CERALOG®
SYSTEM

CERALOG®
PROSTHETIC SYSTEM

System information
Prosthetics

a perfect fit™

camlog

TABLE OF CONTENTS

GENERAL SYSTEM INFORMATION on the CERALOG® IMPLANT SYSTEM

The CERALOG® Implant System is based on years of clinical and laboratory experience and is a user-friendly, prosthetically oriented implant system.

All CERALOG® Products are manufactured with the latest state-of-the-art technology. These are continuously being further developed by the company's research and development team in collaboration with clinics, universities and dental technicians and therefore stay abreast of the latest technology.

IMPORTANT NOTE

The descriptions that follow are not adequate to permit immediate use of the CERALOG® Implant System. Instruction by a surgeon experienced in using the implant system is strongly recommended.
CERALOG® Dental implants and abutments should only be used by dentists, doctors, surgeons and dental technicians who have been trained in using the system. Appropriate courses and training sessions are regularly offered by CAMLOG.

Methodological errors in treatment can result in loss of the implant and significant loss of peri-implant bone.

CERALOG® IMPLANTS

GENERAL

CERALOG® Implants are enossal implants and are available in different lengths. They are placed surgically in the maxillary and/or mandibular bone and serve for the anchoring of functional and esthetic oral rehabilitations in partially or fully edentulous patients. The prosthetic restoration is performed with single crowns, bridges or full dentures that are attached to the CERALOG® Implants with the appropriate CERALOG® Components.
CERALOG® Implants are available as one-piece monobloc implant or as a two-piece screw-retained hexalobe implant with PEKK abutment.

CERALOG® Implants are distinguished by:

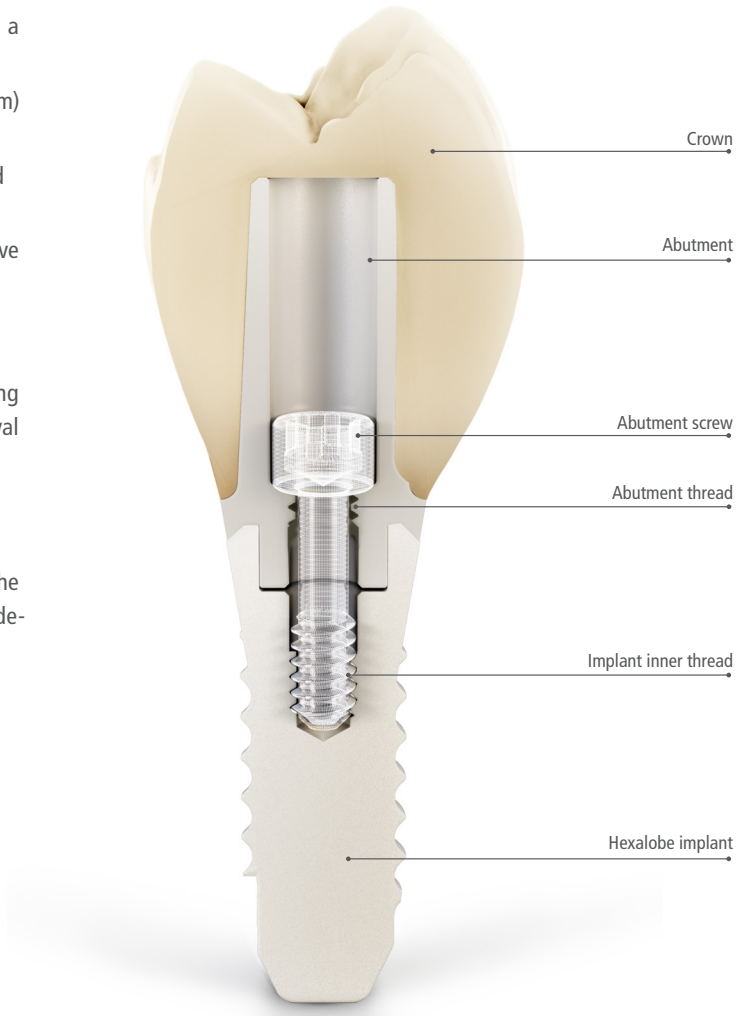
- the properties of zirconium dioxide*
- a dual surface texture which combines two defined roughnesses on a single implant:
  A) The enossal area of the implant with a roughness (Ra value of 1.6 µm) for the targeted deposition of bone cells
  B) The neck area of the implant, with an Ra value of 0.5 for improved soft tissue deposition
- Production of shape and roughness in a single operation. No abrasive treatment of the zirconium dioxide is therefore necessary
- Implant-abutment connection specifically optimized for ceramics

Choices available for therapy planning include the transgingival healing CERALOG® Monobloc implant as well as the both trans- and subgingival healing two-piece CERALOG® Hexalobe implant.

SCOPE OF APPLICATION

CERALOG® Implants, with their ivory color, which closely resembles the color of a natural tooth, are particularly appropriate for esthetically demanding areas.
The following clinical conditions facilitate the process:

- Normal to thick biotype
- Gingival thickness should be at least 3.0 mm
- Minimum width of the attached gingiva should be 1.0 mm
- Minimum distance between the attached gingiva and the mimic musculature should be 2.0 mm

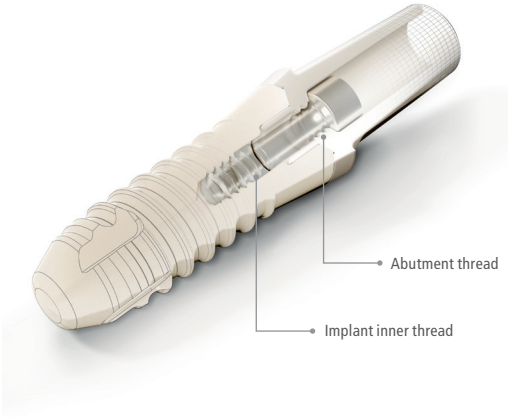


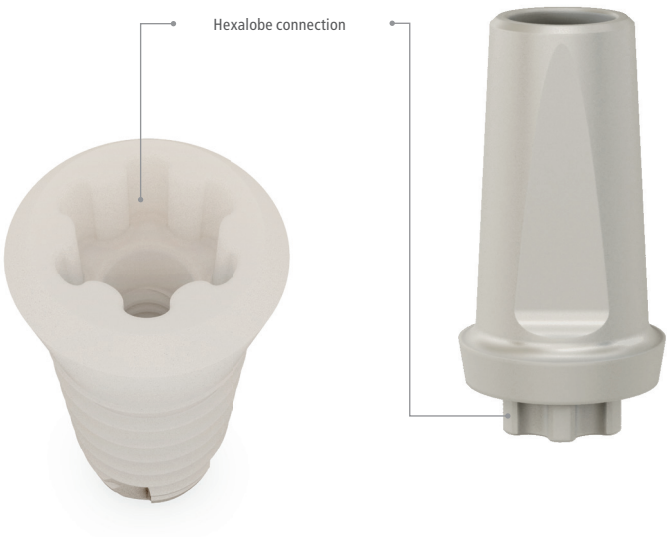
* See [A] in section «Further documentation» on page 28

CERALOG® IMPLANTS

MATERIAL

Components	Made of
CERALOG® Implants	Yttria-stabilized (Y-TZP) zirconium dioxide
CERALOG® Abutments	PEKK
CERALOG® Abutment screws	Titanium alloy or gold alloy with gold coating (Holisticor)
CERALOG® Cover caps, CERALOG® Healing caps, CERALOG® Scanbodies, CERALOG® Temporary abutments CERALOG® Monobloc impression caps, closed tray	PEEK
CERALOG® Hexalobe impression posts, closed tray CERALOG® Hexalobe impression posts, open tray CERALOG® Cover screws	PEEK and titanium alloy
CERALOG® Hexalobe lab analogs	PEEK or zirconium dioxide
CERALOG® Monobloc lab analogs	Stainless steel





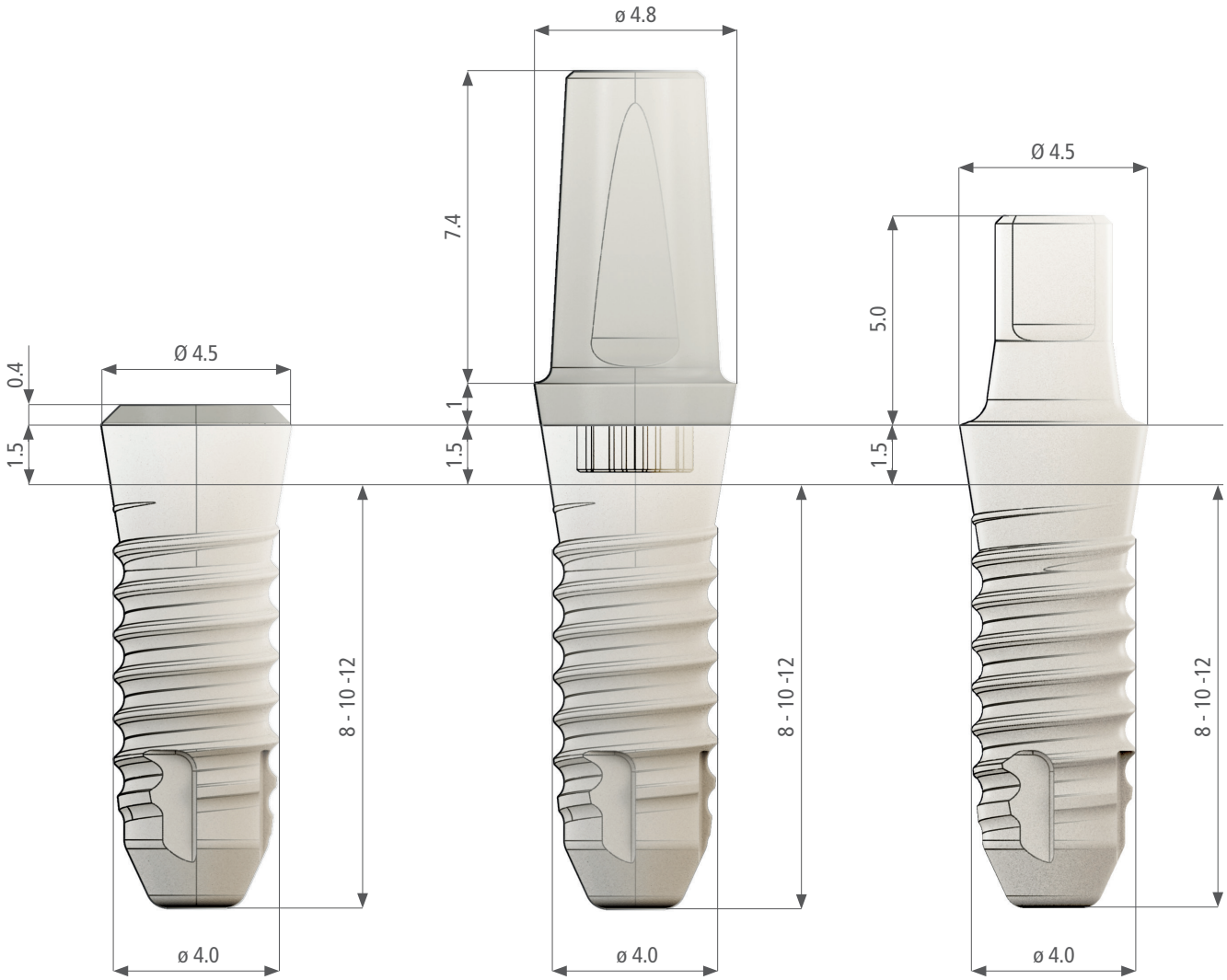
FABRICATION

The CERALOG® Implants are manufactured by Ceramic Injection Molding (CIM). Here, both the outer geometry as well as the surface texture are already created in an injection mold before the sintering and HIP process (HIP = Hot Isostatic Pressing). Due to this procedure, no abrasive processing of the zirconium dioxide is necessary to obtain a structured surface.

INNER IMPLANT CONFIGURATION OF THE CERALOG® HEXALOBE IMPLANT

The hexalobe connection has been designed specifically for ceramic implants which offers the following advantages:

- High positioning precision due to minimal rotational freedom
- No complicated transfer key for abutments required
- Material-compatible force transfer when inserting the hexalobe implant



CERALOG® HEXALOBE IMPLANT

CERALOG® HEXALOBE IMPLANT
with mounted PEKK abutment

CERALOG® MONOBLOC IMPLANT

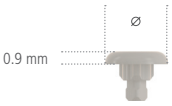
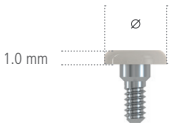
THE CERALOG® HEXALOBE IMPLANT

PROSTHETIC PROCEDURE FOR HEXALOBE IMPLANTS

HEALING OF THE IMPLANT

As a rule, the osseointegration of CERALOG® Implants takes between 3 and 6 months. The healing time depends both on the general health status of the patient as well as the quality of the bone surrounding the implant. The usual methods can be applied to check osseointegration.

The CERALOG® Hexalobe System offers various healing options:
A) Submerged healing with the cover cap or the cover screw respectively.
B) Transgingival healing with the healing cap.

	Article	Art. No.	∅
	**Cover cap** sterile **Material** PEEK	H2020.4505	4.5 mm
	**Cover screw** sterile **Material** PEEK/titanium alloy	H2019.4508	4.5 mm

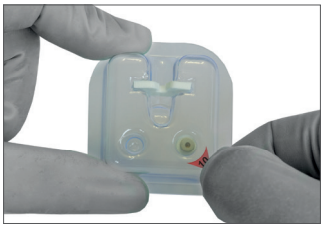
A. SUBMERGED HEALING

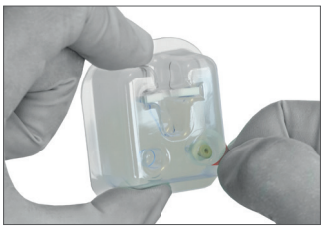
with cover cap

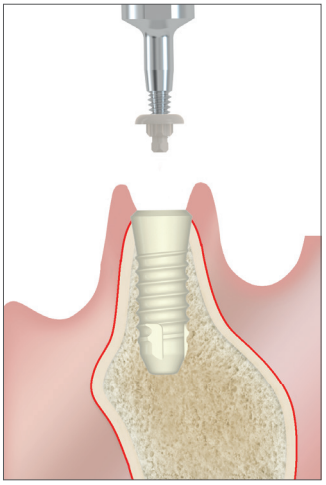
The CERALOG® Cover cap is located in the blister of the implant underneath a separate transparent foil. For insertion, the CERALOG® Extractor for cover caps is inserted into the opening of the cover cap. The cover cap is then carefully inserted into the implant until the flat part of the cap makes contact with the implant shoulder. Here, one should make sure that no soft tissue trapped is between the implant and cover cap. The extractor is unscrewed anti-clockwise from the cap and the soft tissue sutured tightly with atraumatic suture material.

with cover screw

The CERALOG® Screwdriver is inserted into the separately available cover screw.
Then the cover screw is carefully screwed manually into the implant (maximum torque: 15 Ncm). Pull the screwdriver from the cover screw, and suture the soft tissue tightly with atraumatic suture material.

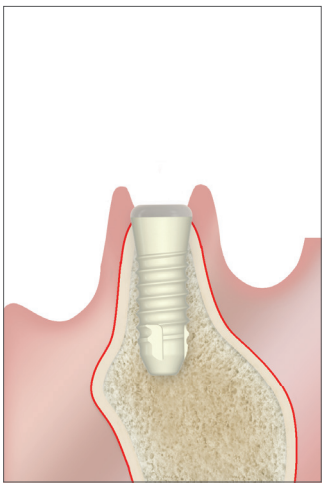




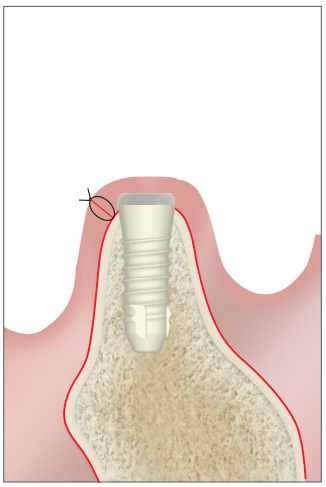


Applying the cover cap with the extractor

IMPORTANT NOTE
The cover cap and cover screw must not remain in the oral cavity for longer than 180 days.



CERALOG® Implant with mounted CERALOG® Cover cap



Wound closure

B. TRANSGINGIVAL HEALING

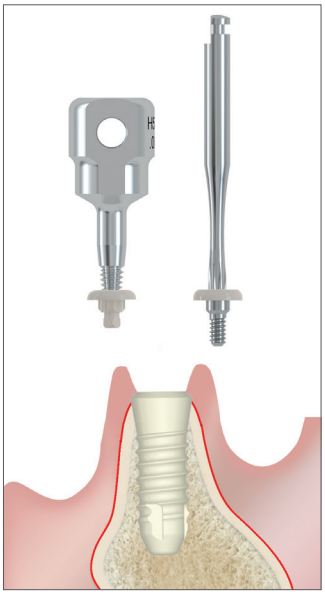
After exposure of the implant, either the CERALOG® Cover cap is removed with the CERALOG® Extractor or the CERALOG® Cover screw is unscrewed with the CERALOG® Screwdriver.

The subsequent use of the CERALOG® gingiva formers supports the development of peri-implant soft tissue. Gingiva formers for gingiva heights of 3.0 mm and 4.4 mm are available. The gingiva height is selected such that the healing cap lies supragingival by 1-1.5 mm.

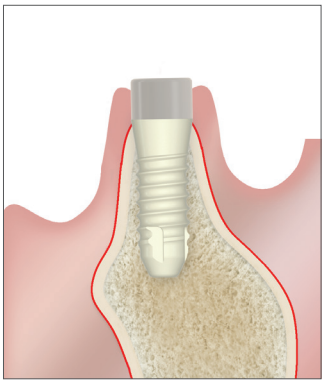
The healing cap is inserted into the implant and fixed to the implant either with the supplied titanium abutment screw or with a gold abutment screw, which must be ordered separately.

The screws are carefully screwed manually into the implant (maximum torque: 15 Ncm).

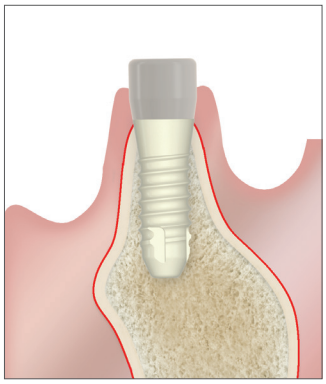
The impression is taken after stabilization of the peri-implant soft tissue.



Removal of the cover cap respectively the cover screw

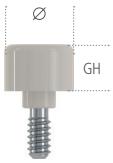


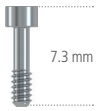
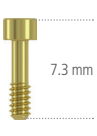
CERALOG® Healing cap, cylindrical, Height 3.0 mm



CERALOG® Healing cap, cylindrical, Height 4.4 mm

IMPORTANT NOTE
The healing cap must not remain in the oral cavity for longer than 180 days.

	Article	Art. No.	Ø	GH
	**Healing caps** incl. titanium abutment screw, sterile **Material** PEEK/titanium alloy	H2020.4525	4.5 mm	3.0 mm
		H2020.4540	5.0 mm	4.4 mm

	Article	Art. No.	Thread
	**Titanium prosthetic screw** for the definitive screwing of abutments into the implant **Material** Titanium alloy	H4001.1600	M1.6
	**Gold prosthetic screw** for the definitive screwing of abutments into the implant **Material** Holisticor	H4011.1600	M1.6

PROSTHETIC PROCEDURE FOR HEXALOBE IMPLANTS

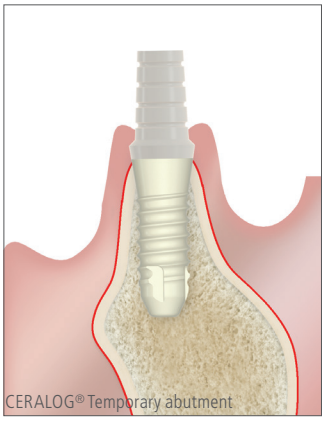
TEMPORARY RESTORATION

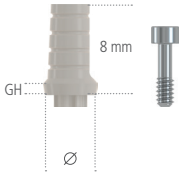
A temporary restoration on hexalobe implants can be performed with temporary abutments made of PEEK (poly ether ether ketone).
An immediate restoration should be planned as a non-functional restoration.

After exposure of the implant, the cover cap is removed with the extractor for the cover cap or the cover screw or gingiva former are unscrewed with the screwdriver.

The temporary abutment is inserted into the implant and fixed to the implant either with the supplied titanium abutment screw or with a gold abutment screw, which must be ordered separately. The screws are carefully screwed manually into the implant (maximum torque: 15 Ncm).

IMPORTANT NOTE
The temporary abutment must not remain in the oral cavity for longer than 180 days.
New unused abutment screws must be used for final fixation of the abutments.


CERALOG® Temporary abutment

	Article	Art. No.	Ø	GH
	**Temporary abutment** incl. titanium abutment screw **Material** PEEK/titanium alloy	H2221.4500	4.8 mm	1.0 mm

After the healing phase, the screws can be tightened with a maximum torque of 25 Ncm for titanium alloy and 15 Ncm for gold alloy. All screws must be retightened with the corresponding torque after at least 5 minutes.

IMPORTANT NOTE
New unused abutment screws must be used for final fixation of the abutments.

IMPRESSION TAKING

Impression taking for the definitive restoration can be performed after successful osseointegration of the implant and healing of the peri-implant soft tissue as follows:

EXPOSURE OF THE IMPLANT SHOULDER

After exposure of the implant, the cover cap is removed with the extractor for the cover cap or the cover screw is unscrewed with the screwdriver.

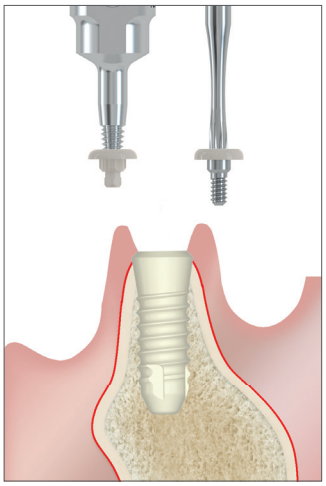
If a healing cap was selected for the healing phase, this can be removed with the aid of the screwdriver.

INSERTION OF THE IMPRESSION POSTS

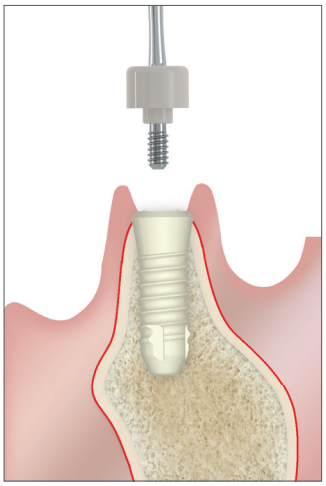
- **closed tray:**
  The fixing screw of the impression post must be carefully hand-tightened with the screwdriver. For tight and thick gingiva in particular, the correct seating of the impression post should be checked prior to taking the impression.
  The impression post, closed tray, is supplied non-sterile.

  The impression cap is now installed, using the guide grooves on the impression post, until a detectable pressure point is reached and the impression cap is definitely fastened. Three guide grooves on the impression post (placed at 120° staggered intervals) facilitate contact-free placement relative to adjacent impression caps or adjacent teeth. The extensions of the impression caps must not be removed.

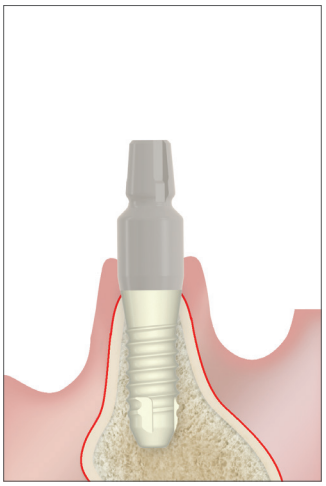
- **open tray:**
  After exposure of the implant shoulder, the impression post open tray is inserted into the implant. To this purpose the impression post is first placed on the implant and carefully rotated until it engages in the implant. Then the fixing screw is carefully hand-tightened.
  The impression post, open tray, is supplied sterile.



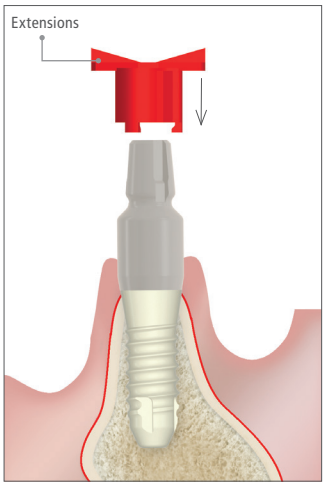
Removing the cover cap respectively the cover screw



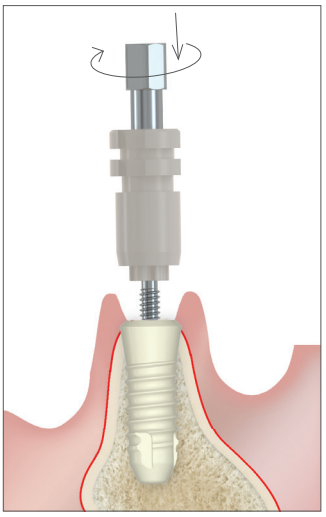
Removing the healing cap



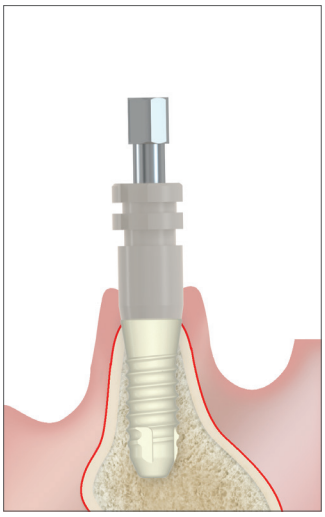
CERALOG® Impression posts, closed tray



Fixation of the impression cap



CERALOG® Impression post, open tray



Insertion of the CERALOG® Impression post, open tray

PROSTHETIC PROCEDURE FOR HEXALOBE IMPLANTS

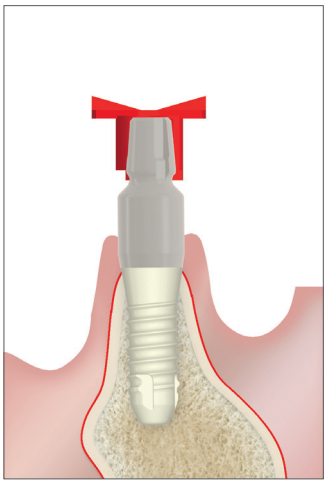
IMPRESSION TAKING

Light Body impression material is applied around the impression post for impression taking. In addition, Heavy Body impression material is placed in the impression tray.

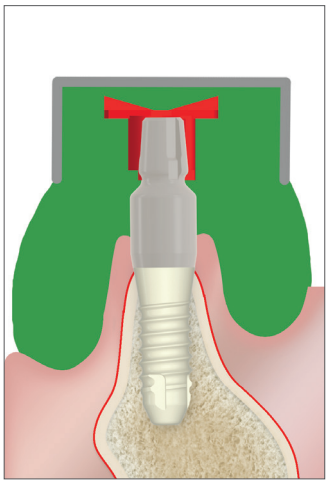
- **with the impression post, closed tray:**
  Right before taking the impression, check again to ensure that the impression caps are seated correctly.
  The impression caps should remain in the impression after the impression tray is lifted. If this is not the case, repeat the impression-taking.

- **with the impression post, open tray:**
  Before taking the impression, check the tray for a precision fit. The fixing screws protruding from the perforations must not touch the tray. To remove the impression, loosen the fixing screw, pull it back completely and then lift off the impression tray.

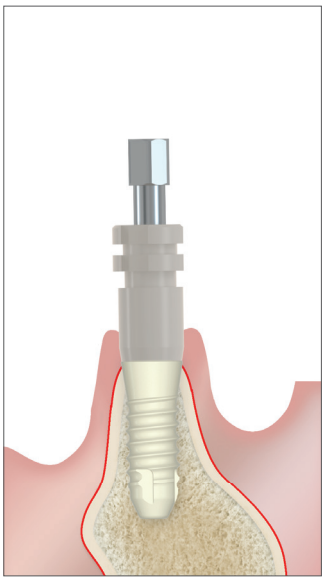
- **Digital recording of the implant/lab analog position:**
  The CERALOG® Scanbody is used for optical 3-dimensional localization of the CERALOG® Implants in the mouth and of CERALOG® Lab analogs in the working model.
  The CERALOG® Scanbody is supplied sterile with a titanium abutment screw. The CERALOG® Scanbody is screwed hand-tight into the implant or laboratory analog with the screwdriver.



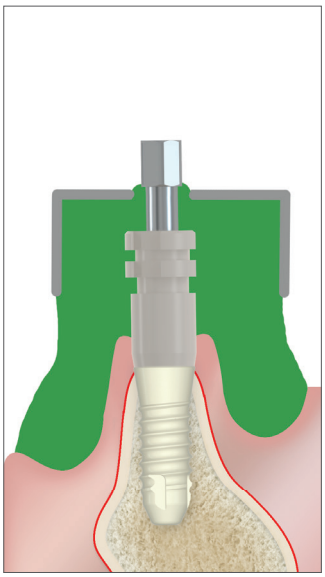
Check of correct seating of the impression cap



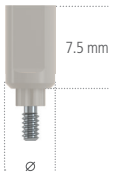
Impression tray with the CERALOG® Impression post, closed tray

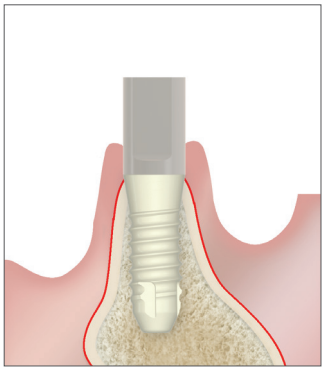


Check of correct seating of the impression post



Impression tray with the CERALOG® Impression post, open tray

	Article	Art. No.	Ø
	**CERALOG® Scanbody** incl. titanium abutment screw **Material** PEEK/titanium alloy	H2610.4580	4.5 mm



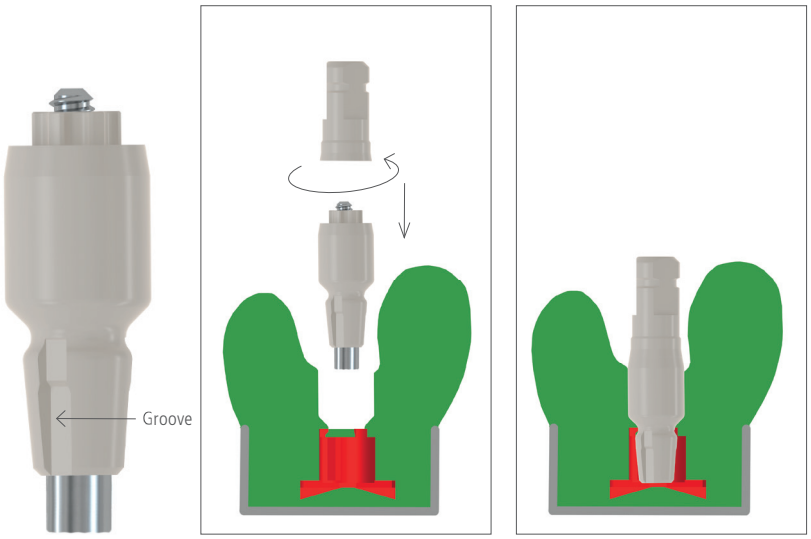
Mounted CERALOG® Scanbody

CAST FABRICATION

CLOSED TRAY

After the impression is taken, the impression cap remains in the impression. In the dental laboratory, the impression posts, closed tray, are attached to the corresponding lab analogs (note proper seating).

A screwdriver is used to hand-tighten the fixing screw. The components are repositioned into the impression caps. Make sure that the grooves correctly engage in the impression cap. Do not use bonding material!

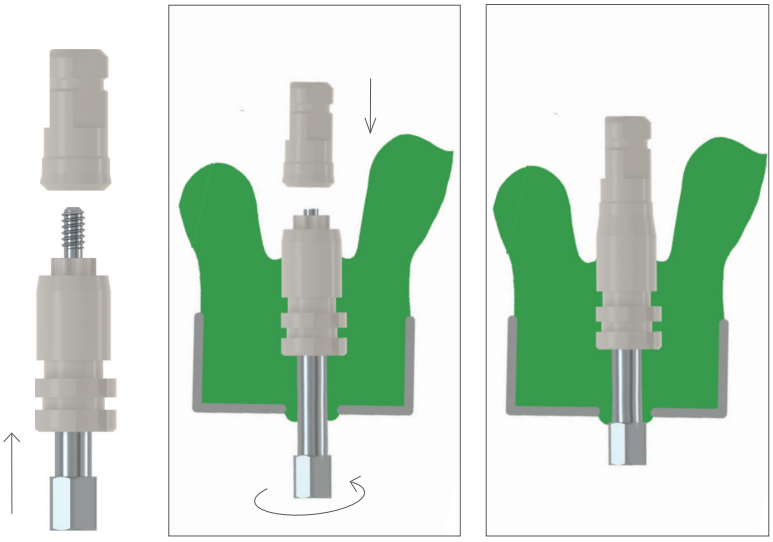


OPEN TRAY

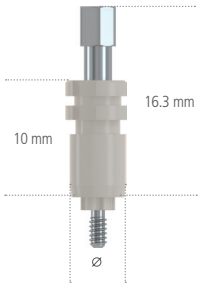
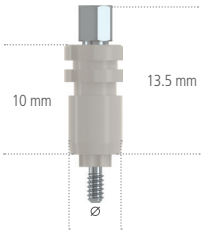
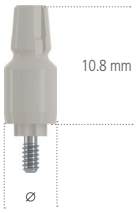
After the impression is taken, the impression posts, open tray, are located in the impression.

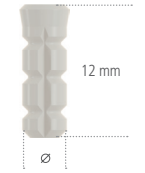
In the dental laboratory, the impression posts, open tray, are attached to the corresponding lab analogs (note proper seating).

For the open tray impression posts, the fixing screw is hand-tightened with a screwdriver.



PROSTHETIC PROCEDURE FOR HEXALOBE IMPLANTS

	Article	Art. No.	∅
	**Hexalobe impression posts open tray, long** incl. fixing screw, sterile **Material** PEEK/titanium alloy	H2121.4550	4.8 mm
	**Hexalobe impression posts open tray, short** incl. fixing screw, sterile **Material** PEEK/titanium alloy	H2122.4550	4.8 mm
	**Hexalobe impression posts closed tray** incl. fixing screw **Material** PEEK/titanium alloy	H2120.4550	4.8 mm
	**Impression cap** for impression post and impression cap, closed tray, (5 pieces) **Material** POM	J2111.4300	-
	**Bite registration cap** (5 pieces) **Material** POM	J2112.4300	-

	Article	Art. No.	∅
	**Hexalobe lab analog** for printed and cast models **Material** Zirconium dioxide	H3020.4500**	4.5 mm
	**Handle for hexalobe lab analog** for printed models **Material** Stainless steel/PEEK	H3025.0010**	3.4 mm
	**Hexalobe lab analog** for cast models **Material** PEEK	D1042*	4.5 mm

* Manufacturer: AXIS biodental SA, Les Rosées 5, 2336 Les Boïs, Switzerland
** will be available as from July 2019

PROSTHETIC PROCEDURE FOR HEXALOBE IMPLANTS

PROSTHETIC RESTORATION

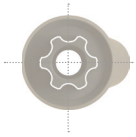
The CERALOG® System offers three different abutments made of PEKK (poly ether ketone ketone):

- PEKK abutment, straight
- PEKK abutment, 15° angled, type A.
- PEKK abutment, 15° angled, type B.

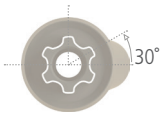
The difference between the abutments type A and B lies in the 30° offset indexing:

Type A
Cam alignment in the direction of the angle

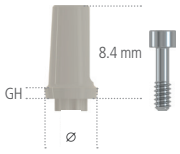
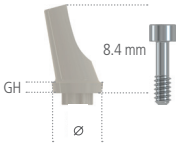
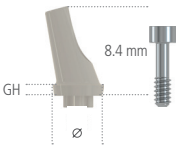
Type B
Cam alignment 30° offset



Type A



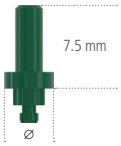
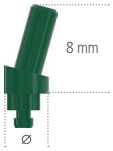
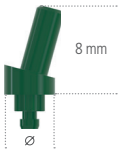
Type B

	Article	Art. No.	Ø	GH
	**PEKK abutment, straight** incl. titanium abutment screw **Material** PEKK/titanium alloy	H2231.4580	4.8 mm	1.0 mm
	**PEKK abutment, 15° angled, type A** incl. titanium abutment screw **Material** PEKK/titanium alloy	H2233.4580	4.8 mm	1.0 mm
	**PEKK abutment, 15° angled, type B** incl. titanium abutment screw **Material** PEKK/titanium alloy	H2234.4580	4.8 mm	1.0 mm

PLANNING OF THE PROSTHETIC RESTORATION

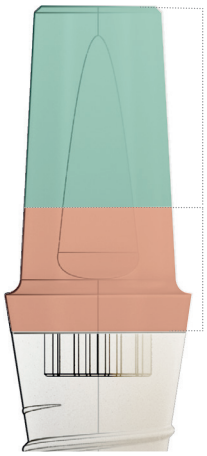
For planning the prosthetic restoration, users of the CERALOG® System can choose between straight and 15° angled abutments (type A and type B). The selection abutments can be inserted directly into the lab analog and are reusable.

IMPORTANT NOTE
The selection abutments must not be used on the patient.

	Article	Art. No.	⌀
	**Selected abutment, straight** **Material** PPSU	H3511.4580	4.5 mm
	**Selection abutment, 15° angled, type A** **Material** PPSU	H3513.4580	4.5 mm
	**Selection abutment, 15° angled type B** **Material** PPSU	H3514.4580	4.5 mm

MODIFICATION OF THE PEKK ABUTMENT

The abutment can be shortened occlusally depending on the anatomical situation. A minimum height of 3 mm (area marked in red) must be adhered to. The abutment is made of a high performance polymer (PEKK) and is easy to adapt using a tungsten carbide bur.



PROSTHETIC PROCEDURE FOR HEXALOBE IMPLANTS

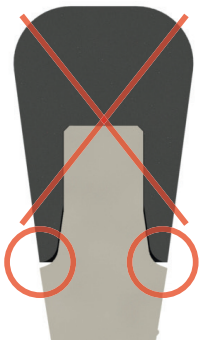
FABRICATION AND BONDING OF THE CROWN

After fabricating the cast, the CERALOG® Abutment is placed in a corresponding lab analog and fixed hand-tight with a lab screw using the lab screwdriver. The abutment must be seated in the lab analog correctly.
Laboratory analog and abutment are used for the fabrication of crowns in conventional procedures.
The abutment can be used for a screw-retained crown or a crown cemented in the patient's mouth.

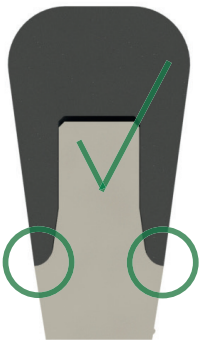
IMPORTANT NOTE
Prior to being used on the patient, the components are cleaned with alcohol (ammonium, chloride or other aldehyde-containing cleaning agents may not be used)!

The components are bonded using a suitable cement. The cement is mixed according to manufacturer's instructions and applied to the abutment.
The crown must lie on the abutment shoulder to ensure optimal mechanical stability. The cement gap should be as small as possible.

NOTE
For connecting the abutment with a crown, we recommend using a resin-containing adhesive monomer MDP (for example, "PANAVIA™ v5" from Kuraray Europe GmbH or "RelyX TM Unicem 2 Automix" from 3M ESPE). Observe the manufacturer's processing instructions.



The crown does not fit correctly on the abutment as the crown does not rest fully on the abutment.



Correct fit of the crown on the abutment.

INSERTION OF THE ABUTMENT

The following worksteps are recommended:

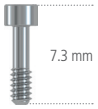
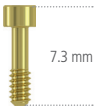
- Thoroughly clean and dry the inner configuration of the implant prior to final integration of the abutment

In case of a cemented solution:

- Insert the abutment in the implant.
- The abutment is fixated with a new unused CERALOG® Titanium or gold abutment screw
- Disinfect crown and fixate on the abutment

In case of a screw-retained solution:

- Clean the abutment/crown bonding connection and insert into the implant
- The abutment is fixated with an unused CERALOG® Titanium or gold abutment screw
- The screw head can be protected with gutta-percha or a similar material before cementing the crown or closing the screw channel.

	Article	Art. No.	Thread
	**Titanium prosthetic screw** for the definitive screwing of abutments into the implant **Material** Titanium alloy	H4001.1600	M1.6
	**Gold prosthetic screw** for the definitive screwing of abutments into the implant **Material** Holisticor	H4011.1600	M1.6

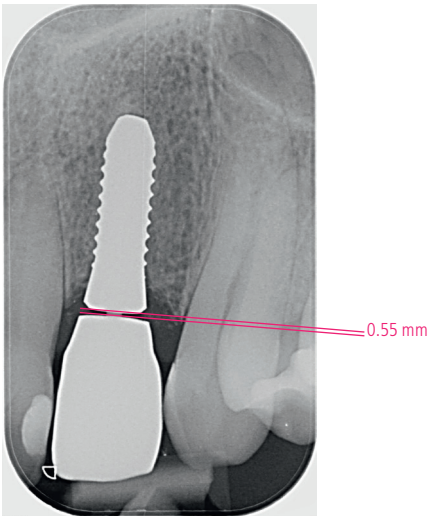
NOTE

The abutment screw is tightened with the screwdriver at the following maximum tightening torques:

- 25 Ncm for the titanium abutment screw.
- 15 Ncm for the gold abutment screw.
- All screws must be retightened with the corresponding torque after at least 5 minutes.

XRAY IMAGE WITH THE PEKK ABUTMENT

The PEKK abutment is not radiopaque and therefore the distance between the implant and tooth crown can be easily determined in the X-ray image: the abutment is correctly positioned in the implant when the gap between the implant shoulder surface and the lower edge of the crown measures 0.55 mm in the x-ray image.



(With kind permission of Dr. F. Hermann, Zug, Switzerland)

THE CERALOG® MONOBLOC IMPLANT

PROSTHETIC PROCEDURE FOR MONOBLOC IMPLANTS

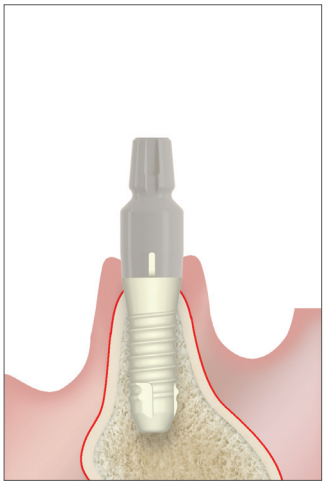
IMPRESSION TAKING

The closed tray method is used for impression-taking.

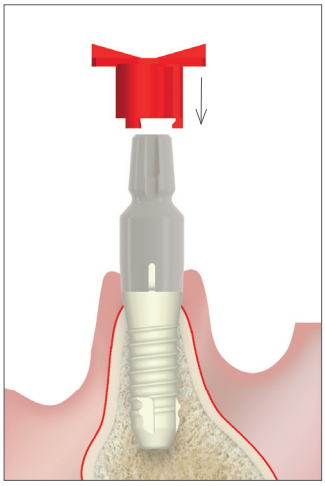
- **Insertion of the impression cap, closed tray**
  After exposure of the implant shoulder, the impression cap, closed tray, can be fixated to the abutment part of the implant via a plug mechanism. For tight and thick gingiva in particular, the correct seating of the impression cap should be checked prior to taking the impression.

  The impression cap is now installed, using the guide grooves on the impression post, until a detectable pressure point is reached and the impression cap is definitely fastened. Three guide grooves on the impression cap (placed at 120° staggered intervals) facilitate contact-free placement relative to adjacent impression caps or adjacent teeth. The extensions of the impression caps must not be removed.

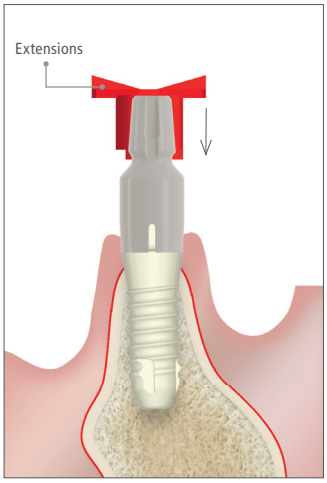
- **Impression taking**
  Light Body impression material is applied around the impression cap for impression taking. In addition, Heavy Body impression material is placed in the impression tray. Right before taking the impression, check again to ensure that the impression caps are seated correctly. The impression caps should remain in the impression after the impression tray is lifted. If this is not the case, repeat the impression-taking.



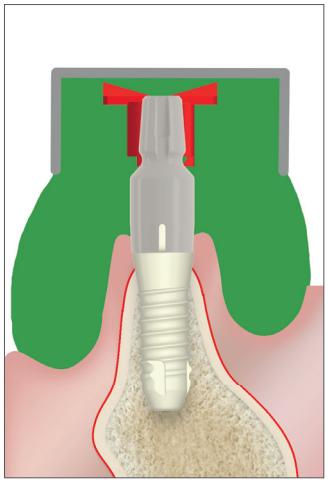
CERALOG® Impression cap, closed tray



Fixation of the impression cap



Check of correct seating of the impression cap

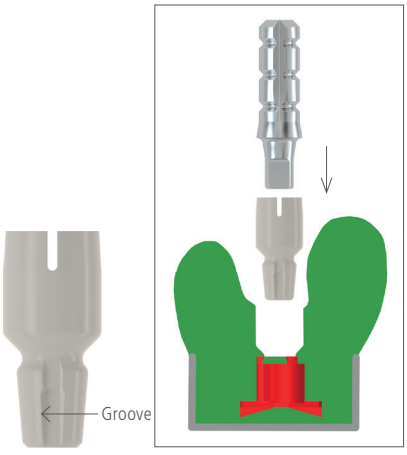


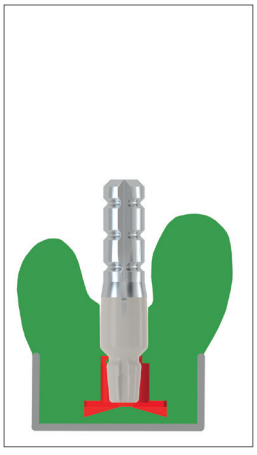
Impression tray with the CERALOG® Impression cap, closed tray

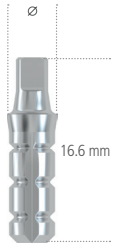
CAST FABRICATION

After the impression is taken, the impression cap remains in the impression. In the dental laboratory, the impression caps, closed tray, are attached to the corresponding lab analog (note proper seating).
The components are repositioned into the impression caps. Make sure that the grooves correctly engage in the impression cap.

Do not use bonding material!





	Article	Art. No.	∅
	**Monobloc lab analog** for cast models **Material** Stainless steel	H3010.4500*	4.5 mm
	**Monobloc transfer cap, closed tray** **Material** PEEK	H2110.4550	5.0 mm
	**Impression cap** for impression post and impression cap, closed tray, (5 pieces) **Material** POM	J2111.4300	-

* Manufacturer: AXIS biodental SA, Les Rosées 5, 2336 Les Boïs, Switzerland

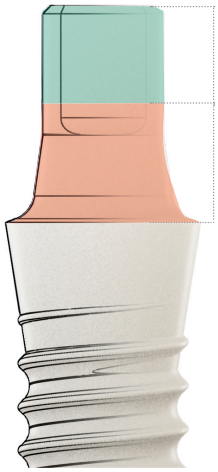
PROSTHETIC PROCEDURE FOR MONOBLOC IMPLANTS

PROSTHETIC RESTORATION

MODIFICATION OF THE ABUTMENT PART

The abutment part can be shortened occlusally depending on the anatomical situation. A minimum height of 2.5 mm (area marked in red) must be retained.

NOTE
Processing of the abutment part may only be performed using an appropriate liquid-cooled diamond milling cutter and at slight pressure to avoid heating and the formation of micro-cracks.
To avoid micro-cracks, the neck of the abutment part must not be modified.



DIGITAL RECORDING

The abutment part can be scanned as tooth stump.

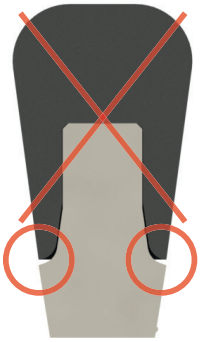
FABRICATION AND BONDING OF THE CROWNS

The crown is fabricated along conventional methods. The crown is cemented in the mouth.

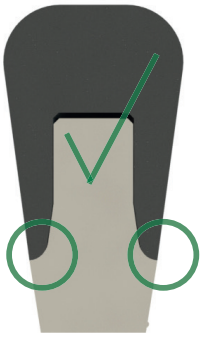
The crown must lie on the shoulder of the implant to ensure optimal mechanical stability.

Cementing of the disinfected crown on the abutment is performed using a special bonding agent for zirconium dioxide and corresponds to conventional fabrication practices.

NOTE
For bonding of the abutment and crown, we recommend using a resin-containing adhesive monomer MDP (for example, "PANAVIA™ v5" from Kuraray Europe GmbH or "RelyX TM Unicem 2 Automix" from 3M ESPE). Observe the manufacturer's processing instructions.



The crown does not fit correctly on the abutment as the crown does not rest fully on the abutment.



Correct fit of the crown on the abutment.

APPENDIX 1 – MATERIALS STRUCTURE OF THE CERALOG® SYSTEM

Zirconium dioxide - Y-TZP

Properties (ISO 13356)		
Chemical structure (in %):	$ZrO_2 + HfO_2 + Y_2O_3$	≥ 99.0
	Y_2O_3	4.5 < … ≤ 6.0
	HfO_2	≤ 5
	Al_2O_3	≤ 0.5
	other oxides	≤ 0.5
Mechanical properties:	Transversal strength	≥ 800 MPa
	Microstructure Median grain size	≤ 0.4 µm
Physical properties:	Density	≥ 6 g/cm³
	Radioactivity	≤ 200 Bq/kg

PEKK

Properties		
Mechanical properties:	Tensile strength (MPa)	138 MPa
	Transversal strength (MPa)	193 MPa
	Compressive strength (MPa)	207 MPa
	Elongation at break	> 30%
Physical properties:	Melting temperature	360 °C
	Density	1.3 g/cm³
	Water absorption after 24h	< 0.2 %
	Modulus of elasticity	4.5 GPa

PEEK

Properties		
Mechanical properties:	Tensile strength (MPa)	100 MPa
	Transversal strength (MPa)	165 MPa
	Compressive strength (MPa)	135 MPa
	Elongation at break	40 %
Physical properties:	Melting temperature	340 °C
	Density	1.3 g/cm³
	Water absorption after 24h	0.5 %
	Modulus of elasticity	4.1 GPa

Titanium alloy Ti6Al4V ELI

Properties (ASTM F136)		
Chemical structure (in %):	Al	5.5–6.5
	V	3.5–4.5
	Fe	≤ 0.25
	C	≤ 0.08
	N	≤ 0.05
	O	≤ 0.13
	H	≤ 0.012
	Ti	Rest
Mechanical properties:	Tensile strength	≥ 860 MPa
	Elongation at break	≥ 10 %

Holisticor

Properties		
Chemical structure (in %):	Precious metal content (Au, Pt, Pd, Rh)	74.5%
	Au	61%
	Ag	16.5%
	Pt	13.5%
	Cu	9.0%
Mechanical properties:	Hardness HV5	> 250
	Tensile strength (Rm)	> 800 MPa
	0.2% Elongation limit (Rp 0.2%)	> 700 MPa
	Elongation at break	> 6%
Physical properties:	Melting range	950–1050°C
	Density	15.7 g/cm³
	Modulus of elasticity	96 GPa
	Color	Bright yellow

FURTHER DOCUMENTATION

Further information on the CERALOG® products is available in the following documentations:

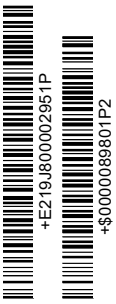
- CERALOG® Product Catalog
- CERALOG® Instructions for use
- CERALOG® Preparation instructions

[A] CERALOG Implant System – Numbers and Facts at a Glance (White Paper), Art.-No. X.J6718.02/2017

https://ifu.camlog.com
www.camlog.com

CE 0123

Art.-Nr. J8000.0295 Rev. 00 2/2019



HEADQUARTERS
CAMLOG Biotechnologies GmbH | Margarethenstr. 38 | 4053 Basle | Switzerland
Telephone +41 61 565 41 00 | Fax +41 61 565 41 01 | info@camlog.com | www.camlog.com

Manufacturer CERALOG® Products: ALTATEC GmbH | Maybachstr. 5 | 71299 Wimsheim | Germany

camlog