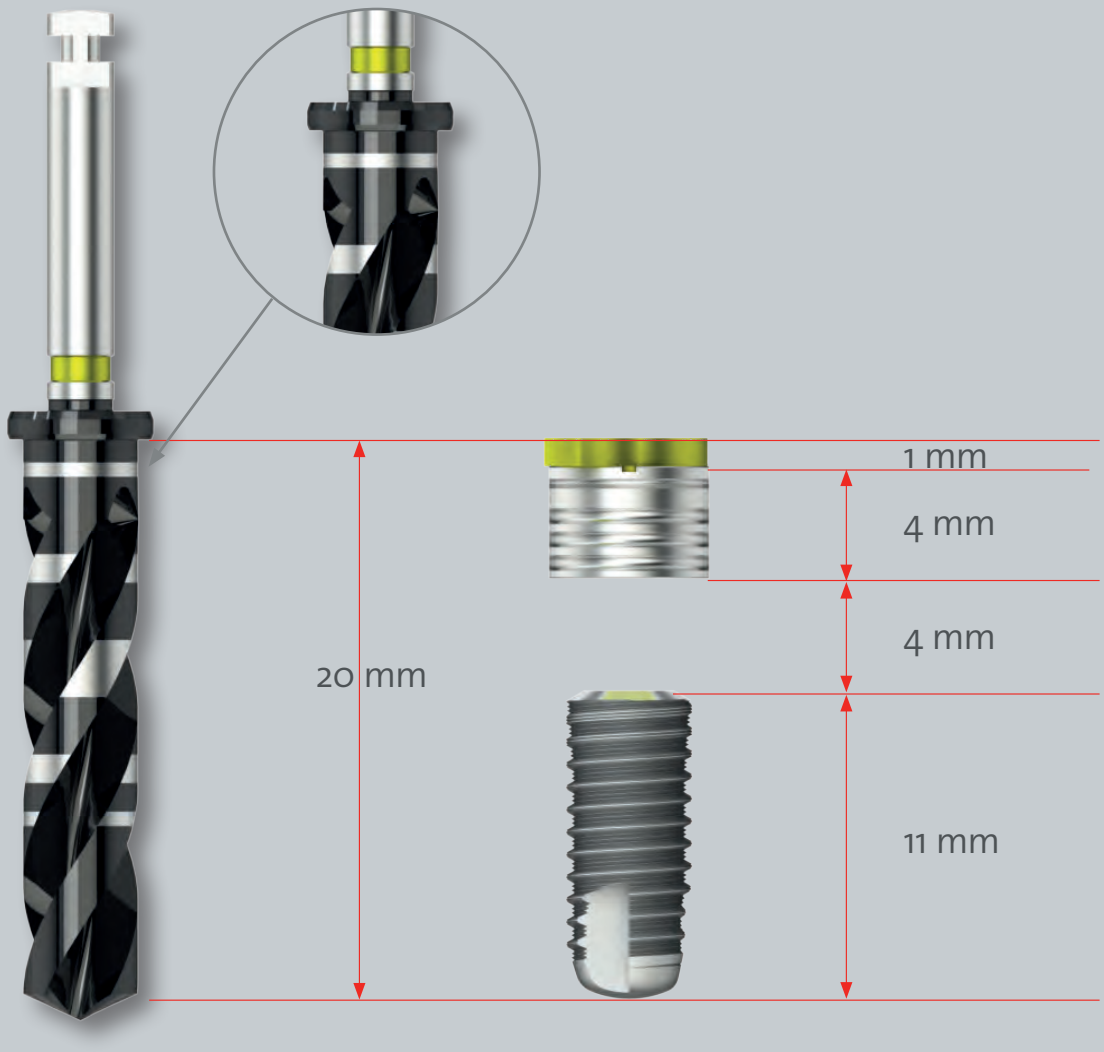
MICROCONE IMPLANTS D 5.0 MM



Selection of drill length

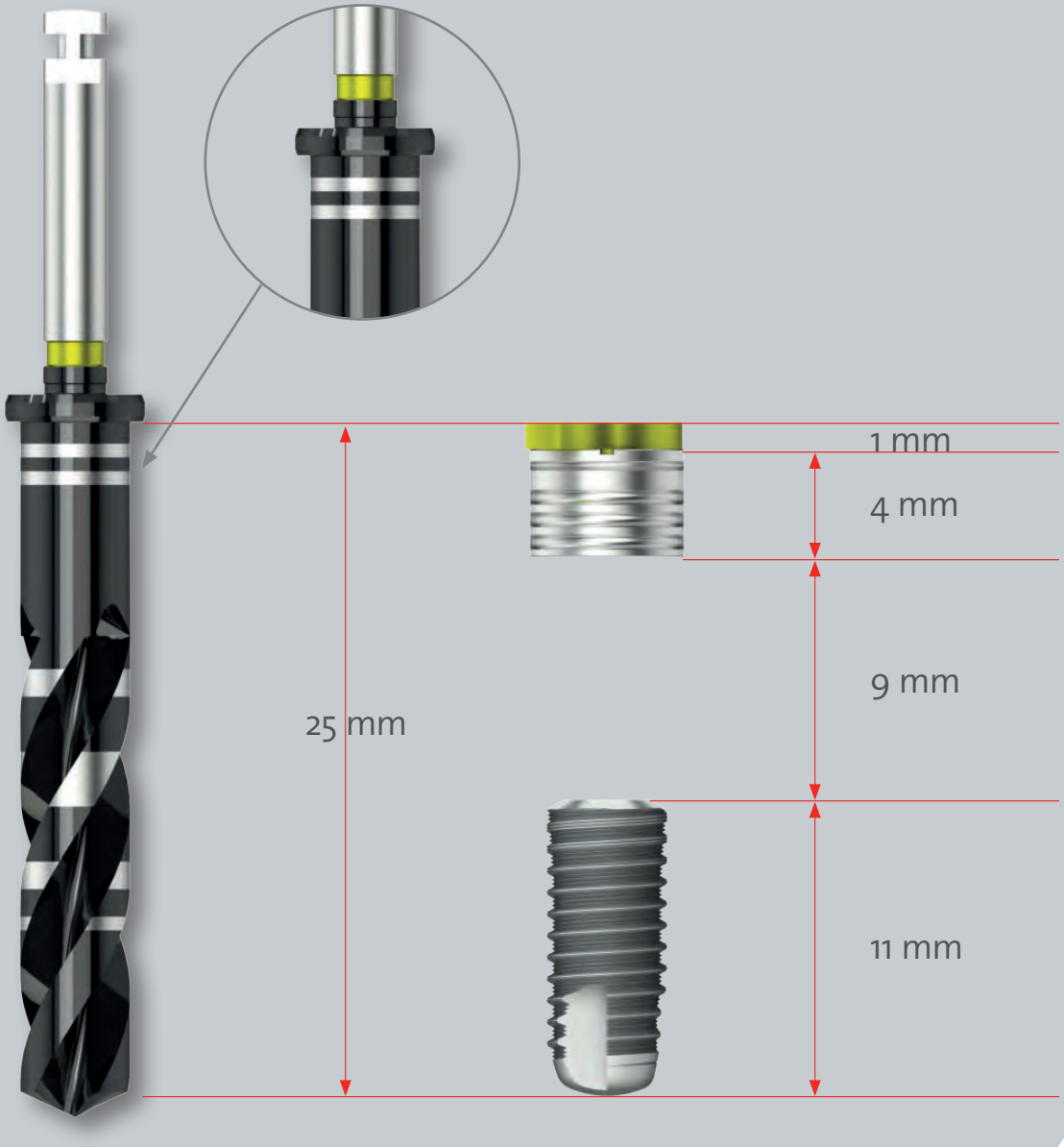
The MedentiGuide System software supports the standard drill with two drill lengths: 20 mm and 25 mm. The distance from the top edge of the inner sleeve to the bottom edge of the implant is thus defined by the selected drill length.

Short drill



The distance between the lower edge of the outer sleeve and the top edge of the implant is always defined by the selected implant and drill lengths. The distance between the lower edge of the sleeve and the upper edge of the implant can be defined, depending on the desired implant length, by the choice of the drill length. NB: The desired drill length must therefore be taken into account during planning.

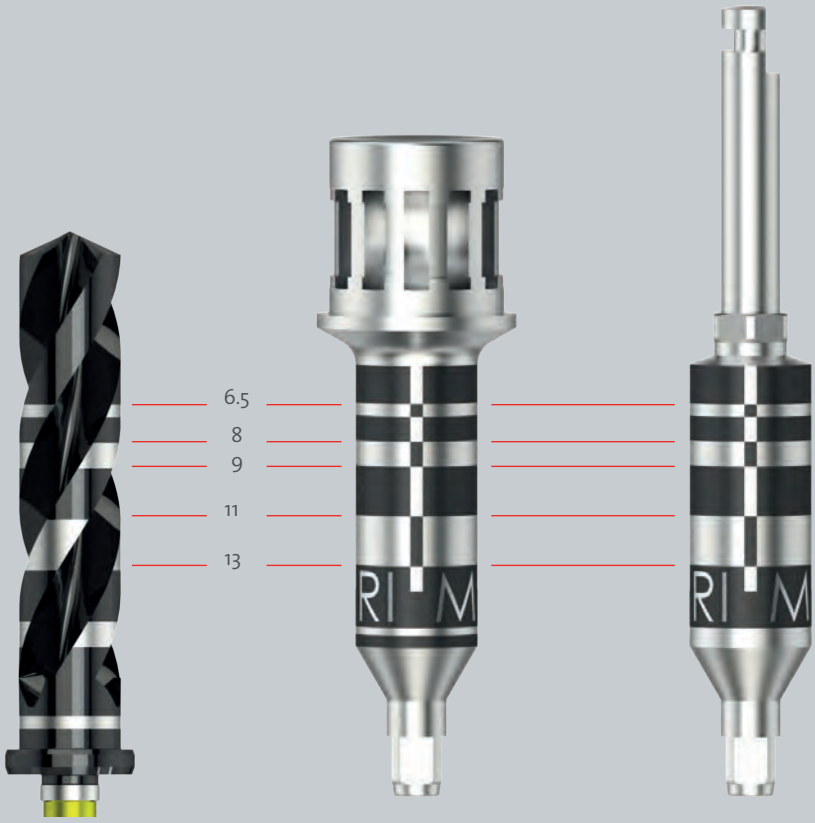
Long drill

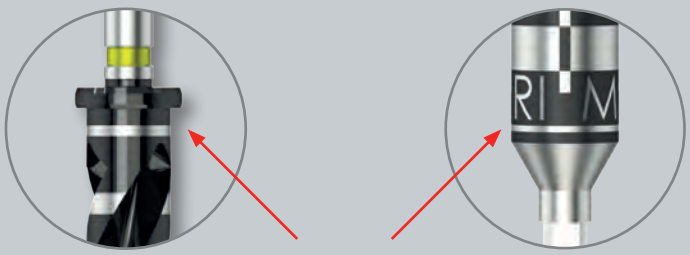


MedentiGuide Placement Instrument

The implants can optionally be guided through the template for positioning. This involves the use of the corresponding MedentiGuide placement instruments, either for manual and ratchet or the contra-angled handpiece. The drill length determines whether the short or long MedentiGuide placement instrument is usedt.

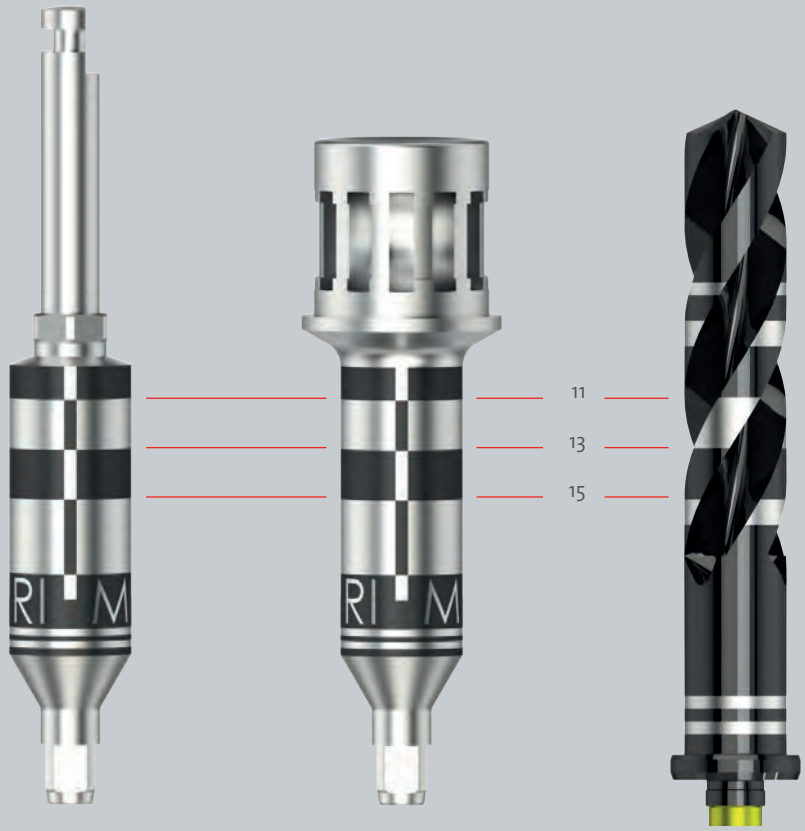
Short drill

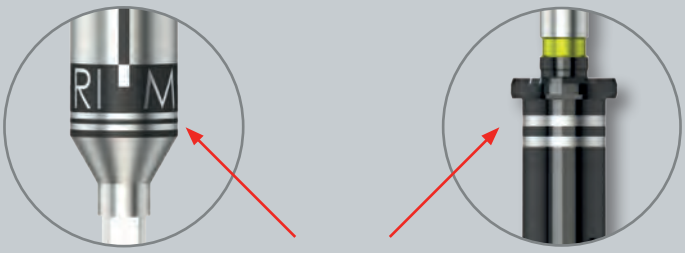




Short drill & MedentiGuide placement instrument, short
>> 1 marking ring

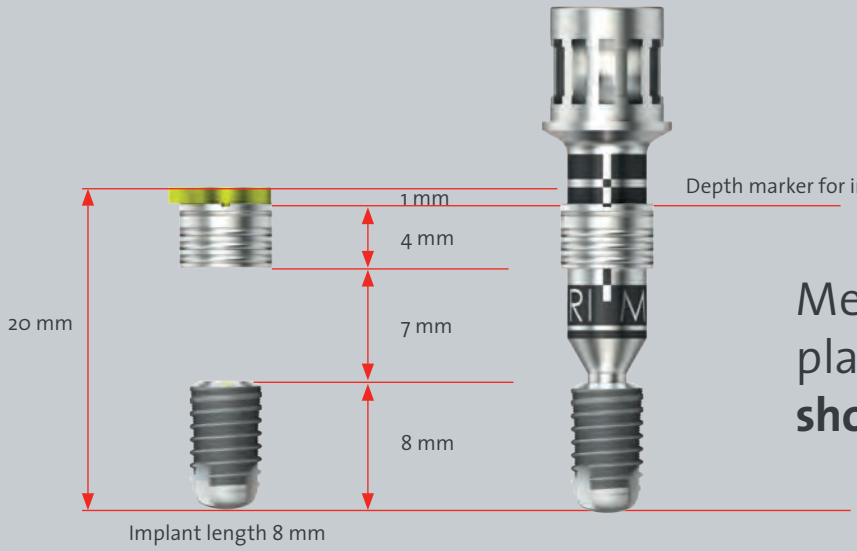
Long drill



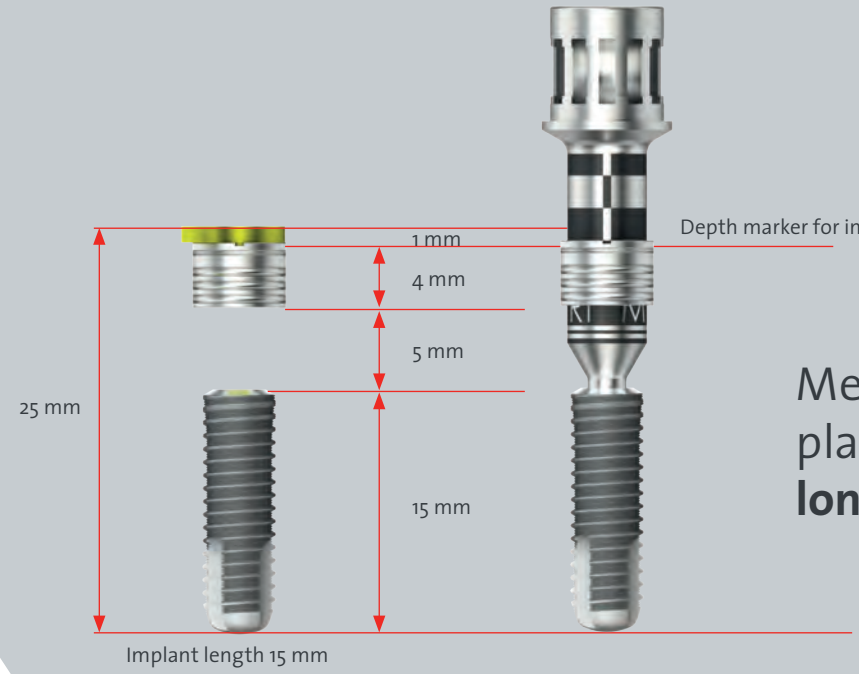


Long drill & MedentiGuide placement instrument, long
>> 2 marking rings

MedentiGuide Placement instrument



MedentiGuide placement instrument **short**

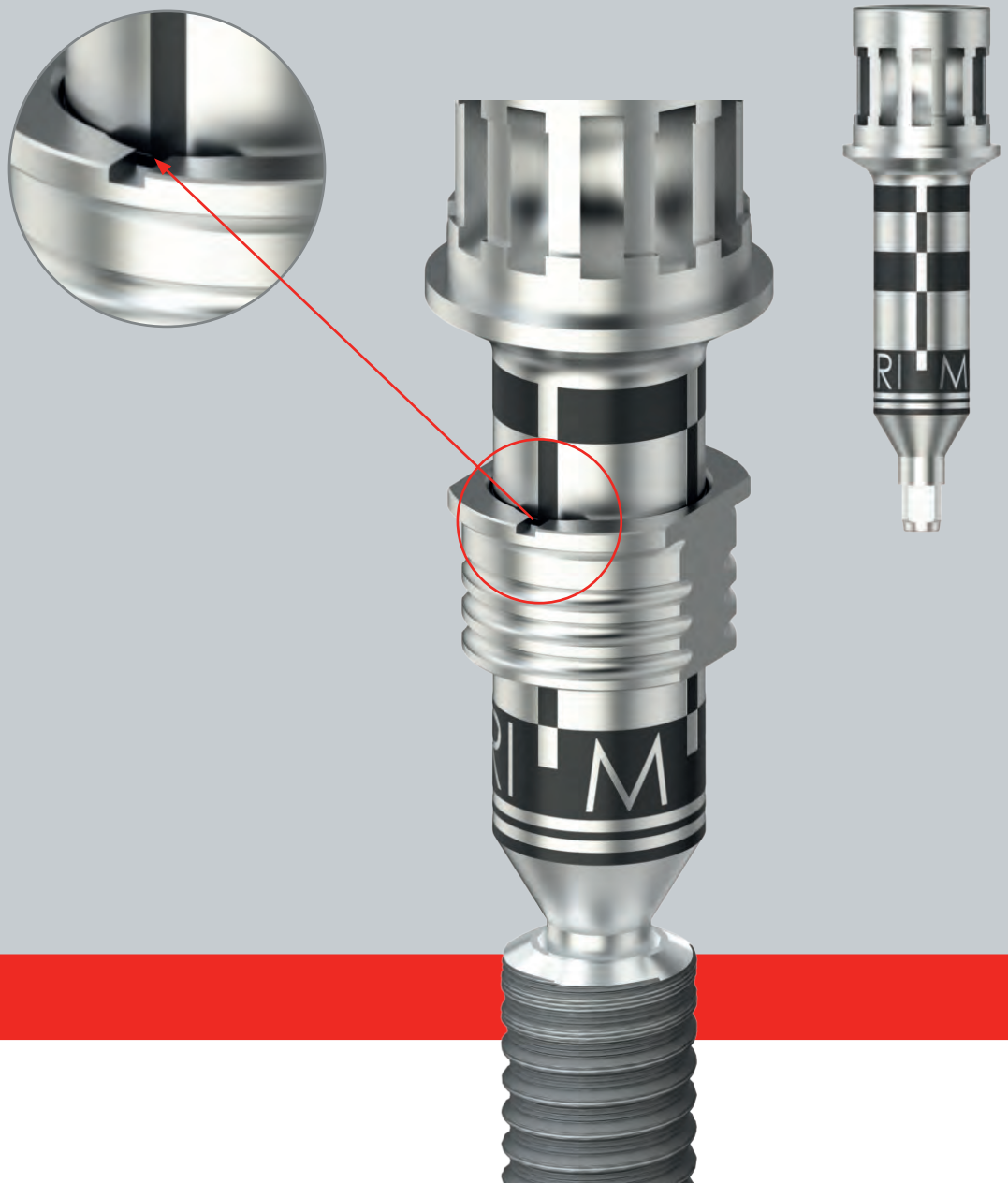


MedentiGuide placement instrument **long**

Implant alignment

To ensure that the implant is inserted at the correct height, it is rotated through the outer sleeve until the corresponding depth marker is flush with the top edge of the outer sleeve.

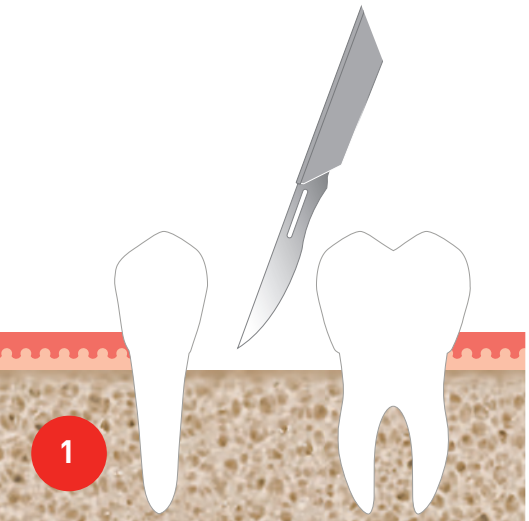
If required, the implants can be aligned to the indexing of the implant connection. The MedentiGuide placement instrument is used in this case. The vertical marking on the placement instrument is aligned in the direction of the area of the square in the implant. The marking/notch on the outer sleeve is used as a guide to correctly position the implant.



Drilling protocol

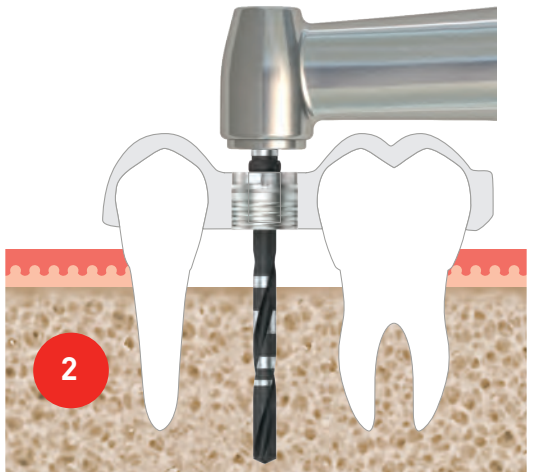
(For example for D 4.5 x 15 mm implant with the standard outer sleeve)

Initial situation



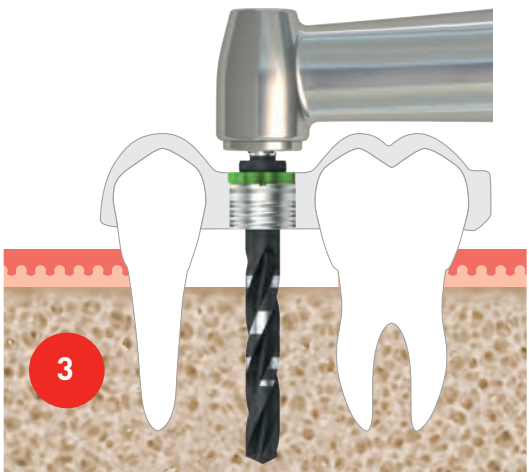
Cut a flap in the soft tissue to expose the bone around the implantation point or optionally expose the implantation point with the mucosal punch.
NB: Check the drilling template at every step to ensure that it is correctly seated. It is important to observe the surgical manual for each implant system.

Pilot hole with the Ø 2.0 mm pilot drill



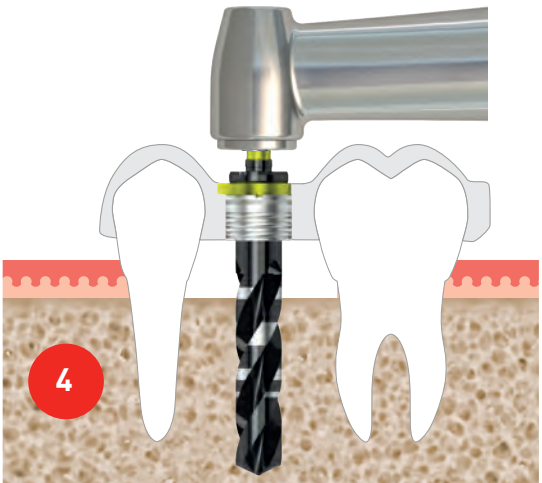
The pilot hole is drilled with the Ø 2.0 mm pilot drill.
Guided by the drill sleeve (inner sleeve), this defines the sagittal direction of the implant axis and the drilling depth.
The recommended speed is 300- 600 rpm and the maximum speed is 800 rpm.

Optional incremental drilling; deep drill with the Ø 3.0 mm standard drill



Incremental drilling is performed with the corresponding drill sleeve (inner sleeve). In this case with the D 3.0 mm standard drill.
The recommended speed is 300-600 rpm and the maximum speed is 800 rpm.

Deep drilling with the final Ø 4.0 mm standard drill

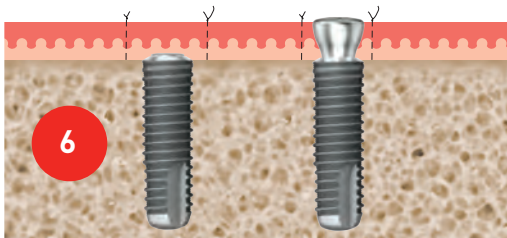


Incremental drilling is performed with the corresponding drill sleeve (inner sleeve), in this case with the D 4.0 mm standard drill.
The recommended speed is 300-600 rpm and the maximum speed is 800 rpm.

Insert the implant either by hand/ratchet or with the contra-angled handpiece.

NB: Before inserting the implant, remove the inner sleeve. Now the implant is screwed in position through the outer sleeve until the depth marking of the placement instrument is flush with the upper edge of the outer sleeve.
Check the vertical marking on the placement instrument to ensure the desired alignment of the implant connection.

Submerged or transgingival healing can be achieved

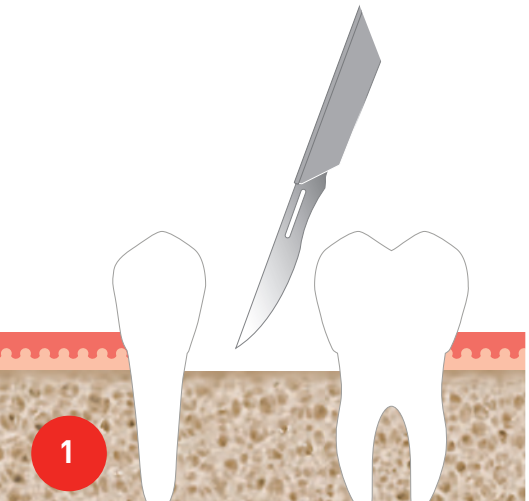


The implant can heal either with submerged or transgingival methods.

Drilling protocol

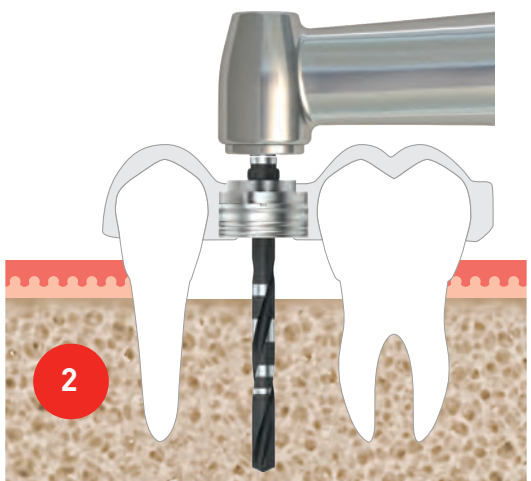
(For example for D 5.0 x 15 mm implant with the large outer sleeve)

Initial situation



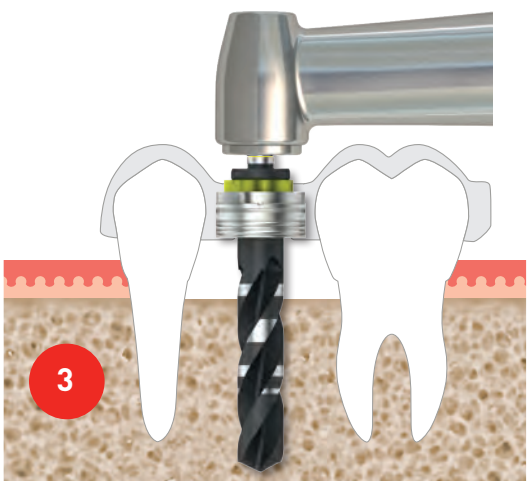
Cut a flap in the soft tissue to expose the bone around the implantation point or optionally expose the implantation point with the mucosal punch.
NB: Check the drilling template at every step to ensure that it is correctly seated. It is important to observe the surgical manual for each implant system.

Pilot hole with the Ø 2.0 mm pilot drill



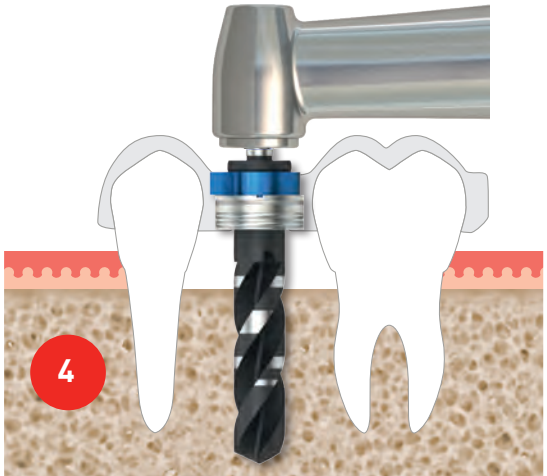
The pilot hole is made with the Ø 2.0 mm pilot drill.
Guided by the drill sleeve (adapter sleeve and the corresponding inner sleeve), this defines the sagittal direction of the implant axis and the drilling depth.
The recommended speed is 300-600 rpm and the maximum speed is 800 rpm.

Incremental drilling with the Ø 4.0 mm standard drill



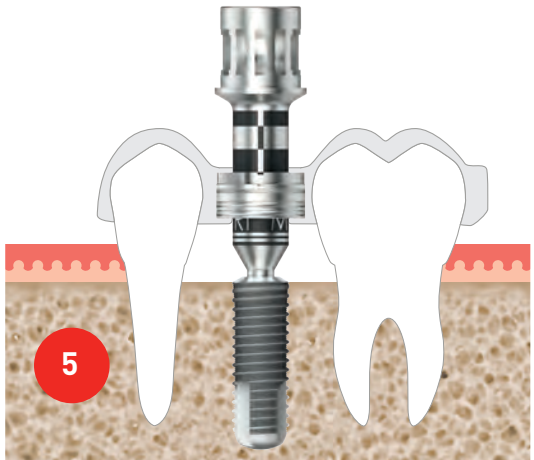
Incremental drilling is performed with the corresponding drill sleeve (adapter sleeve and inner sleeve).
In this case with the D 4.0 mm standard drill.
The recommended speed is 300-600 rpm and the maximum speed is 800 rpm..

Deep drilling with the final Ø 4.5 mm standard drill



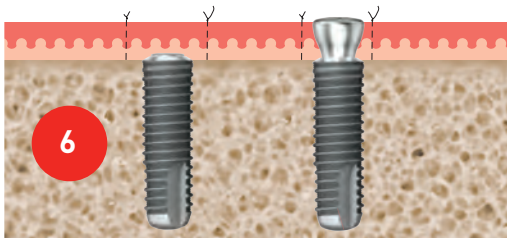
The adapter sleeve is now removed with the inner sleeve from the previous drilling. The inner sleeve (0-32-14) for the final drilling is then inserted into the external sleeve.
Drill to achieve the final depth is performed with the final drill, which in this case is the D 4.5 mm standard drill. The recommended speed is 300-600 rpm and the maximum speed is 800 rpm.

Insert the implant either by hand/ratchet or with the contra-angled handpiece.



NB: Before screwing the D 5.0 implant into position, the inner sleeve has to be replaced with the adapter sleeve. Now the implant is screwed through the through the outer sleeve until the depth marking of the placement instrument is flush with the upper edge of the adapter sleeve.
Check the vertical marking on the placement instrument to ensure the desired alignment of the implant connection.

Submerged or trans-gingival healing can be achieved

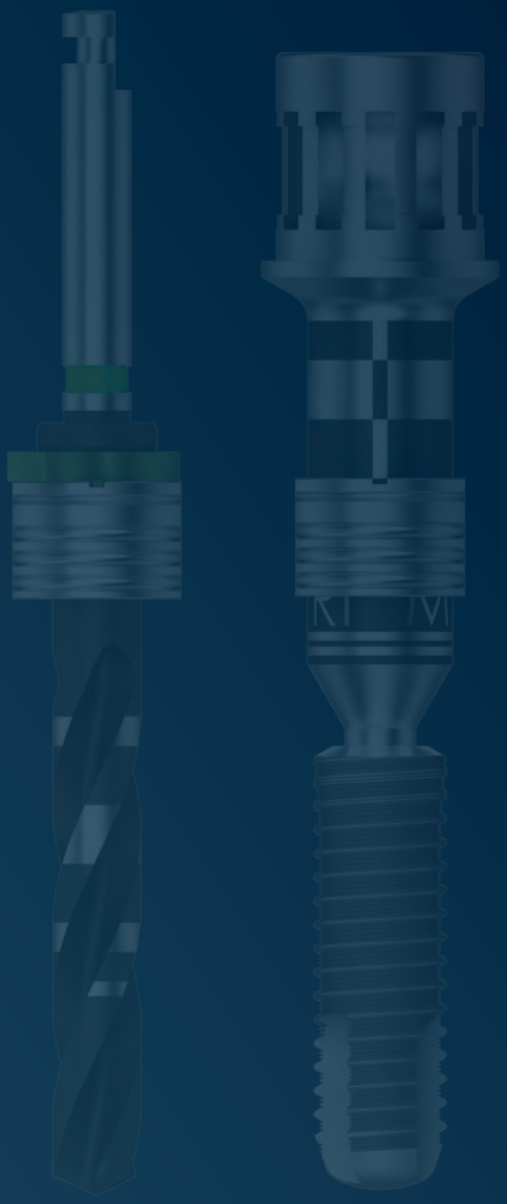


The implant can heal either with submerged or transgingival methods.


MOTOR SPORTS 1
TUR LEN
1
SCHRAUF
M5B
BRAKES

Medentika®
MedentiGuide

Products



Needle drill

- **Stainless steel**

Type	Needle drill
Article No.	0-14-77

MedentiGuide Outer sleeve standard

- **Titanium Grade 5 CF**

Diameter (mm)	D 6.3 / d 5.01
Article No.	0-32-06
Please note:	This sleeve is used for implants D 3.0 - D 4.5.

MedentiGuide Outer sleeve large

- **Titanium Grade 5 CF**

Diameter (mm)	D 8.3 / d 7.01
Article No.	0-32-07
Please note:	This sleeve is used for implants D 5.0.

MedentiGuide Adapter sleeve

- **Titanium Grade 5 CF**

Diameter (mm)	D 7.0 / d 5.01
Article No.	0-32-08
Please note:	This sleeve is used as a connecting piece between the Outer sleeve large and the Inner sleeves for the drill diameter D 2.0 - D 4.0.

MedentiGuide Inner sleeve Microcone implant

- **Titanium Grade 4**
- **Pilot drill**

Diameter (mm)	D 5.0 / d 2.03
Colour code	white
Drill diameter	D 2.0 mm
Article No.	0-32-09

MedentiGuide Inner sleeve Microcone implant

- Titanium Grade 5 CF
- Standard drill

Diameter (mm)	D 5.0 / d 2.53	D 5.0 / d 3.03	D 5.0 / d 3.53	D 5.0 / d 4.03	D 7.0 / d 4.53
Colour code	orange	green	black	yellow	blue
Drill diameter	D 2.5 mm	D 3.0 mm	D 3.5 mm	D 4.0 mm	D 4.5 mm
Article No.	0-32-10	0-32-11	0-32-12	0-32-13	0-32-14

MedentiGuide Inner sleeve Microcone implant

- Titanium Grade 5 CF
- Cortical drill

Diameter (mm)	D 5.0 / d 2.83	D 5.0 / d 3.33	D 5.0 / d 3.83	D 5.0 / d 4.33	D 7.0 / d 4.83
Colour code	orange	green	black	yellow	blue
Drill diameter	D 2.8 mm	D 3.3 mm	D 3.8 mm	D 4.3 mm	D 4.8 mm
Article No.	0-32-22	0-32-23	0-32-24	0-32-25	0-32-26

Placement instrument MedentiGuide

- Stainless steel

Type	Outer sleeve standard	Outer sleeve large
Article No.	0-32-19	0-32-20

MedentiGuide Placement instrument Implant

- Manual and ratchet
- Stainless steel

Implant connection	NI	NI
Type	Microcone	Microcone
Version	short	long
Article No.	1-32-03	1-32-04

Please note: These insertion tools are used to insert implants when using MedentiGuide sleeves.

MedentiGuide Placement instrument Implant

- Manual and ratchet
- Stainless steel


Implant connection	RI	RI
Type	Microcone	Microcone
Version	short	long
Article No.	2-32-03	2-32-04
Please note:	These insertion tools are used to insert implants when using MedentiGuide sleeves.	

MedentiGuide Placement instrument Implant

- Contra-angle
- Stainless steel


Implant connection	NI	NI
Type	Microcone	Microcone
Version	short	long
Article No.	1-32-01	1-32-02
Please note:	These insertion tools are used to insert implants when using MedentiGuide sleeves.	

MedentiGuide Placement instrument Implant

- Contra-angle
- Stainless steel


Implant connection	RI	RI
Type	Microcone	Microcone
Version	short	long
Article No.	2-32-01	2-32-02
Please note:	These insertion tools are used to insert implants when using MedentiGuide sleeves.	

Tweezers

- diamond coated
- Stainless steel

Article No.	22.014.03

Editor
Medentika® GmbH

As at: August 2020

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

CE 0483

The electronic Instructions for Use for our products are available on the website www.medentika.com.

Made in Germany with a long tradition of precision craftsmanship

- High-precision implant systems
- Innovation for immediacy
- High pure S-L-A surface
- High primary stability
- Guaranteed up to lifetime

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Passion for **Precision**

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