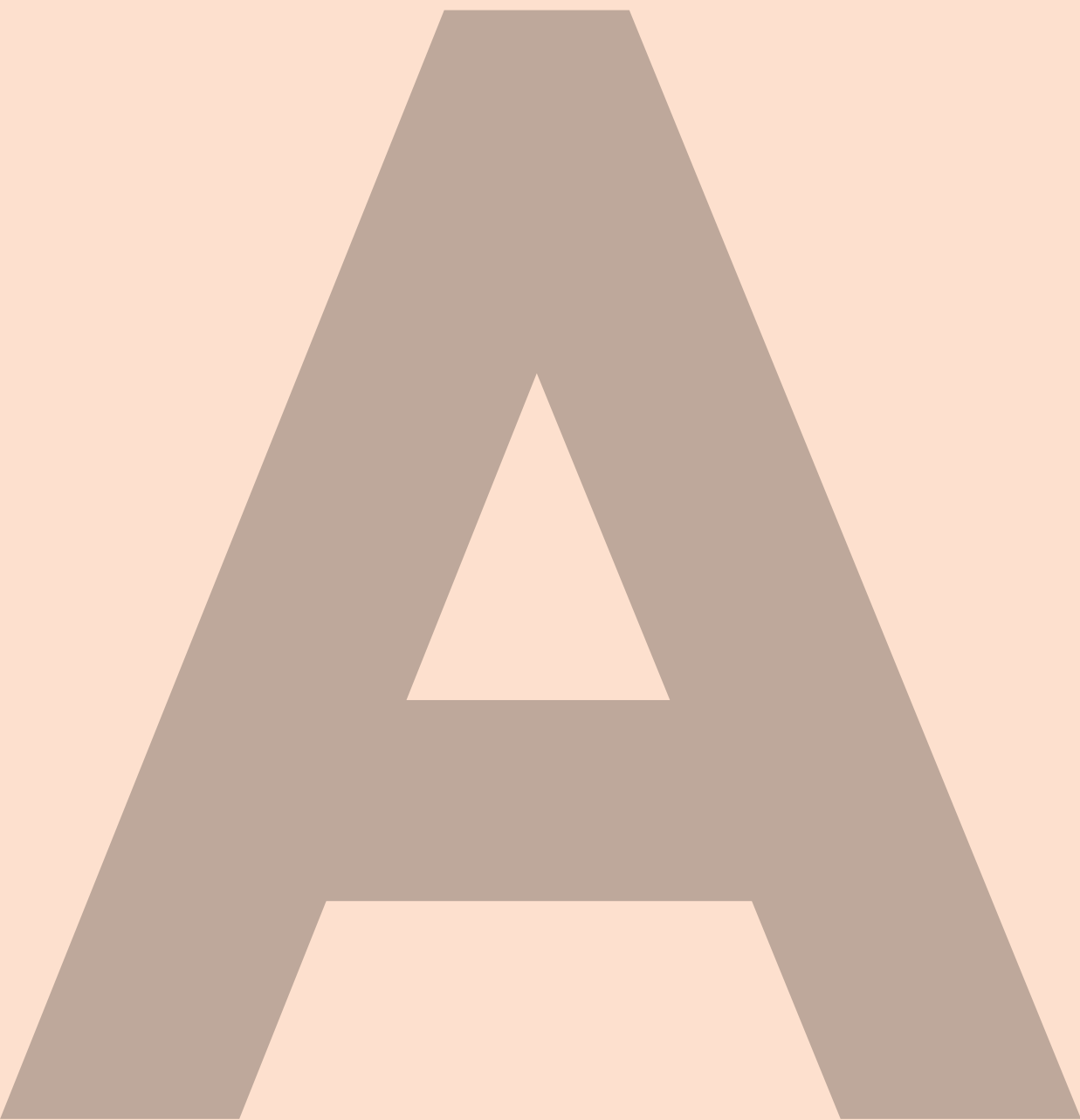


Avantgarde



RatioPlant



Made in
Germany

About us



HumanTech Dental GmbH is one of the leading manufacturers of human implants and instruments for dental surgery. The intelligent, well-designed implant systems are used successfully all over the world.

All our products are  Made in Germany with 

The high standards of precision in all areas of production perfectly complement the strict requirements for the manufacture of medical products. Our high-tech machinery and state-of-the-art testing procedures guarantee the highest product quality.

We manufacture, package and deliver our dental implants directly to our customers in accordance with the latest guidelines. The diversity of the implant product line offers a wide range of clinical solutions, such as reconstructions of single teeth, screw-retained or firmly cemented bridges and partial or full dentures. The implants are made of a biocompatible titanium alloy and their sandblasted and etched surfaces are state of the art.

All our dental implants meet the highest international standards. We are certified for ISO13485 and for CE.

Contents

About us	02
Avantgarde	04-06
Packaging	07
Instruments	08-09
Drilling Protocols	10-12
Healing Caps	13
Surgical Phase / Taking Impressions	14-19
Example of Dental Technology	20-21
Overview of Prosthetic Components	22-23
Prosthetic Components Avantgarde	24-25
Prosthetic Components MultiUnit Abutments	26
Tightening torque	27



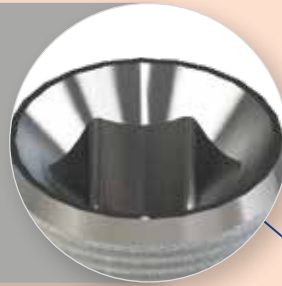
Ratioplant Avantgarde

Mini

Standard

Large

Approved-and-tested hexagonal connection with a polished edge that is mucosa-friendly



Micro-grooves in the neck area of the implant.



Anatomic root-analogue design for easy placement and excellent cosmetic results.

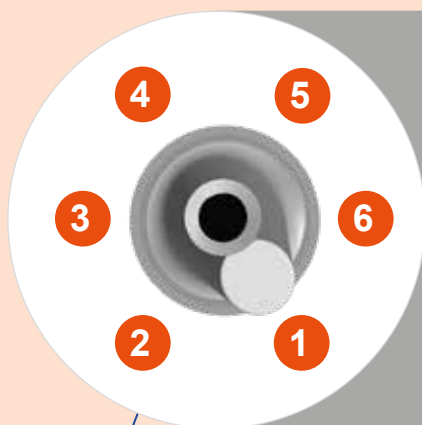


An atraumatic self-cutting thread with 3 extra-long cutting slots to collect bone chips and act as an anti-rotational mechanism.

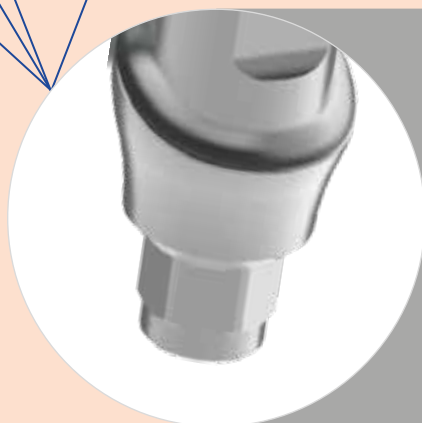


Thanks to the rounded surface of the tip of the implant, the Avantgarde line is also suitable for non-invasive direct sinus lifts.

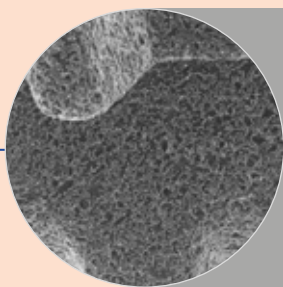




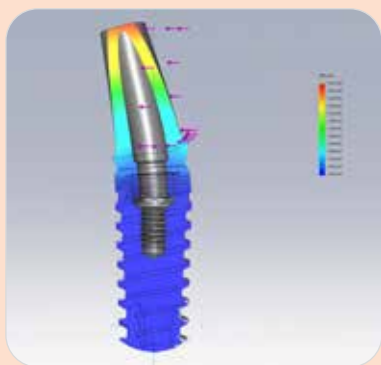
The hexagonal connection allows a high degree of flexibility to orientate the abutment and, therefore, offers the greatest possible freedom for the production of prosthetics. There are 6 possible variations of the abutment-implant position.



The implants have a hexagonal connection, a cone and an inner thread in accordance with applicable standards. The sealing is performed by the conical transition from the upper edge of the implant to the hexagonal connection. Thanks to this unique implant / abutment connection, easy handling is guaranteed. Three platforms – Mini, Standard and Large are distributed over five implant diameters, in order to increase stability.



The implants of the Avantgarde line are root-analogous screw implants with a blasted and etched surface for all indications.



The stability of the implants under load was ensured with FEM analyses and biomechanical tests.

RatioPlant Avantgarde

Simple Colour System

The Avantgarde implants and drills are marked, depending on the diameter, in the colours **yellow** (3.2 mm), **red** (3.8 mm), **green** (4.2 mm), **blue** (5.0 mm) and **white** (6.0 mm). This makes it easier to prepare the operating room and provides additional safety when inserting implants.



Avantgarde Implant Sizes with Art.No.

mm	Ø 3.2	Ø 3.8	Ø 4.2	Ø 5.0	Ø 6.0
6.0				● 5002150060	○ 5002160060
8.0	● 5002132080	● 5002138080	● 5002142080	● 5002150080	○ 5002160080
10.0	● 5002132100	● 5002138100	● 5002142100	● 5002150100	○ 5002160100
11.5	● 5002132115	● 5002138115	● 5002142115	● 5002150115	○ 5002160115
13.0	● 5002132130	● 5002138130	● 5002142130	● 5002150130	○ 5002160130
16.0	● 5002132160	● 5002138160	● 5002142160	● 5002150160	

Platform

Avantgarde implants are available in five diameters and up to six lengths. All implant sizes are distributed across three platforms.

mm	Ø 3.2	Ø 3.8	Ø 4.2	Ø 5.0	Ø 6.0
	Mini	Standard		Large	
					

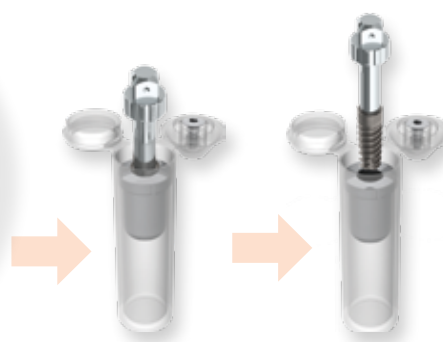
Packaging

User - Friendly, Safe and Easy...

All Avantgarde implants are in special tube internal packaging, located in an extra blister pack. User-friendly, safe and sterile-packed. This packaging provides an easy connection with the insertion instrument directly from the tube during the surgery. Patient labels with all relevant data facilitate documentation of the used implants.



Removing Implants



Removing Cover Screws



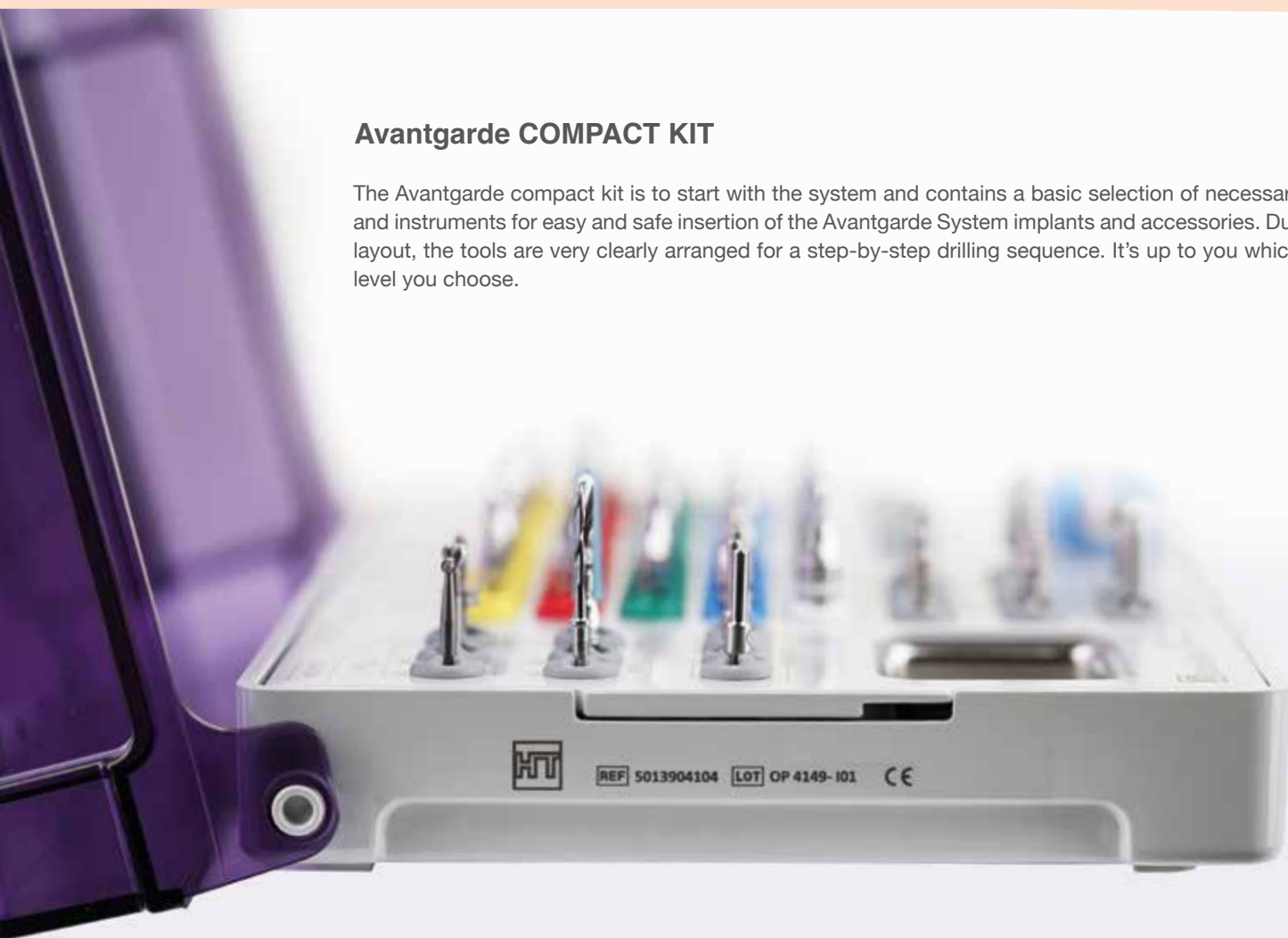
Surgical Kit



Prosthetic Kit

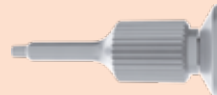
Avantgarde COMPACT KIT

The Avantgarde compact kit is to start with the system and contains a basic selection of necessary tools and instruments for easy and safe insertion of the Avantgarde System implants and accessories. Due to its layout, the tools are very clearly arranged for a step-by-step drilling sequence. It's up to you which entry level you choose.



Instruments

Name	Art. No.
ratchet torque	5012303002
adapter hex ratchet short	5012302003
adapter hex ratchet long	5012302004
adapter hex ratchet extra long	5012302017
adapter hex motor short	5012302001
adapter hex motor long	5012302002
screwdriver hex ratchet short	5012301003
screwdriver hex ratchet long	5012301005
drill Extender	5010308001
screwdriver hex hand short	5012301004
screwdriver hex hand long	5012301006
screwdriver hex motor short ISO	5012301001
screwdriver hex motor long ISO	5012301002
parallel post	5012332240



Drilling Protocol

Bohrprotokoll Avantgarde Compact Kit AV



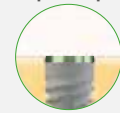
Vorbereitung

Instrument	U/min
Rose-Head Bur 35 (D4-D1)	800
Triangle Drill 21 (D4-D1)	800
Pilot Drill 15 (D4-D1)	1000



Implantatposition

Ø Implantat

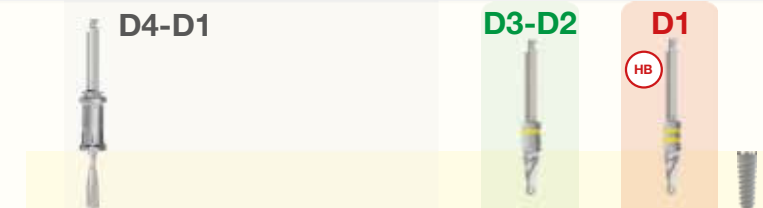


3.3-6.0

Die Positionierung der Avantgarde Implantate sollte auf **Knocheniveau** erfolgen

Aufbereitung Implantatbett

Instrument	U/min
Twist Drill 24 (D4-D1)	700
Final Drill Avantgarde 32 080 (D3-D2)	500
Final Drill Avantgarde 32 080 HB (D1)	500



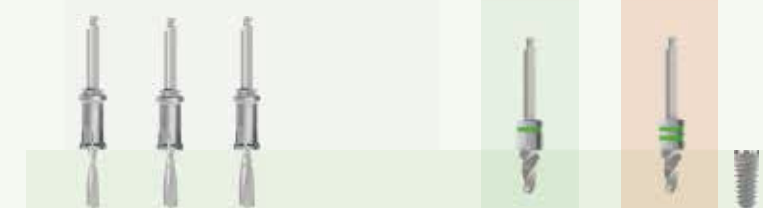
3.3

Instrument	U/min
Twist Drill 24 (D4-D1)	700
Twist Drill 28 (D4-D1)	650
Final Drill Avantgarde 38 080 (D3-D2)	450
Final Drill Avantgarde 38 080 HB (D1)	450



3.8

Instrument	U/min
Twist Drill 24 (D4-D1)	700
Twist Drill 28 (D4-D1)	650
Twist Drill 32 (D4-D1)	500
Final Drill Avantgarde 42 080 (D3-D2)	400
Final Drill Avantgarde 42 080 HB (D1)	400



4.2

Instrument	U/min
Twist Drill 24 (D4-D1)	700
Twist Drill 28 (D4-D1)	650
Twist Drill 32 (D4-D1)	500
Twist Drill 38 (D4-D1)	450
Final Drill Avantgarde 50 080 (D3-D2)	350
Final Drill Avantgarde 50 080 HB (D1)	350



5.0

Instrument	U/min
Twist Drill 24 (D4-D1)	700
Twist Drill 28 (D4-D1)	650
Twist Drill 32 (D4-D1)	500
Twist Drill 38 (D4-D1)	450
Twist Drill 50 (D4-D1)	350
Final Drill Avantgarde 60 080 (D3-D2)	300
Final Drill Avantgarde 60 080 HB (D1)	300



6.0

Twist Drill **mit** Bohrstopp
entsprechend geplanter Implantatlänge



Hinweis:

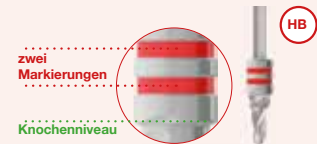
- Um einer Schädigung des Knochengewebes vorzubeugen, ist die abgebildete Bohrfolge und Drehzahl einzuhalten!
- Bei der Verwendung der RatioPlant® Dentalbohrer auf die Bohrtiefe (Markierung/Bohrstopp) achten um neuronalen Schäden vorzubeugen.
- Das „HB“ in Final Drill Avantgarde HB steht für Hard Bone Final Drill und ist daher nur in hartem Knochen D1 (nach Misch) zu verwenden.
- Tiefenmarkierungen an Pilotbohrer und Spiralbohrer entsprechen den Implantatlängen von 8, 10, 11.5, 13 und 16mm.
- Bedingt durch die Konstruktion und Funktion der Bohrer ist die Bohrerspitze bis zu 1.4mm länger als die Implantat-Insertionstiefe.
- Die sachgemäße Verbindung zwischen Schäften gemäß ISO 1797:2017 und dem Handstück ist vor Verwendung zu prüfen.



Final Drill Avantgarde **mit** Bohrstopp
Länge **8.0mm** für **alle** Implantatlängen



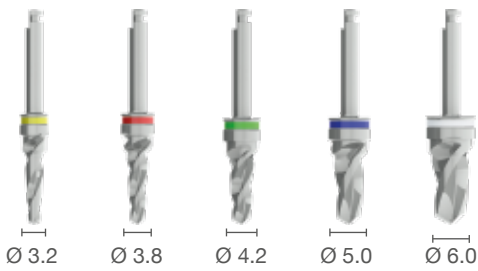
Final Drill Avantgarde HB **mit** Bohrstopp
Länge **8.0mm** für **alle** Implantatlängen



Rev. No.: 02 Rev. date: 2022_04_08

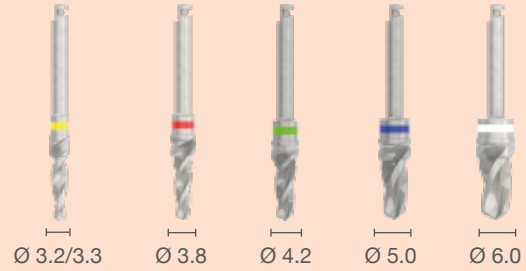
Final Drills

Avantgarde



Name	Art. No.
Final drill Avantgarde 32 080	5010307020
Final drill Avantgarde 32 100	5010307021
Final drill Avantgarde 32 115	5010307022
Final drill Avantgarde 32 130	5010307023
Final drill Avantgarde 32 160	5010307024
Final drill Avantgarde 38 080	5010307001
Final drill Avantgarde 38 100	5010307002
Final drill Avantgarde 38 115	5010307003
Final drill Avantgarde 38 130	5010307004
Final drill Avantgarde 38 160	5010307005
Final drill Avantgarde 42 080	5010307006
Final drill Avantgarde 42 100	5010307007
Final drill Avantgarde 42 115	5010307008
Final drill Avantgarde 42 130	5010307009
Final drill Avantgarde 42 160	5010307010
Final drill Avantgarde 50 060	5010307030
Final drill Avantgarde 50 080	5010307011
Final drill Avantgarde 50 100	5010307012
Final drill Avantgarde 50 115	5010307013
Final drill Avantgarde 50 130	5010307014
Final drill Avantgarde 50 160	5010307015
Final drill Avantgarde 60 060	5010307031
Final drill Avantgarde 60 080	5010307016
Final drill Avantgarde 60 100	5010307017
Final drill Avantgarde 60 115	5010307018
Final drill Avantgarde 60 130	5010307019

Vario



Name	Art. No.
Final Drill Vario 32/33 080	5010307090
Final Drill Vario 32/33 100	5010307091
Final Drill Vario 32/33 115	5010307092
Final Drill Vario 32/33 130	5010307093
Final Drill Vario 32/33 160	5010307094
Final Drill Vario 38 080	5010307095
Final Drill Vario 38 100	5010307096
Final Drill Vario 38 115	5010307097
Final Drill Vario 38 130	5010307098
Final Drill Vario 38 160	5010307099
Final Drill Vario 42 080	5010307100
Final Drill Vario 42 100	5010307101
Final Drill Vario 42 115	5010307102
Final Drill Vario 42 130	5010307103
Final Drill Vario 42 160	5010307104
Final Drill Vario 50 060	5010307105
Final Drill Vario 50 080	5010307106
Final Drill Vario 50 100	5010307107
Final Drill Vario 50 115	5010307108
Final Drill Vario 50 130	5010307109
Final Drill Vario 50 160	5010307110
Final Drill Vario 60 060	5010307111
Final Drill Vario 60 080	5010307112
Final Drill Vario 60 100	5010307113
Final Drill Vario 60 115	5010307114
Final Drill Vario 60 130	5010307115

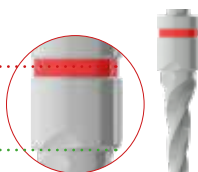
Final drill Avantgarde

- The drilling stop of the Final Drills Avantgarde is designed for equicrestal positioning of the Avantgarde implants.
- Due to the design and function of the drills, the drill tip is a maximum of 1.4 mm longer than the implant insertion depth.

D1-D4

Final Drill **with** stop

one
marking
bone level



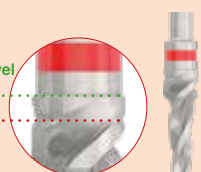
Final drill Vario

- The Vario Drills without drilling stop, allow exact positioning of the implant even in difficult bone conditions.
- The drilling depth can be created freely but must be controlled carefully to avoid neuronal damage.
- A depth indicator notch indicates the bone level position of the implant. Underbone level positioning will be possible if the full helix is inserted during drilling.

D1-D4

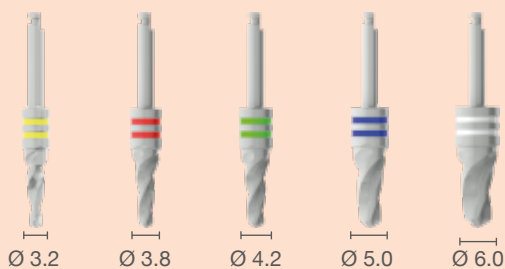
Final Drill Vario **without** stop

approx. 1mm
under bone level
bone level



Drills and Drill Bits

Avantgarde HB



Name	Art. No.
Final Drill Avantgarde 32 080 HB	5010307040
Final Drill Avantgarde 32 100 HB	5010307041
Final Drill Avantgarde 32 115 HB	5010307042
Final Drill Avantgarde 32 130 HB	5010307043
Final Drill Avantgarde 32 160 HB	5010307044
Final Drill Avantgarde 38 080 HB	5010307045
Final Drill Avantgarde 38 100 HB	5010307046
Final Drill Avantgarde 38 115 HB	5010307047
Final Drill Avantgarde 38 130 HB	5010307048
Final Drill Avantgarde 38 160 HB	5010307049
Final Drill Avantgarde 42 080 HB	5010307050
Final Drill Avantgarde 42 100 HB	5010307051
Final Drill Avantgarde 42 115 HB	5010307052
Final Drill Avantgarde 42 130 HB	5010307053
Final Drill Avantgarde 42 160 HB	5010307054
Final Drill Avantgarde 50 080 HB	5010307055
Final Drill Avantgarde 50 100 HB	5010307056
Final Drill Avantgarde 50 115 HB	5010307057
Final Drill Avantgarde 50 130 HB	5010307058
Final Drill Avantgarde 50 160 HB	5010307059
Final Drill Avantgarde 60 080 HB	5010307060
Final Drill Avantgarde 60 100 HB	5010307061
Final Drill Avantgarde 60 115 HB	5010307062
Final Drill Avantgarde 60 130 HB	5010307063

Final Drill Avantgarde Hard Bone

- The Final Drill Avantgarde HB is for use in very hard bone conditions (D1 by Misch).
- The drill stop of the final drills is intended for equicrestal positioning of the Avantgarde implants.
- Due to the design and function of the drills, the drill length (including tip) is longer than the implant insertion depth. Neuronal damage must be prevented by depth controle.

D1

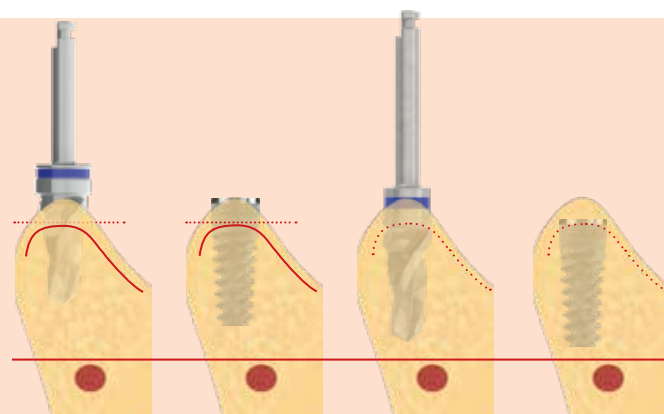
Final Drill HB with stop

two markings

bone level



Name	Art. No.
rose-head bur 23	5010323340
rose-head bur 35	5010335340
rose-head bur 40	5010340340
pilot drill 15	5010315340
triangle drill 21	5010315341
twist drill 24	5010324375
countersink 3.2	5010332265
countersink 3.8	5010338265
countersink 4.2	5010342265
countersink 5.0	5010350265
countersink 6.0	5010360265



Note

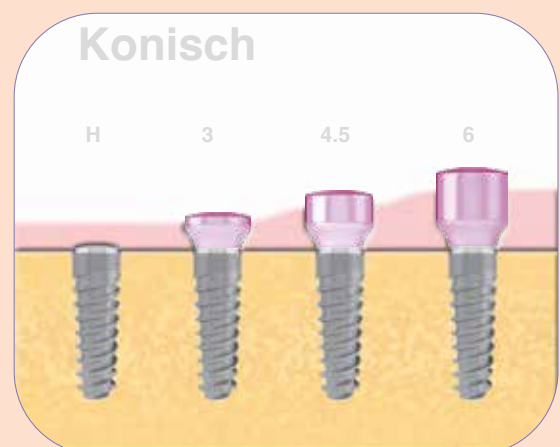
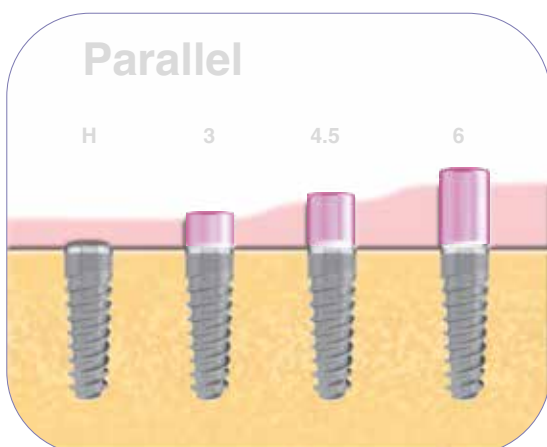
When selecting the drills and implants, the vertical reduction of the bone must be taken into account!

Maintenance, Safety and Liability

- With regard to the maintenance of the instruments and drills, please observe the reprocessing instructions.
- Cutting hard bone materials and tooth substance may cause the premature loss of the sharp cutting edges. All drill bits must therefore be inspected for blunt cutting edges or damage after every period of use and, if necessary, replaced.
- To avoid instrument damage, the prescribed rotational speed must be respected.
- Caution: There is a risk of injury due to the sharp blades of the drill! There is a risk of injury due to drilling, threading, tilting and slipping! The user is solely responsible for inspecting the product before its use with respect to its suitability and possible use for the intended purposes. It is the responsibility of the user to use the drill and drill bits correctly.
- Number of uses: Always inspect drill before usage. Do not use if damaged. Do not exceed 20 uses.

Healing Caps

Name	Art. No.
healing cap par 3.0 Mini a	5011106050
healing cap par 4.5 Mini a	5011106051
healing cap par 6.0 Mini a	5011106052
healing cap par 3.0 S a	5011106056
healing cap par 4.5 S a	5011106057
healing cap par 6.0 S a	5011106058
healing cap par 3.0 L a	5011106062
healing cap par 4.5 L a	5011106063
healing cap par 6.0 L a	5011106064
healing cap con 3.0 Mini a	5011106053
healing cap con 4.5 Mini a	5011106054
healing cap con 6.0 Mini a	5011106055
healing cap con 3.0 S a	5011106059
healing cap con 4.5 S a	5011106060
healing cap con 6.0 S a	5011106061
healing cap con 3.0 L a	5011106065
healing cap con 4.5 L a	5011106067
healing cap con 6.0 L a	5011106068
healing cap par 3.0 L short	5011106037
healing cap par 4.5 L short	5011106038
healing cap par 6.0 L short	5011106039
healing cap individual Peek S	5011206001
healing cap individual Peek L	5011206002

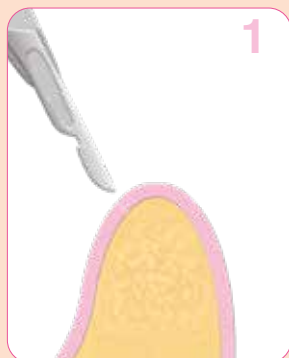


RatioPlant Avantgarde

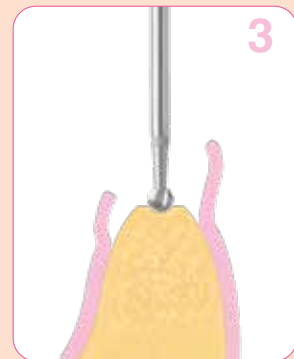
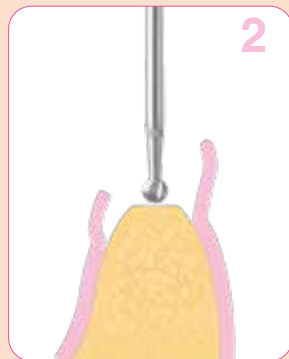
Surgical Phase

for example, Avantgarde 4.2/11.5

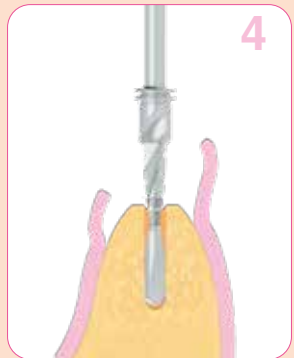
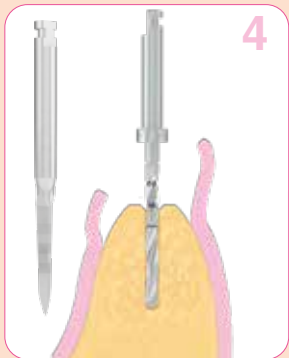
Exposure of the bone using scalpel or mucosal punch. Removal of the periosteum and preparation of the flap (1).



Marking with a round bur bit; fix the implant position, level the bone plateau by milling if necessary (2,3). If the bone crest is tapered, level the plateau using the rosehead bur according to the implant diameter. Note that the bone plateau defines the end position of the drilling stop (see page 12).



Pilot drilling with pilot drill, alternatively with triangle drill and enlarge pilot drilling with twistdrill 24 (4).



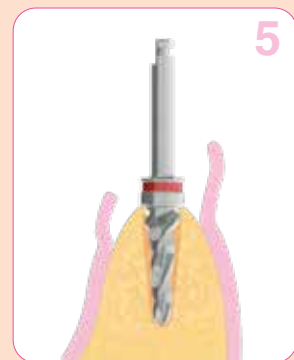
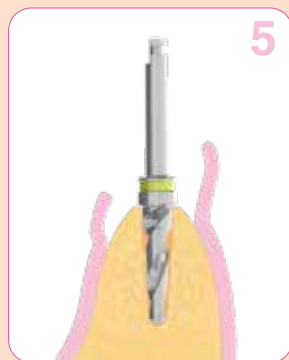
Extension drilling (5) with final drills. Start with final drill 3.2. The drill length must be selected according to the desired implant length. Increase the drill diameter of final drills step-by-step until desired implant diameter.

Colour markings on the final drill bits:

yellow	for $\varnothing$ 3.2
red	for $\varnothing$ 3.8
green	for $\varnothing$ 4.2
blue	for $\varnothing$ 5.0
white	for $\varnothing$ 6.0

Note:

If the drilling depth cannot be made sufficiently deep due to difficult bone conditions, use the final drills Vario without stop as an alternative to the final drills with stop (see page 10).



Countersink usage obligatory in bone quality D3-D1 to enlarge the coronal-cortical area. Herewith the insertion torque and the applied stress to the surrounding bone will be reduced. Countersink size must be selected according to the implant diameter. (6a)

Final Drill HB usage according to the implant diameter (use only in D1 bone quality) to enlarge the apical-cortical area to allow insertion of the implant without excessive stress. (6b)

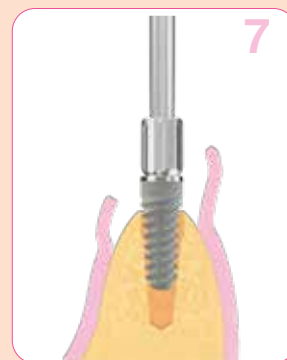
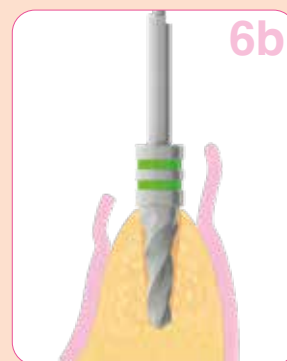
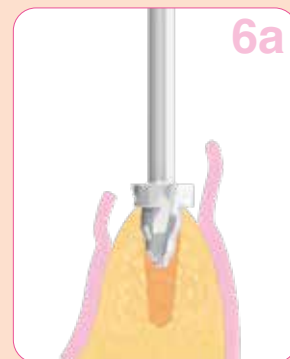
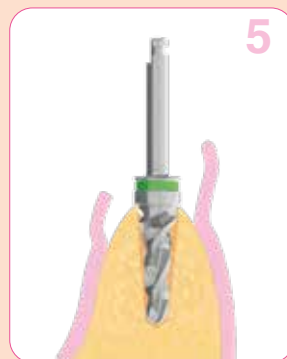
Place implant with inserter for motor, finally tighten with torque ratchet and inserter for ratchet with max. 40 Ncm (7). Preferably place in an equicrestal position.

Note:

Remove the implant with the adapter for the ratchet or motor directly from the sterile plastic tube after opening the two lids. A cover screw is located in the upper lid. After opening the intermediate cover, the implant can be removed.



QR code for the user manual



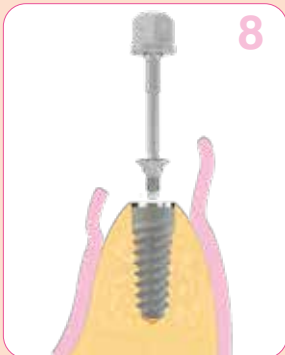
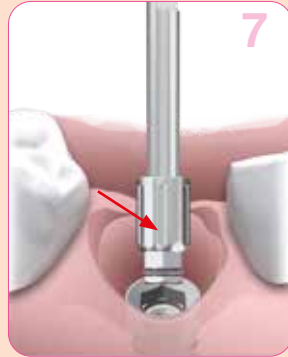
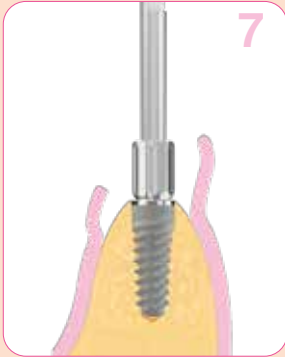
RatioPlant Avantgarde

Surgical Phase

for example, Avantgarde 4.2/11.5

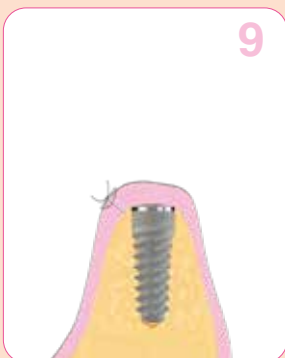
Ensure and note the final position:

The marking on the inserter should ideally be orientated towards the buccal! The mark indicates the direction of the inclination in the 15° and 25° abutments (7).



For closed healing, seal the implant with the cover screw. This is tightened by hand. Alternatively, a corresponding healing cap can be placed to allow open healing.

The augmentation material can be placed optionally (8).



Wound closure and subsequent X-ray check (9).

After healing (3 to 6 months re-opening):
Exposing using a scalpel or mucosal punch, remove the cover screw, insert the healing cap and tighten by hand (10-11). If necessary, attach mucosa to the healing caps by placing a suture (11).

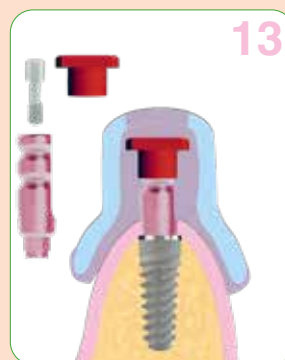
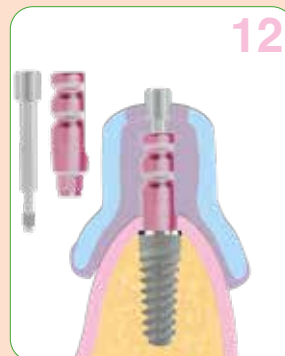
Healing phase



After shaping of the mucosa, impressions can be taken. Impression posts are available for two imprint procedures:

- Open impression method with individual impression tray – impression posts (Mini, Standard and Large) for open impression with the long screw (12).
- Closed impression method with standard or individual impression tray – impression posts for closed impression (Mini, Standard and Large) with the prosthetic screw and transfer cap (13).

Prosthetic treatment



Example of Impression

Sequence of steps for an Open Impression

Place the Impression Posts for open impression with the enclosed long screws on the implant, tighten by hand and check for tight fit (1).

Test the appropriate impression tray (2).

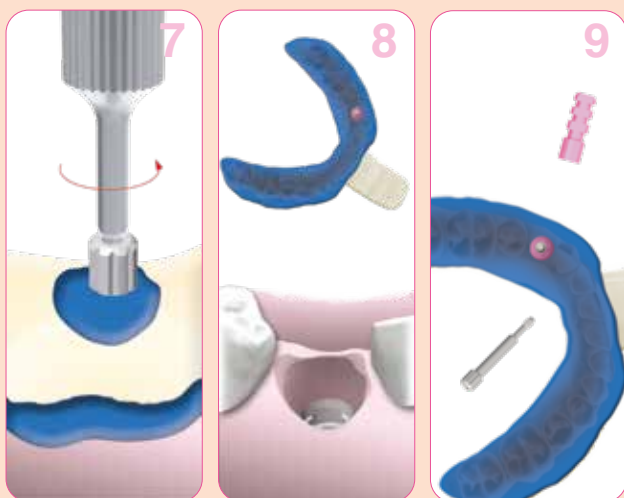
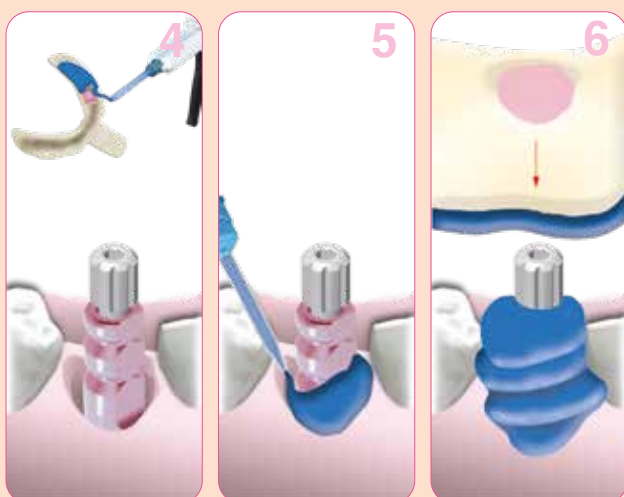
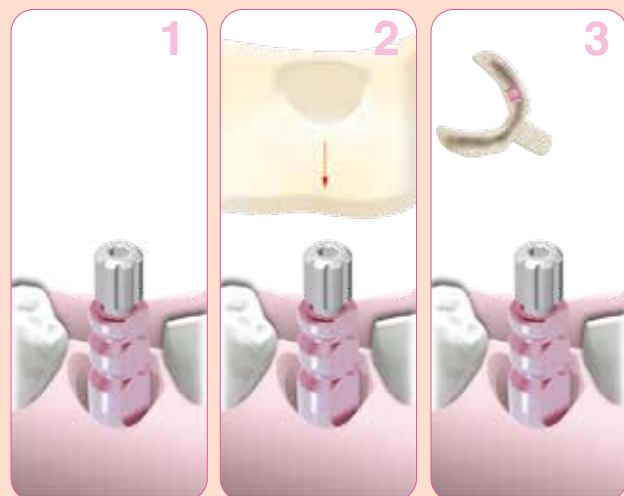
Apply wax sheet or suitable foil on the depression hole and place suitable impression material on the impression tray (3-4).

Apply impression material with fine syringe into the sulcus area, ensure it is free of air pockets and place the prepared impression tray into position without tension (5-6).

Release the impression screw after the prescribed hardening time (7).

Remove the impression and prepare with a suitable disinfection agent (8). Reattach the healing cap.

Hand-tighten the impression posts with the corresponding laboratory analogue with the long screw (9).



After making the prosthetics in the dental laboratory, remove the healing caps. Insert abutment (13-14) and tighten with new prosthetic screw with 25 Ncm using a torque ratchet (see page 31).

Note:

Always repeat tightening with the torque after five minutes.

Insert the dental prosthesis - in this case, a crown - (15).

Note:

If the restoration is cemented, a retraction thread must be applied before insertion to prevent cement residues from penetrating into the area of the implant! Otherwise there is a risk of peri-implantitis.

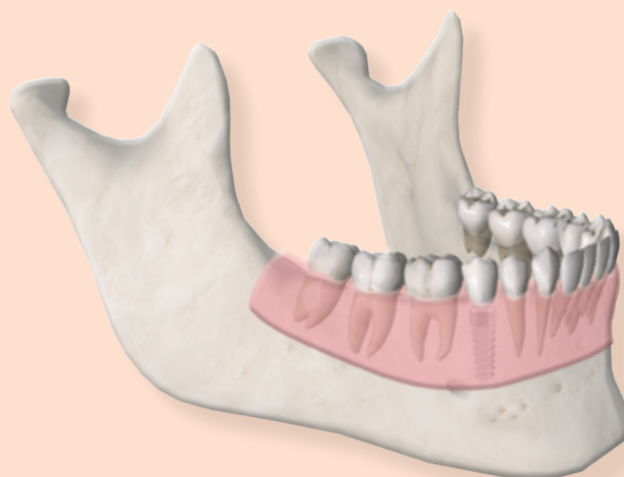
General note

The above-mentioned descriptions are not sufficient for the immediate application of the implant system. We recommend training from an experienced surgeon in how to use the Avantgarde implant system. As a rule, the implant system must only be used by trained dentists, implantologists and dental technicians. Methodological errors may result in the loss of the implants and damage to the peri-implant bone substance. The products are processed and applied beyond our control and are the sole responsibility of the user. We do not accept any liability for any damage caused in this way.

Please also note and observe our instructions on page 30 of this brochure regarding safety, liability and guarantees.



QR code for the user manual



Example of Dental Technology

Sequence of steps for a single crown with titanium abutment

Model with model analogue (1).

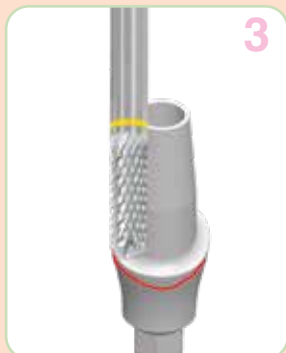
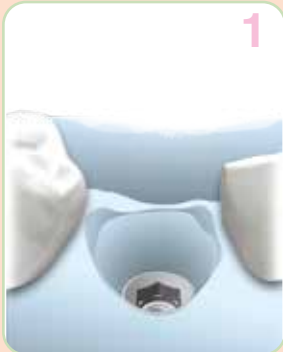
Select titanium abutment corresponding to implant diameter, angles and depth of mucous membrane and hand tighten with a laboratory screw (violet) (2).

Mark the gingival margin on the model on the abutment, release laboratory screw and remove the abutment. Then remove the excess with a suitable milling cutter. We recommend using a separate laboratory analogue for improved processing (3).

Affix to the model again with the laboratory screw (4).

Shorten from occlusal, to make more space for the crown (5).

Modelling of the wax or plastic crown (6).



Crown prepared for ceramic veneer after casting (7).

Finished ceramic crown (8).



Example of cementing

After removal of the temporary treatment and cleaning, place the abutment into the mouth with the prosthetic screw with the aid of the torque ratchet at a torque of max 25 Ncm (9).

Note:

Insert abutment (always tighten with new prosthetic screw with 25 Ncm using a torque ratchet. It is essential to repeat this after 5 minutes!)

Always introduce a retraction thread to avoid the excess cement getting into the subgingival space (10)!



Mix suitable material for cementing and fill the crown (11).

Position the crown and allow it to harden with contact to the antagonist. Remove excess cement and retraction thread after the hardening time and clean the entire area (12).



Overview of Prosthetic Components

Impression Posts



Avantgarde impression posts are available for all platforms, for impression procedures with open or closed tray, as well as for making digital impressions. The perfectly harmonised components guarantee precise transfer of the oral situation to the master model or into the digital work environment.

Cementable Abutments



Avantgarde cemented abutments are available in a range of materials, forms, angles and sizes for all platforms in order to fulfil individual patient requirements.

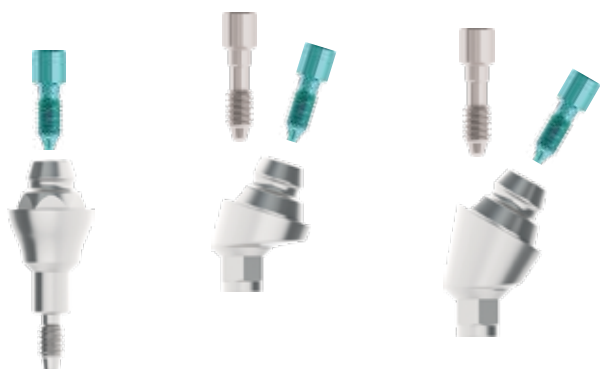
Aesthetic Abutments



CAD-CAM blanks allow occlusally-screwed crowns and/or individual abutments to be manufactured in the digital milling process with a precise connection structure. Adhesive abutments were developed specifically for the manufacture of individual hybrid abutments consisting of a prefabricated Ti adhesive base and an individually manufactured zirconium or pressed ceramic base using suitable 2K adhesive and are ideally suited for high-quality front tooth restoration.

MultiUnit Abutments

0° 17.5° 30°

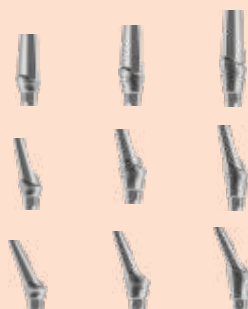


The Avantgarde MultiUnit abutments solve challenging situations in the case of patients without teeth and offer a range of angles, shoulder heights and prosthetic components for individual and optimal treatment. The elaborate design ensures efficient treatment, including with immediate loading of the construction under the right conditions, and features an excellent system overview and a high degree of user friendliness.

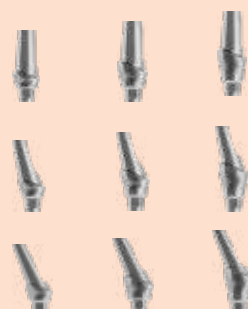
Prosthetic Avantgarde



0°
15°
25°



0°
15°
25°



Screw / Impression

Name	Art. No.
prosthetic screw normal	5011109001
impression screw long	5011109006
impression post open tray Mini a incl. impression screw long	5011105050
impression post closed tray Mini a incl. prosthetic screw	5011105053
transfer cap M	5011105008
impression post open tray S a incl. impression screw long	5011105051
impression post closed tray S a incl. prosthetic screw	5011105054
transfer cap S	5011105007
impression post open tray L a incl. impression screw long	5011105052
impression post closed tray L a incl. prosthetic screw	5011105055
transfer cap L	5011105009
lab analog Mini a	5011110005
lab analog S a	5011110006
lab analog L a	5011110007

Titanium Abutments Mini

M

abutment Ti 0 con Mini H1	5011110170
abutment Ti 0 con Mini H2	5011110270
abutment Ti 0 con Mini H3	5011110070
abutment Ti 15 con Mini H1	5011110180
abutment Ti 15 con Mini H2	5011110280
abutment Ti 15 con Mini H3	5011110080
abutment Ti 25 con Mini H1	5011110190
abutment Ti 25 con Mini H2	5011110290
abutment Ti 25 con Mini H3	5011110091

Titanium Abutments Standard

S

abutment Ti 0 con S H1	5011110120
abutment Ti 0 con S H2	5011110220
abutment Ti 0 con S H3	5011110020
abutment Ti 15 con S H1	5011110130
abutment Ti 15 con S H2	5011110230
abutment Ti 15 con S H3	5011110030
abutment Ti 25 con S H1	5011110140
abutment Ti 25 con S H2	5011110240
abutment Ti 25 con S H3	5011110040

Titanium Abutments Large

abutment Ti 0 con L H1	5011110121
abutment Ti 0 con L H2	5011110221
abutment Ti 0 con L H3	5011110021
abutment Ti 15 con L H1	5011110131
abutment Ti 15 con L H2	5011110231
abutment Ti 15 con L H3	5011110031
abutment Ti 25 con L H1	5011110141
abutment Ti 25 con L H2	5011110241
abutment Ti 25 con L H3	5011110041

Prosthetic Components CAD-CAM

Name	Art. No.
CAD-CAM Premill Mini	5011110440
CAD-CAM Premill Standard	5011110441
CAD-CAM Premill Large	5011110442

Information CAD-CAM:

When using the CAD CAM abutments, the necessary due diligence must be applied, as the limits given in the software can not take into account all eventualities, and otherwise the required creative freedom would be too limited.

Adhesive Abutments

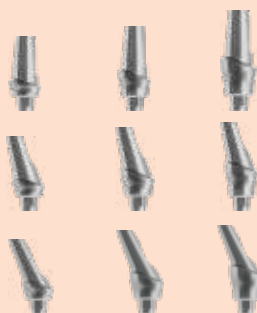
Adhesive Abutment Mini	5011110049
Adhesive Abutment Standard	5011110050
Adhesive Abutment Large	5011110060
Ti-Base Mini	5011110052
Ti-Base Standard	5011110053
Ti-Base Large	5011110054

Soft-Tissue Management

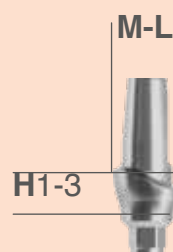
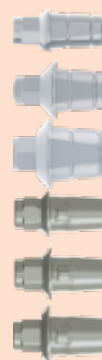
For the Avantgarde system, abutments are available for the 3 platforms – Mini (3.2 mm), Standard (3.8/4.2 mm) and Large (5.0/6.0 mm) and 3 different neck heights (H1 = 1.5 mm, H2 = 3.0 mm and H3 = 5.0 mm) to cover different soft tissue forms. The abutments correspond exactly to the emergence profile of the previously used healing screws and can be used on all Avantgarde implants. This range of options allows the optimal transition between the implant and dental prosthesis.

Important Information for all Abutments

The sealing surfaces at the points at which the abutments come into contact with the implant must not be grinded, polished or processed in any way. It is essential that care be taken to ensure an optimal fit. Machining the sealing surfaces leads to the loss of the guarantee.



0°
15°
25°



Mini Standard Large



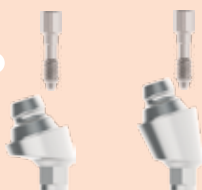
Prosthetic Avantgarde



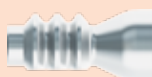
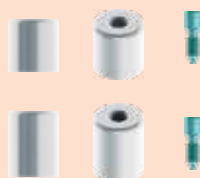
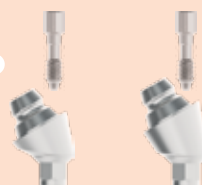
0°



17.5°



30°



MUA-MultiUnit Abutment

Name	Art. No.
MU abutment M 0° H1	5011110443
MU abutment M 0° H2	5011110444
MU abutment S 0° H1	5011110420
MU abutment S 0° H2	5011110421
MU abutment L 0° H1	5011110449
MU abutment L 0° H2	5011110450
MU abutment M 17.5° H1	5011110445
MU abutment M 17.5° H2	5011110446
MU abutment S 17.5° H1	5011110423
MU abutment S 17.5° H2	5011110424
MU abutment L 17.5° H1	5011110451
MU abutment L 17.5° H2	5011110452
MU abutment M 30° H1	5011110447
MU abutment M 30° H2	5011110448
MU abutment S 30° H1	5011110426
MU abutment S 30° H2	5011110427
MU abutment L 30° H1	5011110453
MU abutment L 30° H2	5011110454
MU abutment inserter	5012302022
MU healing cap H1 incl. MU prosthetic screw	5011106100
MU healing cap H2 incl. MU prosthetic screw	5011106101
MU impression post open tray	5011110013
MU impression post closed tray	5011110014
MU scan connector PEEK incl. MU prosthetic screw	5011610000
MU lab analog	5011110004
MU 0° inserter ratchet	5012302020
MU prosthetic cap TI incl. MU prosthetic screw	5011110012
MU prosthetic cap plastic incl. MU prosthetic screw	5011210020

Tightening torque

	Screw	Instrument	Tightening torque*
Avantgarde	 Cover screw	 Screwdriver hex hand long	Hand-screwed
	 Impression screw long		
	 MU prosthetic screw	 Screwdriver hex hand short	
	 Prosthetic screw normal		
	 Healing cap		
	 Healing cap individual PEEK		
	 MUA healing cap		
	 Impression post		
 MUA impression post			
 Scan connector			
 MUA scan connector PEEK			
 PEEK abutment provisional			
	 Quick-abutment	 Screwdriver hex short	25 Ncm
	 Abutment ZrO		
	 Abutment Ti	 Screwdriver hex long	
	 Gold abutment		
	 Ti abutment provisional	 Ratchet	
	 Ti adhesive abutment		
	 Abutment Ti CAD CAM		
	 MU abutment		
	 MU prosthetic cap Ti		

* The listed tightening torques contain only recommended values. Always retighten prosthetic screws after 5 minutes.



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