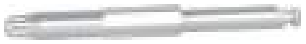
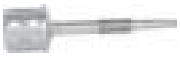
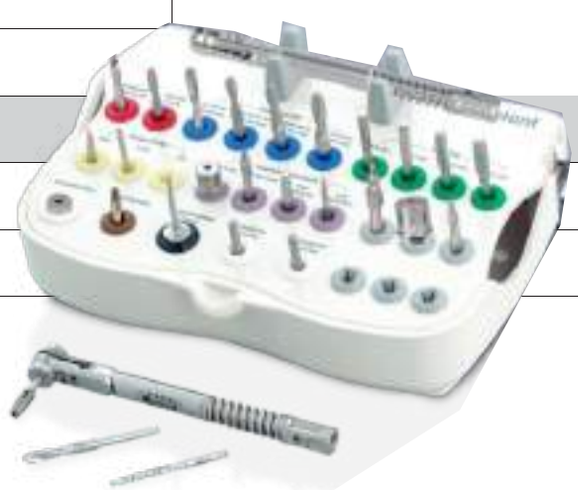
CCDRT	Tools	
CCDRT	Torque ratchet	
CCDSDRK	Screwdriver for ratchet SW 1,28, short	
CCDSDRL	Screwdriver for ratchet SW 1,28, long	
CCDSDWK	Screwdriver for contra-angle SW 1,28, short	
CCDSDWL	Screwdriver for contra-angle SW 1,28, long	
CCDEWR3K	Insertion tool for ratchet, 3,0 mm, short	
CCDEWR3L	Insertion tool for ratchet, long, 3,0 mm	
CCDEWR4K	Insertion tool for ratchet, short, 3,4/4,0/4,5/5,0 mm	
CCDEWR4L	Insertion tool for ratchet, long, 3,4/4,0/4,5/5,0 mm	
CCDEWW3K	Insertion tool for contra-angle, short, 3,0 mm	
CCDEWW3L	Insertion tool for contra-angle, long, 3,0 mm	
CCDEWW4K	Insertion tool for contra-angle, short, 3,4/4,0/4,5/5,0 mm	
CCDEWW4L	Insertion tool for contra-angle, long, 3,4/4,0/4,5/5,0 mm	
CCDPP	Parallel Pins 2 pc./pack., 1,5/2,0 mm	
CCDAW	Extraction tool for ratchet	
CCDBV	Drill extension	
CCDTS	Depht probe	
REF	Drills	
CCD3KB	Triangular drill	
CCDRB	Rose drill	
CCDPB	Positioning drill	
CCDPI	Pilot drill	
REF	Extension Drills	
CCDEB1	Extension drill I, 3,0 mm	
CCDEB2	Extension drill II, 3,4 mm	
CCDEB3	Extension drill, III, 4,0 mm	
CCDEB4	Extension drill IV, 4,5 mm	
CCDEB5	Extension drill V, 5,0 mm	

REF	Bone Taps		
CCDGS30	Bone tap 3,0 mm		
CCDGS34	Bone tap 3,4 mm		
CCDGS40	Bone tap 4,0 mm		
CCDGS45	Bone tap 4,5 mm		
CCDGS50	Bone tap 5,0 mm		
REF	Drill Stops		
	ø 3,0 mm		ø 3,4 mm
CCDBS3006	Drill stop 6 mm	CCDBS3406	Drill stop 6 mm
CCDBS3008	Drill stop 8 mm	CCDBS3408	Drill stop 8 mm
CCDBS3010	Drill stop 10 mm	CCDBS3410	Drill stop 10 mm
CCDBS3012	Drill stop 12 mm	CCDBS3412	Drill stop 12 mm
	ø 4,0 mm		ø 4,5 mm
CCDBS4006	Drill stop 6 mm	CCDBS4506	Drill stop 6 mm
CCDBS4008	Drill stop 8 mm	CCDBS4508	Drill stop 8 mm
CCDBS4010	Drill stop 10 mm	CCDBS4510	Drill stop 10 mm
CCDBS4012	Drill stop 12 mm	CCDBS4512	Drill stop 12 mm
	ø 5,0 mm		
CCDBS5006	Drill stop 6 mm		
CCDBS5008	Drill stop 8 mm		
CCDBS5010	Drill stop 10 mm		
CCDBS5012	Drill stop 12 mm		
REF	Surgical box		
CCDCB	Surgical box without instruments		
CCDCBK	Surgical box complete		



Surgical procedure
DENTAL IMPLANT KA -system

Chronological description of the insertion of an implant of the Dental Implant KA system.

1. OPERATION PLANNING AND PREPARATION

1.1. Diagnostis

Pre-implantological diagnostics and planning are carried out taking into account the anatomy of the jaw and its surrounding soft tissue. The surgical planning is made after the analysis of the bone quality and the anatomical situation based on the X-ray image and taking into account the patient's current health situation. If the radiological diagnosis shows an unfavourable initial situation due to a reduced available bone material, the collection of further radiological findings (CT, magnetic resonance or digital volume tomography) can be helpful.

1.2. Selection of the appropriate implant by the responsible implantologist

The implantologist should always use the largest possible implant depending on the situation as well as the intended indication.

1.3. Determination of the patient status based on general medical preliminary examinations

- Existing and possible contraindications must be checked and excluded in advance..
- Allergic contraindications must be taken into account (this applies to all products used during the operation and coming into direct contact with the patient (drill, implant, etc.)

1.4. Preparation of the dental implant ka system products for implantation

Only original products of the Dental Implant KA implant system from CD Medical GmbH or replacement products explicitly recommended by Dental Implant KA GmbH may be used during the surgery.

1.5. Determination of the implantation site

The optimal implantation site must be determined taking into account points 1.1 - 1.4.

2. SURGERY

2.1. Anaesthesia

Local infiltration anaesthesia must be performed. Line anaesthesia must be avoided at all costs.

2.2. Jaw ridge opening

The mucosa is cut to the bone with a scalpel through a ridge incision and the mucoperiosteal flap is opened up.
It has to be ensured that the subsequent surgical suture is at least 5 mm from the localised implant site (see 1.5.). Thus gingival coverage of the implant is guaranteed in the event of a possible wound rupture.
The mucoperiosteal flap must be kept away from the implant site during the entire implant insertion procedure.

2.3. Pilot drilling / bone drilling

- A pilot drill (ø 2.0 mm) must be used at the previously defined implantation site. The depth of the drill hole is depending on the selected implant dimension (see 1.2.). During pilot drilling, it is essential to adhere to the drilling direction (angular position) determined on the basis of the bone analysis (see 1.1.), which results from the existing bone structure and the implant position determined by the implantologist
- The required drilling depth is to be monitored via the depth markings on the drill bit.
- The drilling depth should be monitored with the depth probe.
- The recommended drilling speeds of 500 rpm (ø 2.0 mm - ø 3.1 mm), 400 rpm. (ø 3.25 mm - ø 4.15 mm) and 300 rpm (ø 4.75 mm) must be observed for all drilling cycles (see "Drilling Sequence Dental Implant KA
  If the recommended drilling speed is exceeded, bone necrosis may occur due to local bone overheating.
- Sufficient cooling with a suitable irrigation solution must be ensured at all times during bone drilling.
  The cooling line must not be interrupted during the drilling procedure.

2.4. Final drilling

The final drill diameter is to be drilled step by step using the corresponding final drill bits:

- After successfully performing pilot drilling, the final drill required for the selected implant must not be used directly.
- When performing successive reaming from the smallest final drill to the final drill actually required, the gradation sequence of the different drill diameters has to be observed.
- In order to completely exclude overheating and the associated bone necrosis, the gradation of the successive drill diameters must be kept as small as possible. The "Drilling Sequence Dental Implant KA, which is enclosed with the corresponding products, must be observed.
- For hard bone, the thread is partially or completely pre-cut with the appropriate bone-tap. With the cylindrical tap, the conical area of the implant bed can be expanded.
- The drill arrangement in the Dental Implant KA surgical box is as follows: from left to right increasing diameter of the drills.

2.5. Insertion of the implant

- The implant packaging is to be removed from the outer sterile packaging only immediately before implant placement.
- The standard packaging of the Dental Implant KA from Dental Implant KA GmbH is based on a double sterile blister.
- The outer blister must be opened by a non-sterile specialist. The sterile inner blister inside is to be placed carefully and without contact on the operating table (gentle pouring out of the outer blister).
- The inner blister must be opened by a sterile specialist and made available to the attending implantologist.
- Removal of the implant is possible directly with an original insertion key of the Dental Implant KA system.
- The insertion key must be fully inserted into the implant (internal hexagon). The fit of the insertion key must be checked before removal.
- The implant to be used can then be removed from the storage sleeve, which is fixed in the inner blister.
- It must be ensured that the implant has no further contact with the environment after removal from the blister until insertion.
- The implant should be placed at the preparation and screwed into the bone by applying slight pressure in a clockwise direction.
- In the course of the first screwing-in movements, pay attention to the exact screwing-in direction (angular position of the implant to the final drill hole).
- The implantologist has two options for inserting the implant:
  - manually: with the ratchet of the Dental Implant KA system
  - mechanically with contra-angle handpiece: when using the mechanical option, the maximum insertion speed of 15 rpm must not be exceeded.
- The implant must be inserted flush to the bone edge (crestal).
- Make sure that a maximum insertion torque of 55 Ncm is not exceeded.

2.6. Closing the implant

- The coverage in the blister securing the healing cap (cover screw) must be removed from the by a sterile specialist.
- The healing cap can then be removed directly from the storage sleeve fixed in the inner blister using an original insertion instrument.
- The insertion instrument is to be inserted completely into the cover screw (inner hexagonal) with slight pressure.
- The cover screw is to be placed at the implant opening and screwed in with a recommended insertion torque of max. 15 Ncm until complete sealing. The maximum permissible insertion torque of 25 Ncm for sealing the implant opening must not be exceeded at any time.
- The exposed mucoperiosteal flap must be placed over the inserted implant and closed with a saliva-proof suture.

3. AFTERCARE

3.1. Control appointment 1

- The first check-up appointment should take place 10 days after the implantation.
- The wound healing is to be checked by the attending physician.
- Sutures can be removed.

3.2. Control appointment 2

- The second check-up should take place approx. 3 months after the implantation.
- An X-ray check and, if necessary, exposure of the implant with subsequent exchange of the healing cap with gingiva former should be carried out.
- The performance of a periotest (tooth or implant mobility analysis) to check the primary stability is strongly recommended.

3.3. Control appointment 3

- The third check-up appointment should take place 1-2 weeks after insertion of the gingiva former.
- A check of the gingiva in the immediate vicinity of the implant must be carried out.
- It is necessary to check whether the swelling of the gingiva has healed completely.
- A further periotest to check the primary stability is recommended.
- The model for the subsequent final restoration can be made.
- For the impression-taking, the physician can chose between two methods.

3.4. Impression-taking

- Closed system
- Open system: the procedure for taking an impression is described in detail in the document "Impression-taking".
- The gingiva former must be reinserted after the impression has been taken.
- If necessary, the implant can be pre-provided with a temporary restoration.

3.5. Prosthetic treatment

- Prior to the final implant restoration, the performance of another periotest to check the final primary stability is strongly recommended.

3.6. Control appointment 4

- The 4th control appointment should take place 1-2 weeks after completion of the final prosthetic restoration.
- A check of the occlusion must be carried out by the physician.

3.7. Further control appointments

- Further control appointments should take place in a six-month cycle.

4. DOCUMENTATION

Attention: the implant used as well as each control examination must be documented in an implant passport. The implantologist bears the responsibility.

Impression-taking with the Dental Implant KA System

Working steps „Closed impression-taking“

1. Positioning of the impression post in the implant:
   a) Open the healing cap (cover screw) or the gingiva former. The opening of the implant must be easily accessible. After opening and removing the healing cap (cover screw) or the gingiva former, the inner connection of the implant must be thoroughly cleaned of blood, tissue and other deposits.
   b) Place the impression post in the implant, then screw in the universal fixing screw of the Dental Implant KA system and fix the screw with the screwdriver. The fixing screw must be hand-tightened.
   c) Now place the universal impression cap on the impression post until it snaps in. The impression cap must fit firmly on the impression post.
   d) Make sure that gingival tissue is not pinched during impression-taking.

2. Impression-taking with elastomeric impression material, e.g. polyvinylsiloxane or polyether rubber
   a) You can use a standard tray or an individual tray for the impression.
   b) Apply the impression material around the impression post covered with the impression cap.
   c) Carefully remove the tray after the impression material has cured. The impression cap remains in the cured impression material and is automatically removed from the impression post when the tray is taken out.
   d) Then unscrew the impression post and send it to the dental technician together with the impression tray.
   e) Please note that the impression caps are intended for single use only.
   f) The impression components of the Dental Implant KA system are supplied non-sterile. If necessary, they can be disinfected with commercially available disinfectants.

Surgical procedure
Dental Implant KA -system

Chronological description of the insertion of an implant of the implant system Dental Implant KA

1. OPERATION PLANNING AND PREPARATION

1.1. Diagnostis

Pre-implantological diagnostics and planning are carried out taking into account the anatomy of the jaw and its surrounding soft tissue. The basis for surgical planning is the analysis of the bone quality and the anatomical situation on the basis of the X-ray image, taking into account the patient's health situation. If the radiological diagnosis shows an unfavourable initial situation due to a reduced bone supply, the collection of further radiological findings (CT, magnetic resonance or digital volume tomography) can be helpful.

1.2. Selection of the appropriate implant by the responsible implantologist

The Implantologist should always use the largest possible implant depending on the situation as well as the intended indication.

1.3. Determination of the patient status based on general medical preliminary examinations

- Existing and possible contraindications must be checked and excluded in advance.
- Allergic contraindications must be taken into account (this applies to all products used during the operation and coming into direct contact with the patient (drill; implant; etc.)

1.4. Preparation of the Dental Implant KA system products for implantation

Only original products of the dental implant ka implant system from Dental Implant KA or replacement products explicitly recommended by Dental Implant KA may be used during the surgery.

1.5. Determination of the implantation site

The optimal implantation site must be determined Taking into account points 1.1 - 1.4.

2. SURGERY

2.1. Anaesthesia

Local infiltration anaesthesia must be performed. Line anaesthesia must be avoided at all costs..

2.2. Jaw Ridge Opening

The mucosa is cut down to the bone with a scalpel through a jawline incision and the bone and the mucoperiosteal flap is opened up.
An incision should be made which ensures that the subsequent surgical suture is at least 5 mm from the localised implant site (see 1.5.). This measure can ensure gingival coverage of the implant in the event of a possible wound rupture.
The mucoperiosteal flap must be kept away from the implant site during the entire implant insertion procedure.

2.3. Pilot drilling / bone drilling

- A pilot drill (ø 2.0 mm) must be drilled at the previously defined implantation site. The depth of the drill hole should be selected depending on the selected implant dimension (see 1.2.). For the pilot drilling, the drilling direction (angular position) determined on the basis of the bone analysis (see 1.1.), which results from the existing bone structure and the implant position determined by the implantologist, must be adhered to.
- The required drilling depth is to be monitored via the depth markings attached to the drill bit.
- To check or orientate the drilling depth, the drilling depth should be monitored with the depth probe.
- The recommended drilling speeds of 500 rpm (ø 2.0 mm - ø 3.1 mm), 400 rpm. (ø 3.25 mm - ø 4.15 mm) and 300 rpm (ø 4.75 mm) must be observed for all drilling cycles (see "Drilling protocol Dental Implant KA"). If the recommended drilling speed is exceeded, bone necrosis may occur due to local bone overheating.
- In the course of the bone drilling performed, care must be taken at all times to ensure that the cooling with suitable irrigation solution is sufficiently high. The cooling line must not be interrupted during the intervention of the drill bit.

2.4. Final Drilling

The final drill diameter is to be drilled using the corresponding final drill bits.

- When performing successive reaming from the smallest final drill to the final drill actually required, pay attention to the gradation sequence of the different drill diameters.
- After the successfully performed pilot drilling, the final drill required for the selected implant must not be used directly.
- In order to completely exclude overheating and the associated bone necrosis, the gradation of the successive drill diameters must be kept as small as possible. The "Drilling protocol Dental Implant KA", which is enclosed with the corresponding products, must be observed.
- For hard bone, the thread is partially or completely pre-cut with the matching tap. With the cylindrical tap, the conical area of the implant bed can be expanded.
- The drill arrangement in the Dental Implant KA surgery box is structured as follows: from left to right increasing diameter of the drills

2.5. Insertion of the Implant

- The implant packaging is to be removed from the outer sterile packaging only immediately before implant placement.
- The standard packaging of the Dental Implant KA from Dental Implant KA is based on a double sterile blister.
- The outer blister must be opened by a non-sterile specialist. The sterile inner blister inside is to be placed carefully and without contact on the operating table (gentle pouring out of the outer blister).
- The inner blister must be opened by a sterile specialist and made available to the attending implantologist.
- Removal of the implant is possible directly with an original insertion key of the Dental Implant KA system.
- The insertion key must be fully inserted into the implant (internal hexagon). The fit of the insertion key must be checked before removal.
- The implant to be used can then be removed from the storage sleeve, which is fixed in the inner blister.
- It must be ensured that the implant has no further contact with the environment after removal from the blister until insertion.
- The implant should be placed at the preparation and screwed into the bone by applying slight pressure in a clockwise direction.
- In the course of the first screwing-in movements, pay attention to the exact screwing-in direction (angular position of the implant to the final drill hole).
- The implantologist has two options for inserting the implant:
  - manually: with the ratchet of the Dental Implant KA system
  - mechanically with contra-angle handpiece: when using the mechanical option, the maximum insertion speed of 15 rpm must not be exceeded.
- The implant must be inserted flush to the bone edge (crestal).
- Make sure that a maximum insertion torque of 55 Ncm is not exceeded.

2.6. Closing the implant

- The cap securing the locking screw must be removed from the blister by a sterile specialist.
- The screw plug can then be removed directly from the storage sleeve fixed in the inner blister using an original insertion instrument.
- The insertion instrument is to be inserted completely into the cover screw (inner hexagonal) with slight pressure.
- The cover screw is to be placed at the implant opening and screwed in with a recommended insertion torque of max. 15 Ncm until complete sealing. The maximum permissible insertion torque of 25 Ncm for sealing the implant opening must not be exceeded at any time.
- The exposed mucoperiosteal flap must be placed over the inserted implant and closed with a saliva-proof suture.

3. AFTERCARE

3.1. Control appointment 1

- The first check-up appointment should take place 10 days after the operation.
- The wound healing is to be checked by the attending physician.
- Sutures can be removed.

3.2. Control appointment 2

- Der zweite Kontrolltermin sollte ca. 3 Monate nach der Operation erfolgen.
- An X-ray check and, if necessary, exposure with subsequent exchange of the closure screw for gingiva formers should be carried out.
- The performance of a periotest (tooth or implant mobility analysis) to check the primary stability is strongly recommended

3.3. Control appointment 3

- The third check-up appointment should be 1-2 weeks after insertion of the gingiva former.
- A check of the gingiva in the immediate vicinity of the implant must be carried out.
- Check whether the swelling of the gingiva has healed completely.
- A further periotest to check the primary stability is recommended
- The model for the subsequent final restoration can be made.
- For the impression taking, a decision can be made between two methods

3.4. Impression taking

- Closed system
- Open system: the procedure for taking an impression is described in detail in the document "Impression taking"
- The gingiva former must be reinserted after the impression has been taken
- If necessary, the implant can be pre-provided with the help of a temporary restoration

3.5. Prosthetic treatment

- Prior to the final implant restoration, the performance of another periotest to check the final primary stability is mandatory recommended

3.6. Control appointment 4

- The 4th control appointment should take place 1-2 weeks after completion of the final restoration
- A check of the occlusion must be carried out by the treating physician.

3.7. Further control appointments

- Weitere Kontrolltermine sollten im halbjährlichen Zyklus stattfinden.

4. DOCUMENTATION

Attention: the implant used as well as each control examination must be documented in an implant passport. The implantologist bears the responsibility

Impression taking with the Dental Implant KA System

Working steps „Closed impression taking“

1. Positioning of the impression post in the implant:
   a) Open the cover screw or the gingiva former. The implant opening must be easily accessible. After opening and removing the cover screw or the gingiva former, thoroughly clean the inner connection of the implant of blood, tissue and other debris.
   b) Place the impression post in the implant, then screw in the Universal fixing screw of the Dental Implant KA system and fix the screw with the screwdriver. The fixing screw must be hand-tightened.
   c) Now place the universal impression cap on the impression post until it snaps in. The impression cap must fit firmly on the impression post
   d) Make sure that the gingival tissue is not pinched during impression taking.

2. Impression taking with elastomeric impression material, e.g. polyvinylsiloxane or polyether rubbe
   a) You can use a standard tray or an individual tray for the impression.
   b) Apply the impression material around the impression post covered with the impression cap.
   c) Carefully remove the tray after the impression material has cured. The impression cap remains in the cured impression material and is automatically removed from the impression post when the tray is taken out.
   d) Then unscrew the impression post and send it to the dental technician together with the impression tray.
   e) Please note that the impression caps are intended for single use only.
   f) The impression components of the Dental Implant KA system are supplied non-sterile. If necessary, they can be disinfected with commercially available disinfectants.

Impression-taking

	Labor:	
REF	Fixier screw	
PCDFS	Fixing screw universal	
REF	Impression post	
	3,0 mm	
PCD3AP	Impression post, closed tray 3,0 mm	
	3,4,/4,0/4,5/5,0 mm	
PCD4AP	Impression post, closed tray 3,4/4,0/4,5/5,0 mm	
REF	Implant analog (laboratory implant)	
	3,0 mm	
PCDLA3	Implant analog (laboratory implant) 3,0 mm	
	3,4,/4,0/4,5/5,0 mm	
PCDLA4	Implant analog (laboratory implant) 3,4,/4,0/4,5/5,0 mm	
REF	Impression cap	
PCDAK	Impression cap universal 2 pc../pack.	

DENTAL IMPLANT KA

Implants

REF	Implants (including healing cap)
	ø 3.0 mm
ICD3010	Implant 3.0 x 10.0 mm
ICD3012	Implant 3.0 x 12.0 mm
ICD3014	Implant 3.0 x 14.0 mm
	ø 3.4 mm
ICD3408	Implant 3.4 x 8.0 mm
ICD3410	Implant 3.4 x 10.0 mm
ICD3412	Implant 3.4 x 12.0 mm
ICD3414	Implant 3.4 x 14.0 mm
	ø 4.0 mm
ICD4006	Implant 4.0 x 6.0 mm
ICD4008	Implant 4.0 x 8.0 mm
ICD4010	Implant 4.0 x 10.0 mm
ICD4012	Implant 4.0 x 12.0 mm
ICD4014	Implant 4.0 x 14.0 mm
	ø 4.5 mm
ICD4506	Implant 4.5 x 6.0 mm
ICD4508	Implant 4.5 x 8.0 mm
ICD4510	Implant 4.5 x 10.0 mm
ICD4512	Implant 4.5 x 12.0 mm
ICD4514	Implant 4.5 x 14.0 mm
	ø 5.0 mm
ICD5006	Implant 5.0 x 6.0 mm
ICD5008	Implant 5.0 x 8.0 mm
ICD5010	Implant 5.0 x 10.0 mm
ICD5012	Implant 5.0 x 12.0 mm
ICD5014	Implant 5.0 x 14.0 mm

DENTAL IMPLANT KA

Healing Caps, Gingiva Formers, Fixing Screws

REF	Healing caps	
ICDV3	Fixing screw 3,0 mm	
ICDV4	Fixing screw 3,4/4,0/4,5/5,0 mm	
REF	Gingiva Formers	
	3,0 mm	
PCDGF320	Gingiva former, 3 mm, GH=2	
PCDGF330	Gingiva former, 3 mm, GH=3	
PCDGF340	Gingiva former, 3 mm, GH=4	
PCDGF350	Gingiva former, 3 mm, GH=5	
	3,4,/4,0/4,5/5,0 mm	
PCDGF420	Gingiva former, 3,4/4,0/4,5/5,0 mm, GH=2	
PCDGF430	Gingiva former, 3,4/4,0/4,5/5,0 mm, GH=3	
PCDGF440	Gingiva former, 3,4/4,0/4,5/5,0 mm, GH=4	
PCDGF450	Gingiva former, 3,4/4,0/4,5/5,0 mm, GH=5	
REF	Fixing Screw	
PCDFS	Fixing screw universal	

DENTAL IMPLANT KA

Drilling Sequence Dental Implant KA
Bohrprotokoll Dental Implant KA

	Triangular Drill Dreikantbohrer	Rose head Bur Rosenbohrer	Positioning Drill Positionierbohrer 2,00 mm	Pilot Drill Pilotbohrer 2,80 mm	Extension Drill I Erweit.-bohrer I 3,10 mm	Extension Drill II Erweit.-bohrer II 3,25 mm	Extension Drill III Erweit.-bohrer III 3,65 mm	Extension Drill IV Erweit.-bohrer IV 4,15 mm	Extension Drill V Erweit.-bohrer V 4,75 mm
									
Implant 3,0 mm	X	X	X						
Implant 3,4 mm	X	X	X						
Implant 4,0 mm	X	X	X	X	X	O			
Implant 4,5 mm	X	X	X	X	X	X	O		
Implant 5,0 mm	X	X	X	X	X	X	X	O	

	Bone tap Gewindeschneider 3,0 mm	Bone tap Gewindeschneider 3,4 mm	Bone tap Gewindeschneider 4,0 mm	Bone tap Gewindeschneider 4,5 mm	Bone tap Gewindeschneider 5,0 mm
Implant 3,0 mm	Z				
Implant 3,4 mm		Z			
Implant 4,0 mm			Z		
Implant 4,5 mm				Z	
Implant 5,0 mm					Z

Drill Bohrer	max. rpm max. U/Min.
ø 2,00 – 3,10 mm	500
ø 3,25 – 4,15 mm	400
ø 4,75 mm	300

X = soft bone — weicher Knochen

O = medium dense bone — mittelharter Knochen

Z = dense bone — harter Knochen

Locators

REF	Locator	
	Docklocs® Abutment for Dental Implant KA Ø 3,0 mm, straight, with Set A	
PCDL0001.S	Docklocs® abutment 3,0 mm, GH=1,0 mm	
PCDL0002.S	Docklocs® abutment, 3,0 mm, GH=2,0 mm	
PCDL0003.S	Docklocs® abutment, 3,0 mm, GH=3,0 mm	
PCDL0004.S	Docklocs® abutment, 3,0 mm, GH=4,0 mm	
PCDL0005.S	Docklocs® abutment, 3,0 mm, GH=5,0 mm	
PCDL0006.S	Docklocs® abutment, 3,0 mm, GH=6,0 mm	
	Docklocs® Abutment for Dental Implant KA Ø 3,0 mm, angulation 18°, Variation A, with fixing screw and Set B**	
PCDL0702.S	Docklocs® abutment, 3,0 mm, GH=2,0 mm	
PCDL0704.S	Docklocs® abutment, 3,0 mm, GH=4,0 mm	
PCDL0706.S	Docklocs® abutment, 3,0 mm, GH=6,0 mm	
	Docklocs® Abutment for Dental Implant KA Ø 3,0 mm, angulation 18°, Variation B, with fixing screw and Set B**	
PCDL802.S	Docklocs® abutment, 3,0 mm, GH=2,0 mm	
PDCL804.S	Docklocs® abutment, 3,0 mm, GH=4,0 mm	
PCDL806.S	Docklocs® abutment, 3,0 mm, GH=6,0 mm	
	Docklocs® Abutment for Dental Implant KA Ø 3,4/4,0/4,5/5,0 mm, straight, with Set A	
PCDL0011.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=1,0 mm	
PCDL0012.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=2,0 mm	
PCDL0013.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=3,0 mm	
PCDL0014.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=4,0 mm	
PCDL0015.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=5,0 mm	
PCDL0016.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=6,0 mm	
	Docklocs® Abutment for Dental Implant KA Ø 3,4/4,0/4,5/5,0 mm, angulation 18°, Variation A, with fixing screw and Set B**	
PCDL0712.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=2,0 mm	
PCDL0714.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=4,0 mm	
PCDL0716.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=6,0 mm	
	Docklocs® Abutment for Dental Implant KA Ø 3,4/4,0/4,5/5,0 mm, angulation 18°, Variation B, with fixing screw and Set B**	
PCDL812.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=2,0 mm	
PDCL814.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=4,0 mm	
PCDL816.S	Docklocs® abutment, 3,4/4,0/4,5/5,0 mm, GH=6,0 mm	

Locators

*Set A

Docklocs® Abutment Set A, single piece abutment

1 pc. Docklocs abutment for Dental Implant KA system (PCDL…)
1 pc. Retention housing Titanium (Ø 5,5 mm, height 2,5 mm) with black processing application
1 pc. Block out ring (A0009)
1 pc. Docklocs paralleling post (A0016)
1 pc. Retention insert, blue (A00022
1 pc. Retention insert, pink (A0003)
1 pc. Retention insert, transparent (A0004)
1 pc. Retention insert, red (A0005)
1 pc. Retention insert, orange (A0006)
1 pc. Retention insert, green (A0007)

**Set B

Docklocs® Abutment Set B, abutment with fixing screw

1 pc. Docklocs Abutment, angulation 18° for Dental Implant KA system (PCDL…)
1 pc. Docklocs fixing screw
1 pc. Retaining pin
1 pc. Retention housing Titanium (Ø 5,5 mm, height 2,5 mm) with black processing application
1 pc. Block out ring (A0009)
1 pc. Docklocs paralleling post (A0016)
1 pc. Retention insert, red (A0005)
1 pc. Retention insert, orange (A0006)
1 pc. Retention insert, green (A0007)

REF	System components and accessories Docklocs® Abutments		
PCDL-	Quant.	Description	
A0001.S	8	Docklocs® retention insert, grey, no (0°) retention	
A0002.S	8	Docklocs® retention insert, blue, extra slight retention, 0°–10°	
A0003.S	8	Docklocs® retention insert, pink, slight retention, 0°–10°	
A0004.S	8	Docklocs® retention insert, transparent, strong retention, 0°–10°	
A0005.S	8	Docklocs® retention insert, red, extra slight retention, 10°–20	
A0006.S	8	Docklocs® retention insert, orange, slight retention, 10°–20°	
A0007.S	8	Docklocs® retention insert, green, strong retention, 10°–20°	

Locator system: components and accessories

A0008.S	8	Docklocs processing application black (not for permanent use)	
A0009.S	20	Docklocs® block out ring	
A0010.S	4	Retention housing Titanium with processing application	
A0012.S	4	Docklocs® spacer sleeves	
A0013	1	Docklocs® angle measuring instrument	
A0014.S	4	Docklocs® lab analog straight	
A0026.S	4	Docklocs® lab analog angled 18°	
A0015.S	4	Docklocs® impression post with black processing application	
A0016.S	4	Docklocs® paralleling post	
A0019	1	Docklocs® universal instrument for the dental practice	
A0020	1	Docklocs® universal instrument (four parts)	
A0022	1	Screwdriver for Docklocs abutments with shaft for contra-angle	
A0023	1	Screwdriver with holding sleeve for Docklocs abutments with shaft for contra-angle	
A0025	1	Hexagon screwdriver 1,25 mm for Docklocs abutments and fixing screws with shaft for contra-angle	
A0050.S.T	1	Docklocs® laboratory set, max. 20° divergence compensation: 2 pc. Retention housing Titanium (Ø 5,5 mm, height 2,5 mm) with black processing application (height 1,9 mm), 2 pc. Block out ring (A0009), 2 pc. Retention insert, transparent (A0004), 2 pc. Retention insert, pink (A0003), 2 pc. Retention insert, blue (A0002)	
A0051.S.T	1	Docklocs® laboratory set, max. 40° divergence compensation: 2 pc. Retention housing Titanium (Ø 5,5 mm, height 2,5 mm) with black processing application (height 1,9 mm), 2 pc. Block out ring (A0009), 2 pc. Retention insert, green (A0007), 2 pc. Retention insert, orange (A0006), 2 pc. Retention insert, red (A0005)	

Abutments

REF	Abutments (including fixing screw)	
	0°	
	3,0 mm	
PCDAB310	Abutment 0°, GH=1	
PCDAB320	Abutment 0°, GH=2	
PCDAB330	Abutment 0°, GH=3	
PCDAB340	Abutment 0°, GH=4	
PCDAB350	Abutment 0°, GH=5	
	3,4/4,0/4,5/5,0 mm	
PCDAB410	Abutment 0°, GH=1	
PCDAB420	Abutment 0°, GH=2	
PCDAB430	Abutment 0°, GH=3	
PCDAB440	Abutment 0°, GH=4	
PCDAB450	Abutment 0°, GH=5	
	15°	
	3,0 mm	
PCDAB31510	Abutment 15°, GH=1	
PCDAB31520	Abutment 15°, GH=2	
PCDAB31530	Abutment 15°, GH=3	
PCDAB31540	Abutment 15°, GH=4	
PCDAB31550	Abutment 15°, GH=5	
	3,4/4,0/4,5/5,0 mm	
PCDAB41510	Abutment 15°, GH=1	
PCDAB41520	Abutment 15°, GH=2	
PCDAB41530	Abutment 15°, GH=3	
PCDAB41540	Abutment 15°, GH=4	
PCDAB41550	Abutment 15°, GH=5	

	25°	
	3,0 mm	
PCDAB32510	Abutment 25°, GH=1	
PCDAB32520	Abutment 25°, GH=2	
PCDAB32530	Abutment 25°, GH=3	
PCDAB32540	Abutment 25°, GH=4	
PCDAB32550	Abutment 25°, GH=5	
	3,4/4,0/4,5/5,0 mm	
PCDAB42510	Abutment 25°, GH=1	
PCDAB42520	Abutment 25°, GH=2	
PCDAB42530	Abutment 25°, GH=3	
PCDAB42540	Abutment 25°, GH=4	
PCDAB42550	Abutment 25°, GH=5	
REF	Adhesive abutments	
	3,0 mm	
PCDKA3	Adhesive abutment 3,0 mm	
	3,4/4,0/4,5/5,0 mm	
PCDKA4	Adhesive abutment 3,4/4,0/4,5/5,0 mm	
REF	Scan Abutments	
	3,0 mm	
PCDSA3	Scan abutment 3,0 mm	
	3,4/4,0/4,5/5,0 mm	
PCDSA4	Scan abutment 3,4/4,0/4,5/5,0 mm	
REF	Fixing Screw	
PCDFS	Fixing screw universal	

DENTAL IMPLANT KA

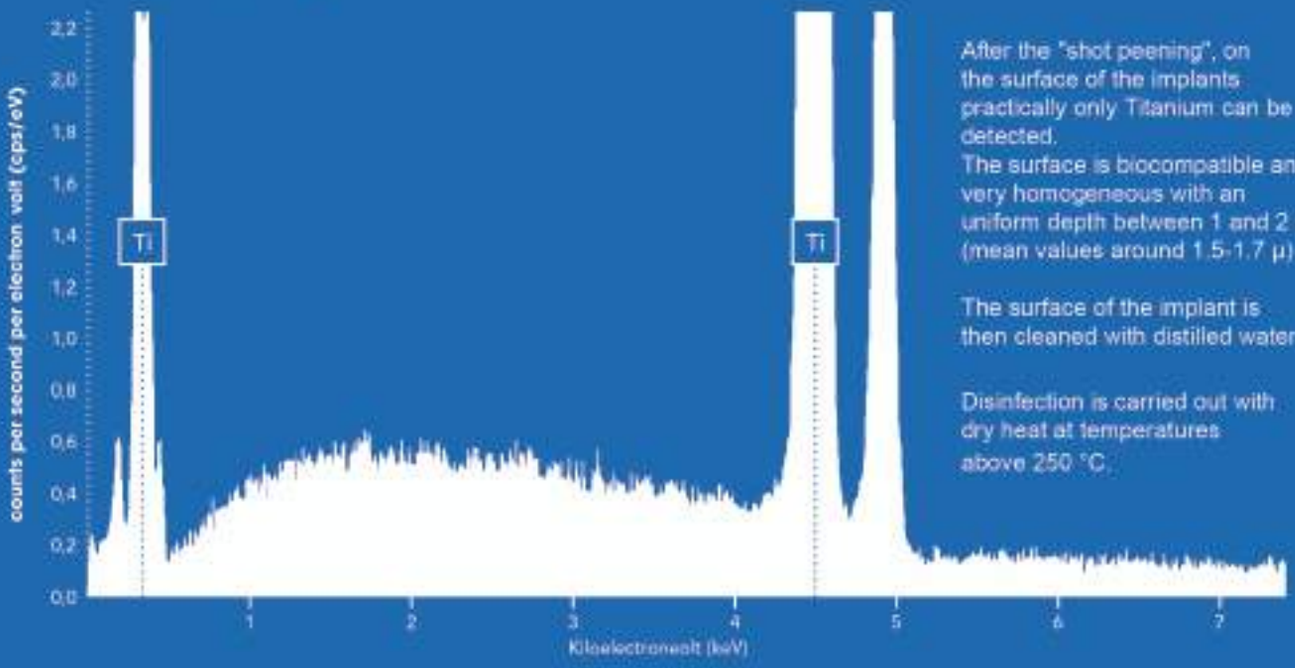
Surface treatment Dental Implant KA implant

Shot Peening

The Titanium surface of the implants is not blasted with aluminium oxide, but conditioned with a special biocompatible blasting material. The surface is not abrasively sandblasted with sharp-edged particles, but gently compacted without creating deep craters in the surface, in which metal particles can get stuck.

This procedure generates an extremely clean homogeneous surface without contamination by metal residues of the blasting material.

Surface purity

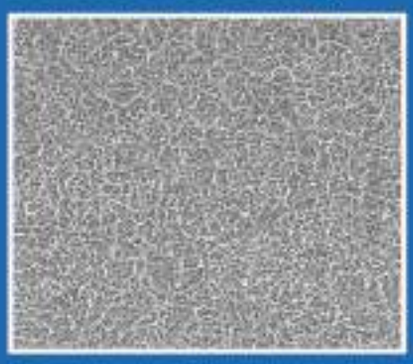


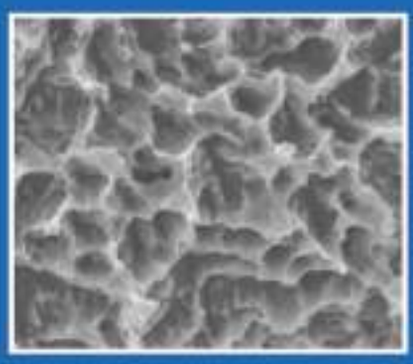
After the "shot peening", on the surface of the implants practically only Titanium can be detected.
The surface is biocompatible and very homogeneous with an uniform depth between 1 and 2 µ (mean values around 1.5-1.7 µ).

The surface of the implant is then cleaned with distilled water.

Disinfection is carried out with dry heat at temperatures above 250 °C.

Surface after etching





The measured mean roughness value (centre roughness value Sa) between 1.5-1.7 µ corresponds to the scientifically proven value for optimal osseointegration.