

IMPLANT LINE

# BT SAFE & BT MANO



## **IMPORTANT NOTE**

For latest updates and information, **visit [www.btk.dental](http://www.btk.dental)**

This manual provides dental practitioners and related specialists with general information regarding the use of BT SAFE and BT NANO dental implant systems.

For detailed information on other specific implant lines and their restorative procedures, please refer to the corresponding manuals, specific literature or refer to the BTK website.

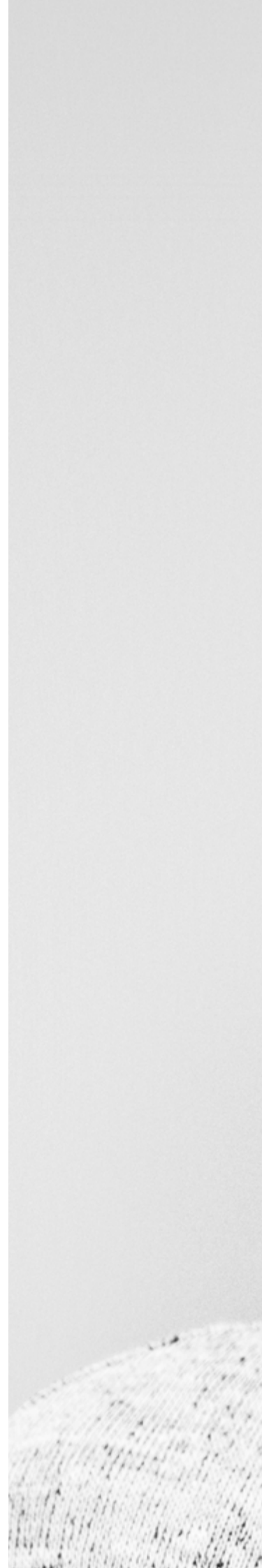
Consider to regularly visit practical courses for updates and professional exchange with dedicated colleagues in order to ensure your long-term success with implant-borne dental restorations.

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# BT SAFE & BT NANO

GUIDELINES FOR THE USE  
OF BT SAFE AND BT NANO  
IMPLANT SYSTEM

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## CORPORATE BACKGROUND

Privately held BTK BIOTEC was founded in 1998 in order to improve the quality of life of people with missing teeth.

BTK is a dedicated supporter of the genuine "100% Made in Italy" label, because with this it is guaranteed that BTK products are of unmatchable Italian craftsmanship and premium quality materials offering dedicated specialization and ample differentiation.



BTK Headquarters - NORTH ITALY

## Implanting Trust, Smile again!

By combining cutting-edge technologies and biology, BTK's mission is to offer affordable and personalized implant-borne solutions thereby sustainably improving the daily life of dental patients.

**Together with leading professionals, BTK strives to become a reference in replacing missing teeth with trusted implant solutions in order to improve oral health around the globe.**

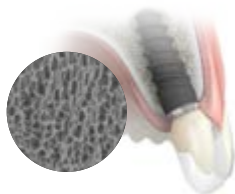




## PREMIUM QUALITY MATERIALS

Grade 4 commercially pure titanium (ASTM F 67 / ISO 5832-2) is BTK's material of choice for dental implants. Grade 4 is slightly harder to work, but it provides the highest strength and durability characteristics among the commercially pure titanium grades, making it the natural choice for BTK dental implants.

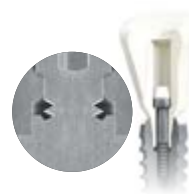
Grade 5 titanium (ASTM F 136 / ISO 5832-3) is used for BTK's prosthetic components, as these are subject to certain levels of stress and in the MINI line implants. This high-strength version, also known as Ti-6Al-4V, is widely used in orthopedics and shows excellent long-term physical and mechanical properties.



## ENDOSSEOUS SURFACE DAE

Clinical trials confirm that roughened endosseous surfaces perform better than machined surfaces concerning endosseous wound healing, "de novo" bone formation and reduced time-to-loading.

Our DAE (dual- acid-etched) process aims to obtain a moderately rough surface with a controlled micro-roughness.



## IMPLANT-ABUTMENT CONNECTION

The precision of the connection between implant and abutment creating a tight seal may be beneficial in preventing inflammatory bacteria propagating in the interface between different components.

Apart from that, extremely tight tolerances as applied by BTK help to avoid micromovements.

Providing precision in every part produced is one of our key contributions ensuring longterm restorative success.



## RESTORATIVE OPTIONS

The purpose of dental implant therapy, now widely used in dentistry, is to replace lost dental elements with biocompatible titanium implants, in order to obtain a new and correct occlusion, using prostheses on implants.

In order to achieve this goal, BTK offers a focused portfolio of restorative solutions backed-up by comprehensive clinical experience. BTK offers a variety of prostheses components to satisfy the clinical preferences and needs of the patients.



## MADE IN ITALY, USED GLOBALLY

We constantly ensure that the quality of our products and services meet the high expectations of our customers and their patients. Specialized professionals are taking care to offer comprehensive solutions in applied research, engineering, education and related activities.

Our brand is a solid promise of quality, we are certified UNI EN ISO 9001, UNI EN ISO 13485 and MDD 93/42/EEC and subsequent amendements and additions, and is therefore authorized to apply the CE Mark on its products.

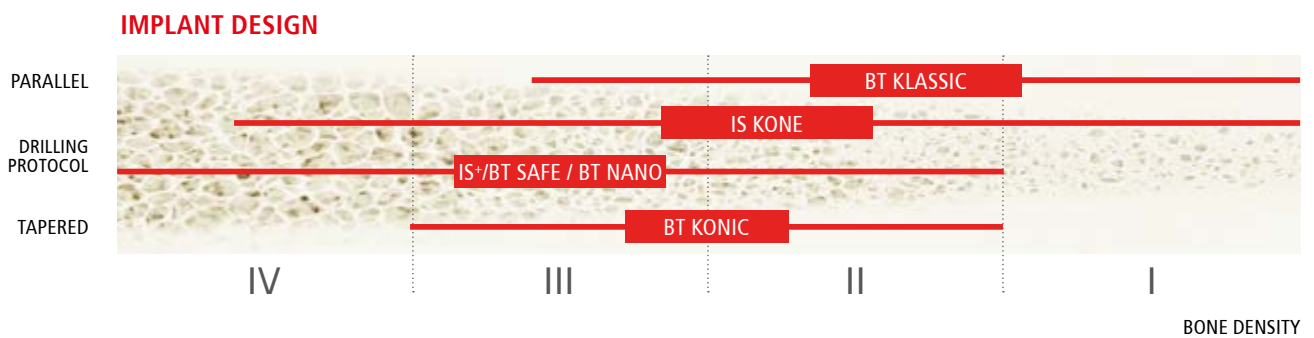
## IMPLANT PORTFOLIO

BTK is dedicated to offer comprehensive implant solutions to meet the requirements of individual clinical situations, user preferences and economic constraints.

Different designs, sizes, diameters, surfaces and abutment connections are available, while at the same time BTK strives to maintain a small number of precision-instruments thus simplifying procedures and limiting investments needed.



## SELECTION OF THE IMPLANTS ON THE BASIS OF BONE DENSITY



# CHARACTERIZATION OF BTK IMPLANT-ABUTMENT CONNECTIONS



## MORSE-TAPER (MTH)

**BTK's morse-taper hexagon connection** comprises a 2.6 mm conical portion at 11° above a hexagon configuration combined with a M1.6 (KR) or M1.8 (KW) abutment screw to deliver adequate pre-load with a minimum of tightening.

Implants with a tapered interface can resist larger axial and transversal forces than implants with a flat interface.

The design guides the abutment into a predictable location with a precise fit with the inner portion of the implant.

The precision of the conical connection with its tight seal may be beneficial in preventing inflammatory bacteria from propagating in the interface between implant and abutment and it helps to avoid micro-movements.



## INTERNAL HEXAGON (INT)

**BTK's internal hexagon connection** comprises a parallel hexagon of 2 mm length opening with a small conical portion combined with a M1.8 abutment screw to deliver adequate pre-load with a minimum of tightening.

The internal hexagon has two functions: to transfer the torque momentum during implant placement and as an indexing system to transfer the precise 3D-position of the implant to the master cast.

Internal indexing systems have some advantages over external indexing systems since they allow longer engaging surfaces while reducing the platform height of the implant. This offers somewhat more flexibility in designing the emergence profile of the final restoration.



## EXTERNAL HEXAGON (EXT)

**BTK's external hexagon connection** comprises a parallel hexagon at 0.7 mm height and a 90° shoulder to allow a flat-to-flat margin fit to the implant. Abutments are connected to the implant using a M1.8 (EN) or M2.0 (ER/EW) abutment screw.

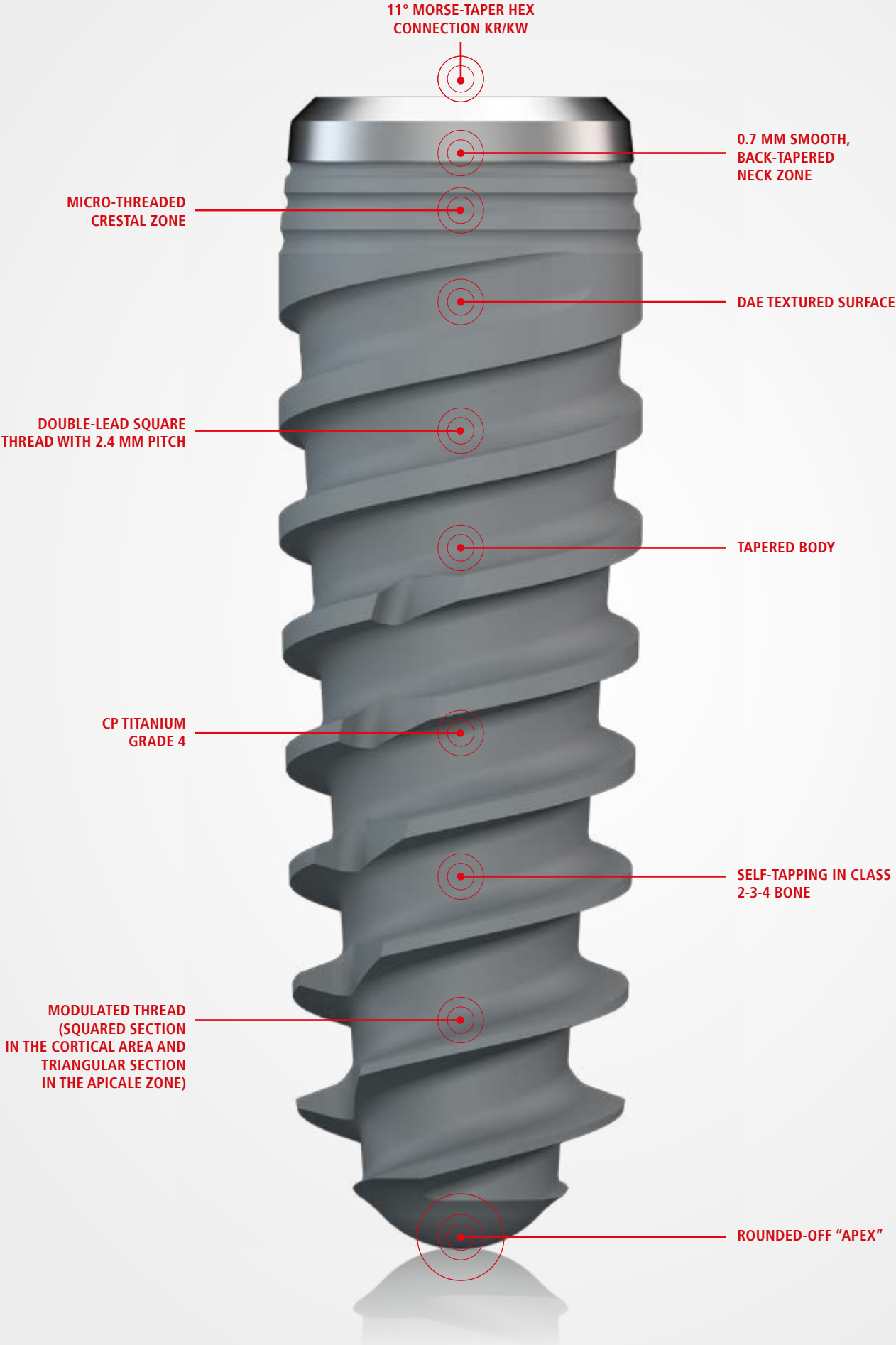
The abutment screw plays a central role for the mechanical, long-term strength and fatigue resistance of the implant abutment connection. The requirements for such a screw are many, such as no loosening, long-term fatigue resistance, overload protection and safe pick-up and handling ability.

Due to the fact that the abutment screw is exposed to heavy dynamic loads, the precise application of tightening torque force is essential.

MORSE-TAPER (MTH)	INTERNAL HEXAGON (INT)	EXTERNAL HEXAGON (EXT)
		<b>EN</b> = EXTERNAL NARROW
<b>KR</b> = KONIC REGULAR	<b>IR</b> = INTERNAL REGULAR	<b>ER</b> = EXTERNAL REGULAR
	<b>IM</b> = INTERNAL MEDIUM	
<b>KW</b> = KONIC WIDE	<b>IW</b> = INTERNAL WIDE	<b>EW</b> = EXTERNAL WIDE

**NOTE** that different BTK implants require different types of prosthetic platforms using corresponding abbreviations according to their sizes. For more details, refer to the corresponding BTK implant lines documentation.

3. BT SAFE IMPLANT



## IMPLANT CHARACTERISTICS: BT SAFE

**BT SAFE implants are suitable for the treatment of oral endosseous implantation in the maxilla or mandible and for the functional and aesthetic rehabilitation of edentulous or partially edentulous patients.**

BT SAFE dental implants are made of commercially pure, cold-worked titanium Grade 4 and feature the DAE (dual acid-etched) surface. BT SAFE is a bone-level implant that replicates the root of the natural tooth and is self-tapping.

The BT SAFE implant is particularly suitable for early or immediate positioning after extraction or loss of natural teeth and / or for immediate loading applications in edentulous maxillae, as it offers excellent primary stability.

BT SAFE offers a back-tapered, micro-threaded smooth neck portion of 0.7 mm. The implant has a double-lead square thread with a pitch of 2.4 mm. Threads are characterized by a triangular shape near the apical zone while the threads take on a square shape in the cortical area.

BT SAFE implant line offers one abutment connection based on the well-proven 11° morse-taper hexagon (MTH) having regular (KR) or wide (KW) corresponding prosthetic components, respectively for diameters Ø 3.3, 3.7, 4.1, 4.8 mm and for diameters Ø 4.8, 6 mm.

The implant line is rounded off with the highly compact BT NANO implant (KW) for severely atrophic jaws. BT NANO implant is available with diameters Ø 4.2, 4.8, 6 mm and lengths 5 mm e 6 mm, and offers a MORSE-TAPER hexagon connection (KW).

BT SAFE and BT NANO lines allow both ways of healing: sub-mucosal or trans-mucosal healing approach.

BTK offers a focused portfolio of restorative solutions backed-up by comprehensive clinical experience. Biotec offers a variety of medical devices to satisfy the clinical preferences and needs of patients.

BTK has a solution for every case and can also provide customized products, designed and manufactured specifically for each patient.

BT SAFE and BT NANO lines share the surgical kit with IS KONE and IS<sup>+</sup> implants.

For the accurate planning of the clinical case, BTK offers to the clinical a guided surgical protocol, with a complete digital workflow and the realization of the correspondent surgical guide.

## CORONAL BACK TAPER & NECK DESIGN

The back-tapered profile of the coronal portion ensures excellent management of the cortical bone, thus helping to improve soft tissue support and to preserve cortical bone.

In the cortical area, where there are no threads, it is located the nominal maximum diameter of the implant. The purpose is to create a sealing effect without stress for the cortical bone.

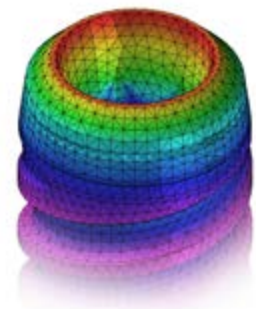
The micro-threads in the coronal portion contribute to improving BIC (Bone to Implant Contact), increasing the contact surface between implant and bone, significantly reducing bone resorption.



## PLATFORM SWITCHING

Platform shifting is the concept of providing a narrower diameter prosthetic component on a wider diameter implant platform, creating an exposed ridge on the implant platform for the soft tissue.

This design, as demonstrated also in the literature, allows an excellent respect of the biological width, the preservation of the soft tissues such as the preservation of the marginal level of bone. Consequently, optimal aesthetic results are expected.



## IMPLANT: ABUTMENT CONNECTION

The BT SAFE implant line has a MORSE-TAPER hexagon (MTH) connection between implant and abutment. This connection is characterized by an 11° conical portion above a hexagonal configuration. A connection with a conical interface is able to withstand greater axial and transverse loads in comparison to a flat interface design. Furthermore, the design guides the abutment into a predictable position, with a precise fit with the inner part of the implant.

The precision of the conical connection, with its sealing properties, can help



to prevent the spreading of inflammatory bacteria at the implant-abutment interface. It also helps to avoid or reduce micro-movements.

The internal hexagon has a dual function:

- transfer the force torque during implant placement
- transfer the 3D position of the implant to the master model, as an indexing system

Internal indexing systems have significant advantages over external indexing systems because they offer longer engagement surfaces and reduce the height of the implant platform. This increases the flexibility during the design of the emergence profile for the final restoration.

Depending on the implant diameter of the BT SAFE line, the implant-abutment connection has two different configuration called KR (regular) and KW (wide).

- **KR** (regular) for implants with a diameter of Ø3.3 mm; Ø 3.7 mm; Ø 4.1 mm; Ø 4.8 mm
- **KW** (wide) for implants with a diameter of Ø 4.8 mm; Ø 6 mm

## MECHANICAL PERFORMANCE

The development of the product design has been accompanied by FEM (Finite Element Method) analysis, in-depth mechanical tests and fatigue strength tests conducted by accredited laboratories and in compliance to ISO 14801.

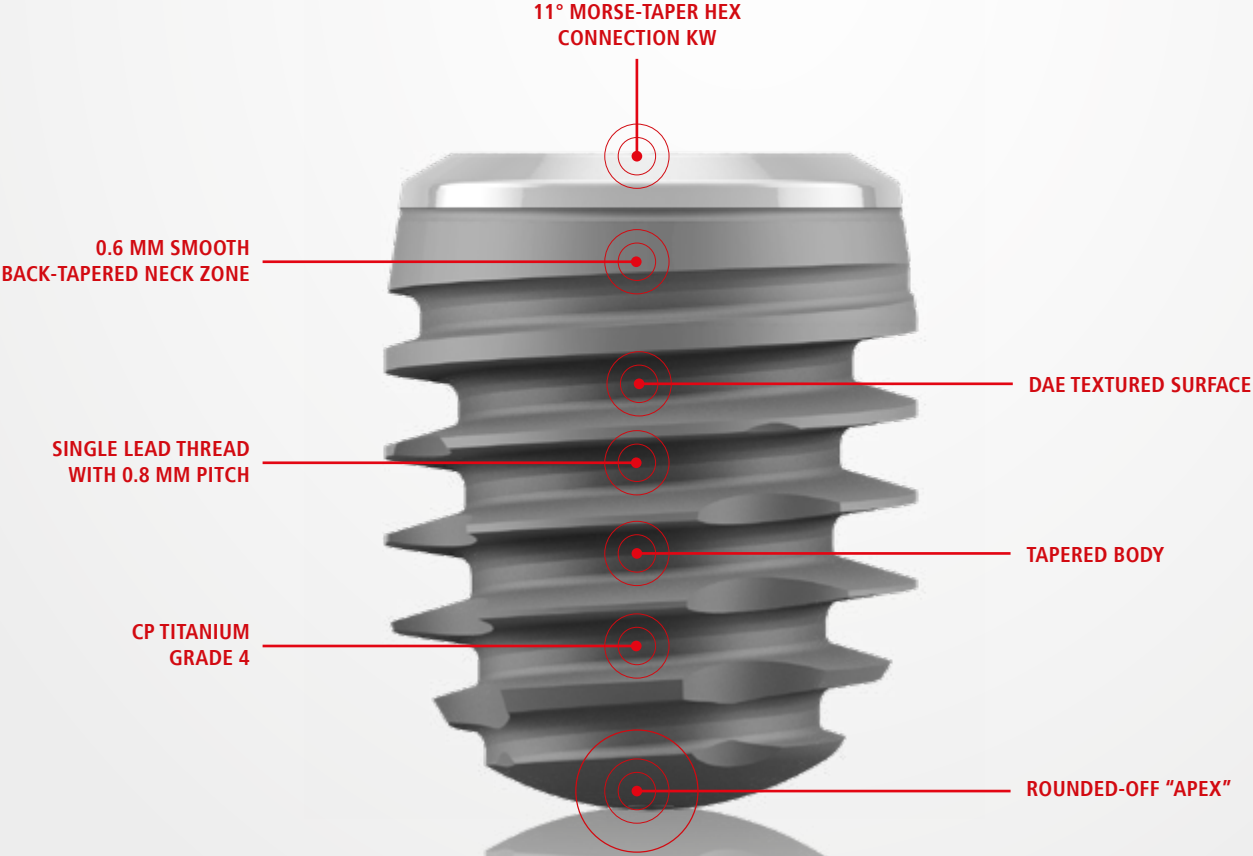
Mechanical risks play an important role in implantology, since they can increase the likelihood of cases failure, resulting in waste of time and waste of financial resources for both clinician and patient.

During the planning phase of the treatment, particular attention must be paid to avoid potential conditions of excessive load in both implants and prosthetic components, such as:

- Inadequate number of implants
- Inadequate implants length and /or implants diameter
- Excessive length of lever arms
- Incorrect positioning of the prosthesis
- Occlusal interferences with excessive lateral forces
- Parafunctions of the patient
- Inadequate procedures during the prosthesis preparation
- Inadequate adaptation of the prosthesis
- Trauma resulting from accidents or from the patient's habits

As a general rule, the implant with the largest possible diameter must be always used. Due to the reduced mechanical stability, implant with small diameter (<3.7 mm) should be used only in cases where low mechanical load is expected

4. BT NANO IMPLANT



## SOLUTIONS FOR NON-STANDARD INDICATIONS: BT NANO

In order to plan the treatment and to position the implant correctly, it is necessary to be aware of the required surgical techniques and to have an adequate specialized training. Prior to any implant surgery an accurate medical history of the patient must be performed (clinical and radiographic analysis are necessary) and all possible risks must be assessed.

Patient expectations must also be well defined. Close communication between the patient, the dentist, the surgeon and the dental technician is essential to obtain the desired prosthetic result. A well-designed surgical protocol based on preoperative examinations and treatment planning is the prerequisite for a successful outcome.

In specific clinical situations, a specifically designed implant type / system is more suitable than the standard implant lines. BT SAFE implant line is extended by BT NANO, a 5 mm a./o. 6 mm short implant in 3 different diameters (4.2 mm / 4.8 mm / 6 mm) which can be inserted using the existing BT SAFE surgical kit. It helps to avoid extensive augmentation procedures and is considered as a splinted support for longer, regular BTK implants. Please note that BT NANO requires KW (konic wide = Ø 3.4 mm) prosthetic componentry.

### LIMITED INDICATIONS

#### Short Implants (e.g. BT NANO)

Due to their reduced surface area for bone anchorage, implants with length 6 mm or less are to be used exclusively for the following indications:

- as an additional implant combined with longer than 6 mm implants to support implant-borne restorations
- as an auxiliary implant for implant-borne bar designs supporting full dentures in extremely atrophied jaws.



### CHARACTERISTICS OF THE BT NANO IMPLANT

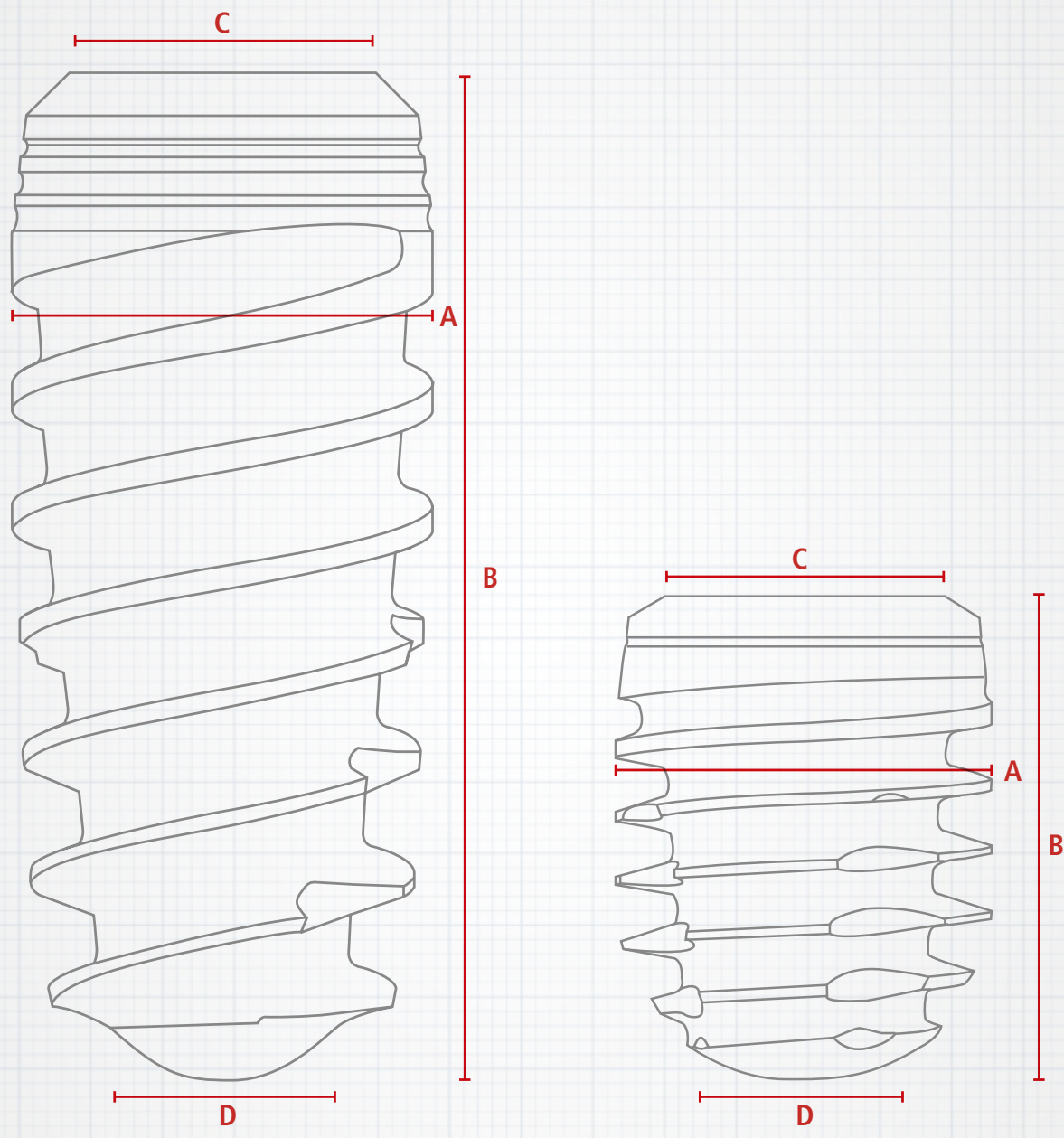
BT NANO is the ultra-short conical body implant line made of commercially pure, cold worked titanium Grade 4 and feature the DAE (dual acid-etched) surface. BT NANO is a bone-level and self-tapping implants. The special back-tapered design of the coronal portion, with a smooth portion of 0.6 mm, provides excellent management of the cortical bone. The nominal maximum diameter of the implants is positioned 1.5 mm from the platform helping to create a seal with no stress for the cortical bone. The integrated design between implant interface and abutment, narrowed that the implant platform, allows to preserve the soft tissues such as the biological width (platform switching concept).

The tapering shape of the implant body, combined with the design of the thread is planned to allow a gradual condensation of the bone in the radial direction ensuring a good primary stability in the coronal level, where there is the greatest implant seal, even in the presence of poor quality bone. BT NANO has a optimized design to resist lateral loads. The thread is designed to have a surface area 27% greater compared to a traditional screw implant of the same size and it is sharp up to 2 mm from the platform, where it becomes slightly square.

The conical connection ensures perfect seal between implant and abutment, eliminating the possibility of micro-movements and infiltrated bacteria. BT NANO implant offers on abutment connection based on the well-proven 11° morse-taper hexagon having a KW (wide)corresponding prosthetic components.

## IMPLANT PORTFOLIO BT SAFE AND BT NANO

MORSE TAPER KR	implant length in mm <b>B</b>								APEX TIP ∅ / mm <b>D</b>	
	∅ mm <b>A</b>	5	6	8	10	12	14	16		18
	<b>KONIC REGULAR</b> (KR) <b>C</b>	<b>BT SAFE</b> M1.6 occlusal thread / prosthetic platform ∅ 2.8 mm / smooth neck portion 0.7 mm								
	<b>3,3</b>	-	-	-	120KR33L	120KR33N	120KR33Q	-	-	1.8
	<b>3,7</b>	-	-	120KR37J	120KR37L	120KR37N	120KR37Q	120KR37S	-	2.0
	<b>4,1</b>	-	120KR41G	120KR41J	120KR41L	120KR41N	120KR41Q	120KR41S	120KR41T	2.3
	<b>4,8</b>	-	120KR48G	120KR48J	120KR48L	120KR48N	120KR48Q	-	-	2.8
	<b>KONIC WIDE</b> (KW) <b>C</b>	<b>BT SAFE</b> M1.8 occlusal thread / prosthetic platform ∅ 3.4 mm / smooth neck portion 0.7 mm								
	<b>4,8</b>	-	120KW48G	120KW48J	120KW48L	120KW48N	120KW48Q	-	-	2.8
	<b>6,0</b>	-	120KW60G	120KW60J	120KW60L	-	-	-	-	3.5
MORSE TAPER KW	implant length in mm <b>B</b>								APEX TIP ∅ / mm <b>D</b>	
	∅ mm <b>A</b>	5	6	8	10	12	14	16		
	<b>KONIC WIDE</b> (KW) <b>C</b>	<b>BT NANO</b> M1.8 occlusal thread / prosthetic platform ∅ 3.4 mm / smooth neck portion 0.6 mm								
	<b>4,2</b>	123KW42E	123KW42G	-	-	-	-	-	-	2.4
<b>4,8</b>	123KW48E	123KW48G	-	-	-	-	-	-	3.0	
<b>6,0</b>	123KW60E	123KW60G	-	-	-	-	-	-	3.8	



The color codes applied for different implant diameters and prosthetic platforms (regular KR / wide KW) are indicated below:

	PURPLE	WHITE	BLUE	GREY	YELLOW	DARK YELLOW	GREEN
IMPLANT DIAMETER Ø	3,3	3,7	4,1	4,2	4,8	4,8	6,0
PROSTHETIC PLATFORM MTH	KR	KR	KR	KW	KR	KW	KW

## HANDLING OF STERILE IMPLANT PACKAGING

### CAUTION

The sealed package of the medical device (MD) must be opened in a surgically suitable environment.

The removal of the implant and of the cover screw, if provided, must be carried out using sterilized instruments, avoiding any contact with non-sterile surfaces.

The sterility of the medical device is only guaranteed if the following conditions are met:

the expiry date stated on the packaging is still valid; there is a red dot on the sterile vial that signals the successful operation of gamma ray irradiation; the sealed package has not been opened and does not show damage or perforations. If only one of the aforementioned conditions is not respected, the device must not be used.

The device is disposable; the reuse can compromise the safety features of the device making it inappropriate for its intended use. BIOTEC explicitly declares that the MD is for single use and assumes no responsibility for any re-use by users.



1

BTK dental implants are supplied sterile in a double-vial package. The implant diameter, length and lot are shown on the label located in the vial containing the implant and in the outer label on the back of the packaging.



2

Open the blister from the back by breaking the outer label, and take out the vial.



3

The top lid of the vial is protected by the seal label. The color of the seal label identifies the diameter of the implant. To facilitate compliance with the traceability requirement of the medical device, there are two detachable patient-labels in the vial. One must be stuck onto the patient's medical record and one onto the patient's implant passport.



4

Open the external vial and withdraw the internal vial containing the implant in a surgically suitable environment. The internal vial must be handled with sterile gloves.



5

Remove the safety cap of the sterile inner vial, which always includes the sterile closure screw. **WARNING** The internal vial consists of 3 parts. The cover screw (locking screw), if provided, is placed in the vial cap. Hold the vial upright to prevent the devices from leaking out. Unscrew the central part of the vial, to access the implant.



6

Some implant lines are supplied with mounting device connected to the implant, other lines are supplied without. Depending on the different configuration, use the appropriate instrument for the implant withdrawal from the vial and for the insertion of the same in the previously prepared implant site. The BTK dental implants can be positioned manually with the Reversible Torque Wrench or they can be inserted using the contra-angle handpiece. A range of 15 - 25 rpm is recommended for implant insertion and not to exceed the maximum torque indicated by BTK.

## IMPLANT INSERTION



If a (partial / complete) tapping has been performed before implant insertion, the implant should be placed carefully on the implant site by performing a counterclockwise half rotation to engage the implant with the prepared thread.

After inserting into the thread, the implant can be guided in its final position clockwise, making sure that the implant is inserted at the desired depth and that the connection is intact.

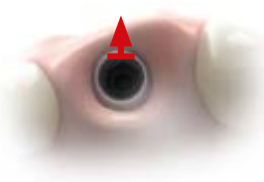
**WARNING** The "implant driver" insertion drivers for the Morse-taper hexagon implant connection must be removed with delicate off-axis movements before removing them.



Insert the implant slowly in the previously prepared site.

A range of 15-25 rpm is recommended. During insertion, do not exceed the maximum torque values indicated below:

- **implant  $\leq$  Ø 3,7 mm:**  
Insertion torque max. 35 - 45 Ncm
- **implant  $>$  Ø 3,7 mm:**  
Insertion torque max. 45 - 65 Ncm



In the cap of the internal vial there is, for each implant family, the corresponding cover screw (locking screw), sterile and ready for use.

Use sterile saline solution to carefully clean the implant connection from any organic residues. Therefore, make sure that it is clean and dry, before placing the cover screw (locking screw) or any prosthetic components that have been decided to be connect to the implant.

The cover screw is the chosen solution for the closed healing mode. To remove it more easily at the end of the healing period, a small amount of sterile vaseline or sterile chlorhexidine gel can be applied to the thread of the cover screw or healing cap before tightening it manually (5-8 Ncm) on the BTK implant, using a driver with a hex connection.



It is advisable to perform a postoperative x-ray check.

# SURGICAL KIT 624NA001



**The Surgical KIT 624NA001** contains all the tools necessary for the application of the IS KONE – BT SAFE – BT NANO – IS+ implants.



## SIMPLICITY REDEFINED ONE KIT

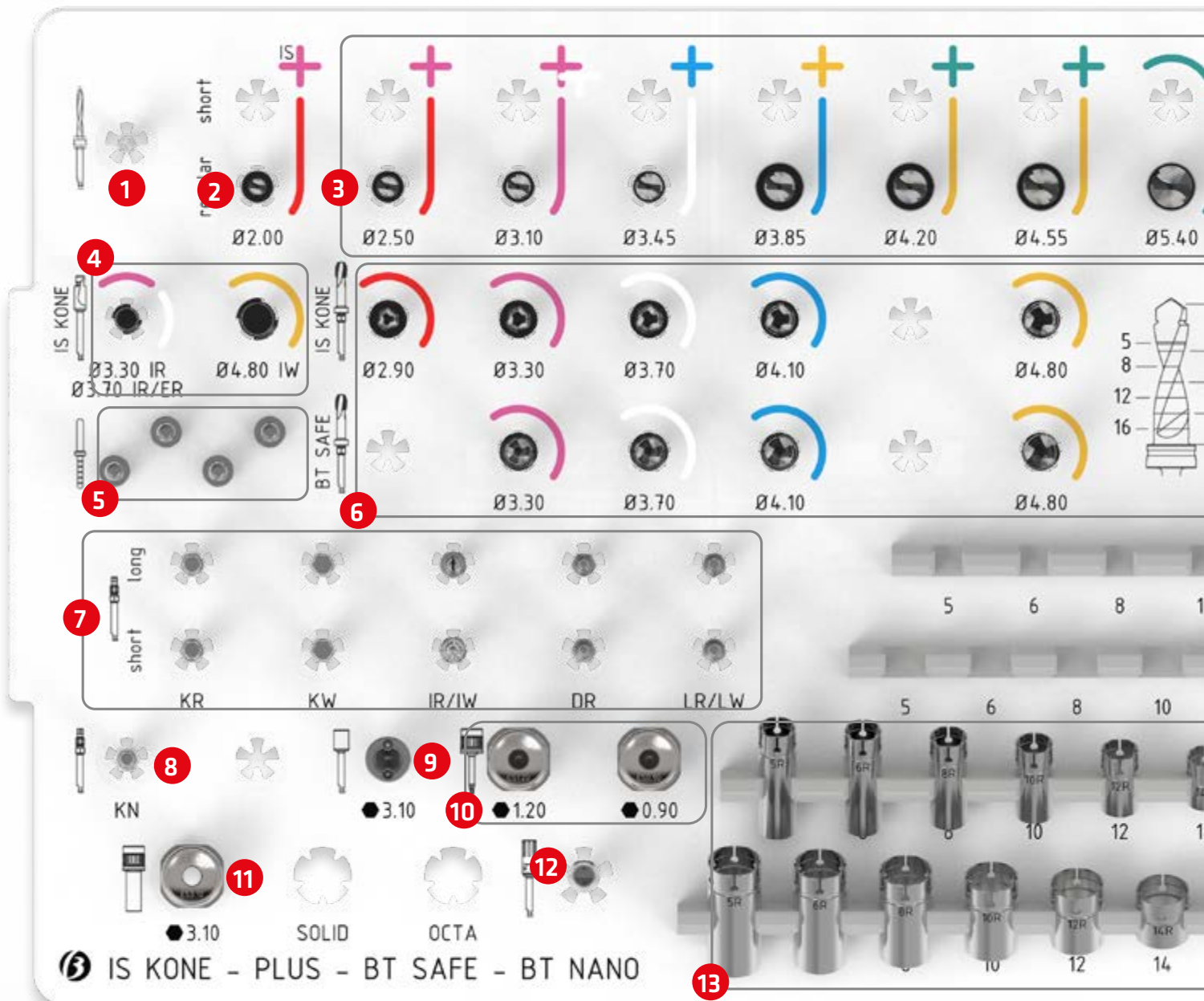
The surgical tray is used for the secure storage and sterilization of surgical and auxiliary instruments.

The surgical tray is made of a highly shock-proof thermoplastic, which is well established in medical applications and the material is suitable for frequent sterilization in the autoclave.

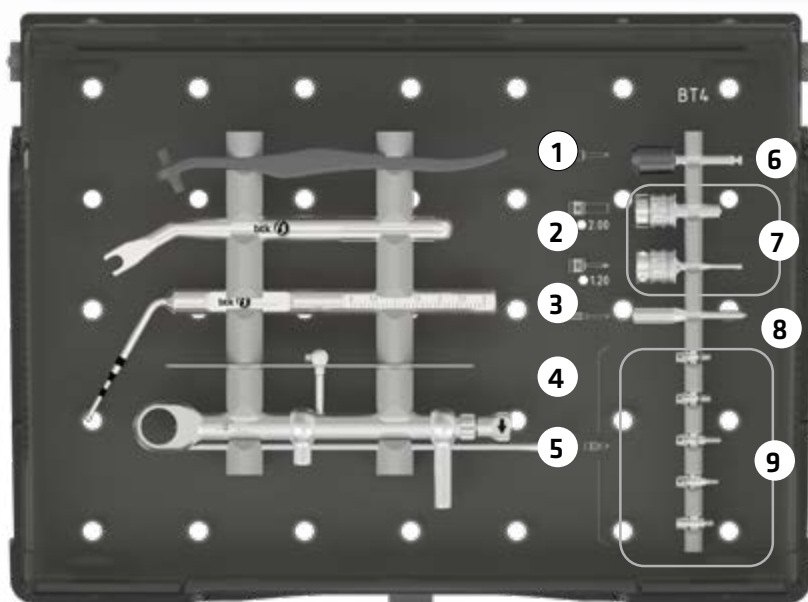
General guidelines for the cleaning and sterilization are given in the corresponding GENERAL SURGICAL GUIDELINES (Ref. 06200117).

# SURGICAL KIT (codice 624NA002)

Contains all the essential instruments for the application of IS KONE - PLUS (IS+ - IC+ - EC+) - BT SAFE - BT NANO implants.



IS KONE - PLUS - BT SAFE - BT NANO




- |  |  |
|--|--|
| <p>① <b>GUIDE SHAFT</b><br/>502MA002   Ø 2.5 mm</p> <p>② <b>ANGLED WRENCH</b><br/>30°<br/>502MA003   HEX 3.10</p> <p>③ <b>DEPTH GAUGE</b><br/>540MA011   Ø 1.8 mm<br/>L108 mm 30°</p> <p>④ <b>SURGICAL GUIDE</b><br/>BT4<br/>502MA006   (PIN Ø2.5mm)</p> <p>⑤ <b>TORQUE WRENCH JD,</b><br/><b>REVERSIBLE</b><br/>501JD003   90 Ncm</p> | <p>⑥ <b>BONE PROFILER HS</b><br/>(BT4)<br/>435HS431   Ø 4.3 mm L25 mm</p> <p>⑦ <b>SCREWDRIVER JD</b><br/>(BT4)<br/>530JD021   HEX 2.0 L10 mm<br/>530JD014   HEX 1.20 L15 mm<br/>Reduced</p> <p>⑧ <b>PARALLELISM PIN</b><br/>(BT4)<br/>540MA007   M1.4 L26mm</p> <p>⑨ <b>BONE PROFILER GUIDE</b><br/>435EN001.02   EN<br/>435ER001.02   ER<br/>435IR001.02   IR<br/>435KR002.02   KR<br/>435KW001.02   KW</p> |
|--|--|





Dispositivi medici a marchio CE - Medical devices with CE mark


**1**  
**SHARP LANCE DRILL**  
  
401HR203 | Ø 2 mm L33 mm


**2**  
**TWIST DRILL**  
  
427HR200 | Ø 2 mm L36.5 mm


**3**  
**DRILLS**


 427HR250 | Ø 2,5 mm L36.5 mm


 427HR310 | Ø 2,75 - 3,10 mm L36.5 mm


 427HR345 | Ø 3,45 - 3,05 mm L36.5 mm

 427HR385 | Ø 3,85 - 3,4 mm L36.5 mm

 427HR420 | Ø 4.2 - 3.7 mm L36.8 mm

 427HR455 | Ø 4.55 - 4 mm L36.8 mm

 427HR540 | Ø 5.4 - 4.7 mm L36.8 mm


 427HR570 | Ø 5.7 - 4.95 mm L36.8 <mm


**4**  
**COUNTERSINK ISKONE INT-EXT**

 438HS330 | L31 mm  
Ø 3.3 mm (INT)  
Ø 3.7 mm (INT-EXT)


 438HS480 | L31 mm  
Ø 4.8 mm (INT)


**5**  
**PARALLELISM PIN/ DEPTH GAUGE**


 540MA014 | Ø 2-2,5 mm L36 mm 2 pcs


 540MA019 | Ø 2-2,5 mm L26 mm 2 pcs


**6**  
**TAPS ISKONE**


 475HR290 | Ø 2,9 mm L36 mm

 475HR330 | Ø 3,3 mm L36 mm


 475HR370 | Ø 3,7 mm L36 mm


 475HR410 | Ø 4,1 mm L36 mm


 475HR480 | Ø 4,8 mm L36 mm


 475HR600 | Ø 6 mm L36 mm


**TAPS BT SAFE**

 474HR330 | Ø 3.3 mm L31 mm


 474HR370 | Ø 3.7 mm L31 mm

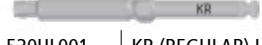
 474HR410 | Ø 4.1 mm L31 mm

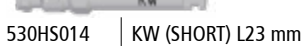
 474HR480 | Ø 4.8 mm L31 mm

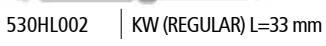
 474HR600 | Ø 6 mm L31 mm

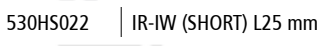
**7**  
**IMPLANT DRIVER**


 530HS013 | KR (SHORT) L23 mm

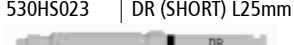
 530HL001 | KR (REGULAR) L33 mm

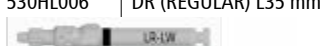
 530HS014 | KW (SHORT) L23 mm

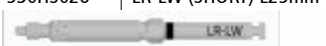
 530HL002 | KW (REGULAR) L=33 mm


 530HS022 | IR-IW (SHORT) L25 mm

 530HL005 | IR-IW (REGULAR) L35 mm


 530HS023 | DR (SHORT) L25mm

 530HL006 | DR (REGULAR) L35 mm


 530HS026 | LR-LW (SHORT) L25mm

 530HL007 | LR-LW (REGULAR) L35 mm


**8**  
**IMPLANT DRIVER**


 530HL003 | KN (REGULAR) L33 mm

**9**  
**RETENTIVE WRENCH**


 530HS017 | HEX 3.10

**10**  
**SCREWDRIVER JD**


 530JD012 | HEX 0.90 L15 mm

 530JD005 | HEX 1.20 L15 mm


**11**  
**MANUAL WRENCH - JD**


 530JD033 | ISO/HEX3.10-JD L10mm

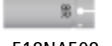
**12**  
**DRILLS EXTENSION**

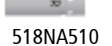
 520HS004 | L25 mm

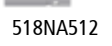
**13**  
**DRILL STOP**

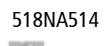
 518NA505 | H5 mm Snap Fit


 518NA506 | H6 mm Snap Fit

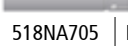
 518NA508 | H8 mm Snap Fit


 518NA510 | H10 mm Snap Fit

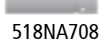
 518NA512 | H12 mm Snap Fit

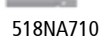
 518NA514 | H14 mm Snap Fit

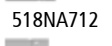
 518NA516 | H16 mm Snap Fit

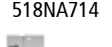
 518NA705 | H5 mm Snap Fit


 518NA706 | H6 mm Snap Fit

 518NA708 | H8 mm Snap Fit

 518NA710 | H10 mm Snap Fit

 518NA712 | H12 mm Snap Fit

 518NA714 | H14 mm Snap Fit

 518NA716 | H16 mm Snap Fit

The surgical kit with drills, taps and bone profiler without DLC coating (kit code 624NA001) is available on request.

# CHARACTERISTICS OF SURGICAL DRILLS

- the respective length to the corresponding depth strip is always the lower or upper end of the strip
- drills and taps should be replaced after max. 30 applications
- drilling must proceed with sharp drills, intermittently at 500 rpm – 600 rpm
- the laser strips correspond to the length of the implant selected.  
However, in order to increase safety drill stops may also be used
- all final drills offer attachment of suitable drill stops
- For implants with a length of 18 mm, the corresponding depth markings on drills are not provided such as the suitable drill stops are not available.

It is advisable to prepare the implant site taking into account that the length of the drill, from the tip and up to the retention collar, is equal to 18.8 mm. It is responsibility of the clinician to evaluate based on the clinical case, morphology and bone quality, as well as the inclination of the implant, how to prepare the implant site.

## SURGICAL PROTOCOLS

For successful osseointegration, a precise, not traumatic surgical technique is required, which safeguards the soft tissues and accurately prepares the implant site without overheating the bone.

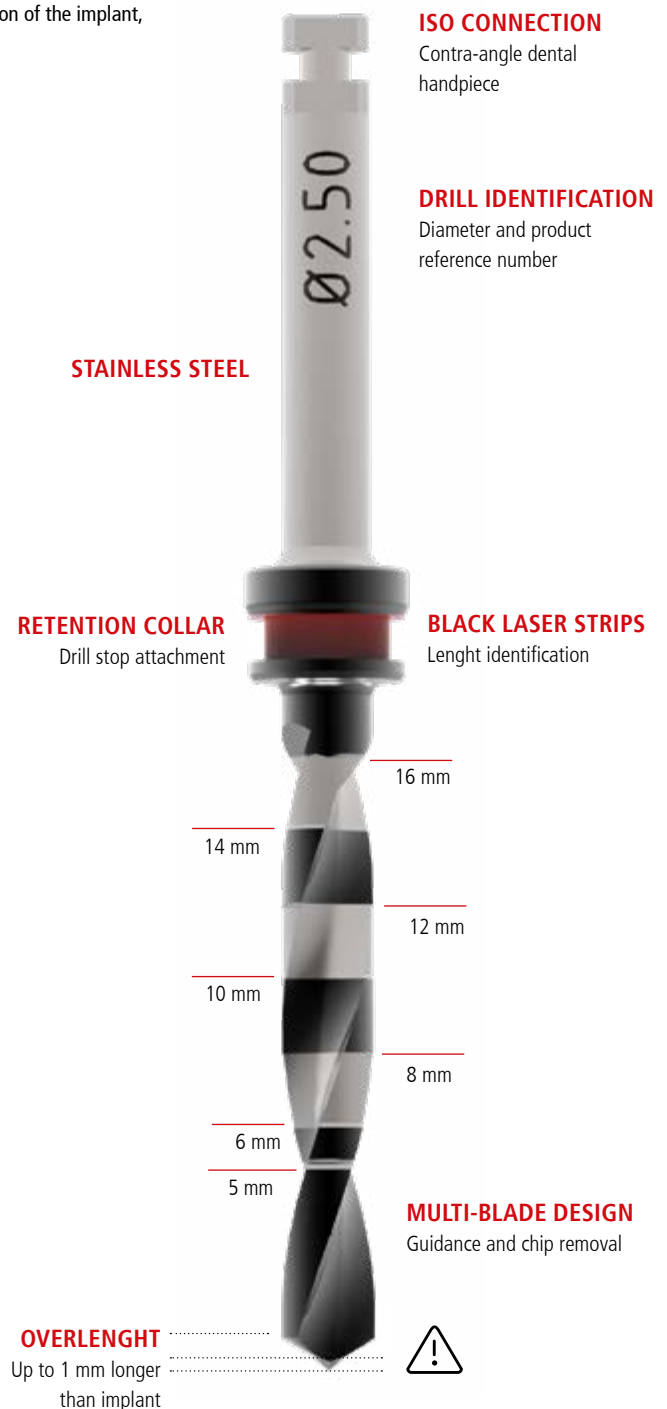
Before starting the surgical procedure and during the same procedure the following points must be taken into account:

- Check that all the necessary tools are available and fully functional.  
It is recommended to always keep an adequate supply of sterile implants and instruments.
- Do not use cutting tools more than 20 times.  
Make sure that the drills are sharp before each use.  
The effectiveness of a drill already decreases after 5/6 applications.
- Drilling must be carried out with sharp drills, intermittently at 500 - 600 rpm, always with abundant external irrigation with pre-cooled sterile saline solution and avoiding excessive pressures.
- Do not exceed the speeds indicated by BTK for drills.
- Use the drills with diameters in ascending order.
- The drills can be placed in distilled / deionized water but should not be placed in saline or Ringer's solution during surgery if they are used for more than one preparation.

## NOTE

- For implants with a length of 18 mm, the corresponding depth markings on drills are not provided such as the suitable drill stops are not available. It is advisable to prepare the implant site taking into account that the length of the drill, from the tip and up to the retention collar, is equal to 18.8 mm. It is responsibility of the clinician to evaluate based on the clinical case, morphology and bone quality, as well as the inclination of the implant, how to prepare the implant site.
- For IS KONE implants with a diameter of Ø 6 mm, the corresponding screw tap (ref 467HR600 Screw Tap HR Ø6.0mm L36mm Is Kone) is not included in the surgical kit (ref. 624NA001). This tool is OPTIONAL and must be purchased separately if necessary.

TOOL	SPEED (RPM)
LANCE DRILL	800
TWIST DRILL (PILOT) Ø 2mm	800
DRILL Ø<3.5mm	600
DRILL 3.5mm≤Ø≤4.5mm	500
DRILL Ø>4.5mm	400
COUNTERSINK	300/400
TAPS	<15

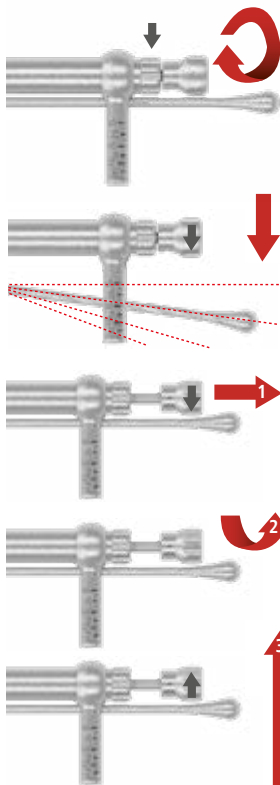


# REVERSIBLE TORQUE WRENCH

The Reversible Torque Wrench is a dismantable, multiple-use instrument that provides means of tightening implants, abutments and screws. The lever arm integrated in the Reversible Torque Wrench is pushed away from the main body to the desired torque value. A torque value indicator is mounted at 90° in relation to the lever arm and indicates different value marks.

## NOTE

Before the first and each following use, the Reversible Torque Wrench should be dismantled, cleaned, disinfected and sterilized in accordance with the instructions for use.



To dismantle the torque wrench for cleaning procedure, unscrew the wheel and then remove the inner bar where the spring is assembled.

### APPLYING THE CORRECT TORQUE VALUE

In order to achieve the desired torque value, apply the force only to the lever-arm to the desired value mark. **The following marks are indicated: 15, 25, 35, 50, 70 and 90 Ncm.** Make sure that the arrow of the inversion device is matching to the lever-arm direction.

### HOW TO CHANGE DIRECTIONS

With this type of Reversible Torque Wrench, one is able to change directions by simply pulling (1) and turning (2) the inversion device 180° in the desired direction.

This is done without removing the Reversible Torque Wrench from the attached driver in order to avoid additional manipulations and to save time.

The grey arrow on the inversion device always indicates in which direction the force is applied (3). This design was chosen to avoid additional manipulation, reduce potential sources of error while helping to save time.



DEVICE	MATERIAL	TIGHTENING TORQUE
Cover screw	Titanium GR5	from 5 to 8 Ncm (hand tight)
Healing abutment	Titanium GR5	from 5 to 8 Ncm (hand tight)
Impression Post screw, tightening to implant or implant replica	Titanium GR5	from 5 to 8 Ncm (hand tight)
Retentive screw, tightening Scan Abutment	Titanium GR5	from 5 to 8 Ncm (hand tight)
Retentive screw, temporary tightening (abutment to implant)	Titanium GR5	from 15 to 20 Ncm
Retentive screw, final tightening (abutment to implant)	Titanium GR5	from 25 to 30 Ncm
Straight abutment M.U.A.	Titanium GR5	from 25 to 30 Ncm
Retentive screw, tightening angled abutment M.U.A.	Titanium GR5	from 20 to 25 Ncm
Retentive screw, prosthesis to abutment M.U.A. - suprastructures	Titanium GR5	10 Ncm
Connector abutment to implant	Titanium GR5	from 20 to 25 Ncm

# SURGICAL PROTOCOLS

## BT SAFE

IMPLANT		DRILLS										TAPS (D1-D2)*									
		Lance drill 401HR202	Twist drill (pilot) Ø 2 426HR200	Twist drill Ø 2,7 426HR270	Twist drill Ø 3,1 426HR310	Twist drill Ø 3,45 426HR345	Twist drill Ø 3,85 426HR385	Twist drill Ø 4,2 426HR420	Twist drill Ø 4,55 426HR455	Twist drill Ø 5,4 426HR540	Twist drill Ø 5,7 426HR570	Screw tap Ø 3,3 466HR330		Screw tap Ø 3,7 466HR370		Screw tap Ø 4,1 466HR410		Screw tap Ø 4,8 466HR480		Screw tap Ø 6 466HR600	
											D1	D2	D1	D2	D1	D2	D1	D2	D1	D2	
3,3	10mm										1°	1°									
	12mm	●	●	●	○						1°	1°									
	14mm										1°	1°									
3,7	8mm												1°	1°							
	10mm												1°	1°							
	12mm	●	●	●	●	○							1°	1°							
	14mm												1°	1°							
	16mm												1°	1°							
4,1	6mm														1°	-					
	8mm														1°	-					
	10mm														1°	1°					
	12mm	●	●	●	●	●	○								1°	1°					
	14mm														1°	1°					
	16mm														1°	1°					
	18mm														1°	1°					
4,8	6mm																1°	-			
	8mm																1°	-			
	10mm	●	●	●	●	●	●	○									1°	1°			
	12mm																1°	1°			
	14mm																1°	1°			
6,0	6mm																			1°	-
	8mm	●	●	●	●	●	●	●	○											1°	1°
	10mm																			1°	1°

● Always

○ Only in presence of D1-D2-D3 bone

\* No Screw taps are necessary for D3 and D4



# BT NANO

		DRILLS									
IMPLANT		Lance drill 401HR202	Twist drill (pilot) Ø 2 426HR200	Twist drill Ø 2,7 426HR270	Twist drill Ø 3,1 426HR310	Twist drill Ø 3,45 426HR345	Twist drill Ø 3,85 426HR385	Twist drill Ø 4,2 426HR420	Twist drill Ø 4,55 426HR455	Twist drill Ø 5,4 426HR540	Twist drill Ø 5,7 426HR570
4,2	5mm	●	●	●	●	●	○				
	6mm	●	●	●	●	●	○				
4,8	5mm	●	●	●	●	●	●	●	○		
	6mm	●	●	●	●	●	●	●	○		
6,0	5mm	●	●	●	●	●	●	●	●	●	○
	6mm	●	●	●	●	●	●	●	●	●	○

- Always
- Only in presence of D1-D2 bone

**N.B.**

The above procedures should be considered indicative; it is responsibility of the clinician to evaluate potential variations of the procedure on the basis of individual case and bone density.

Due to the presence of cutting edges on drills, it is strongly recommended the use of the stop in order to avoid excessive depth of drilling that could compromise vital structures.




In case of insertion of the BT SAFE implant with a length of 18 mm (REF 120KR41T), it is recommended to monitor the insertion torques and, in case of particularly hard cortical bone, it is advisable, if necessary, to prepare the implant site using the screw tap beyond the lasered black strips, taking into account the patient's bone characteristics. This procedure is suggested to used only if there are excessive torque values compared to those indicated above (45-65 Ncm).

PICTURE	REF	PRODUCT NAME	SPECIFICATION
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## ADDITIONAL INSTRUMENTS

Optional instrumentation dedicated to the correct management of the surgical procedure.










### INITIAL PREPARATION

	490HR250	Tissue punch HR	Ø2.5mm Int
	490HR300	Tissue punch HR	Ø3mm Int
	490HR350	Tissue punch HR	Ø3.5mm Int
	490HR400	Tissue punch HR	Ø4mm Int
	490HR450	Tissue punch HR	Ø4.5mm Int
	490HR550	Tissue punch HR	Ø5.5mm Int
	490HR600	Tissue punch HR	Ø6mm Int
	401HS200	Round Drill HS	Ø2mm L30mm
	401HS201	Lance Drill HS	Ø2mm L30mm
	401HR200	Round Drill HR	Ø2mm L35mm
	401HR201	Lance Drill HR	Ø2mm L35mm










### DRILLS, LENGTH 32.5-36.8 mm (REGULAR)

	426HR200	Twist Drill HR	Ø2mm L36.5mm
	426HR250	Twist Drill HR	Ø2.5mm L36.5mm
	426HR310	Twist Step Drill HR	Ø3.1-2.75mm L36.5mm
	426HR345	Twist Step Drill HR	Ø3.45-3.05mm L36.5mm
	426HR385	Twist Step Drill HR	Ø3.85-3.4mm L36.8mm
	426HR420	Twist Step Drill HR	Ø4.2-3.7mm L36.8mm
	426HR455	Twist Step Drill HR	Ø4.55-4mm L36.8mm
	426HR540	Twist Step Drill HR	Ø5.4-4.7mm L36.8mm
	426HR570	Twist Step Drill HR	Ø5.7-4.95mm L36.8mm

### DRILLS, LENGTH 32.5-32.8 mm (SHORT)







































	426HS200	Twist Drill HS	Ø2mm L32.5mm
	426HS250	Twist Drill HS	Ø2.5mm L32.5mm
	426HS310	Twist Step Drill HS	Ø3.1-2.75mm L32.5mm
	426HS345	Twist Step Drill HS	Ø3.45-3.05mm L32.5mm
	426HS385	Twist Step Drill HS	Ø3.85-3.4mm L32.8mm
	426HS420	Twist Step Drill HS	Ø4.2-3.7mm L32.8mm
	426HS455	Twist Step Drill HS	Ø4.55-4mm L32.8mm
	426HS540	Twist Step Drill HS	Ø5.4-4.7mm L32.8mm
	426HS570	Twist Step Drill HS	Ø5.7-4.95mm L32.8mm



### DRILLS DLC, LENGTH 32.5-32.8 mm (SHORT)

	427HS200	Twist Drill HS DLC	Ø2mm L32.5mm
	427HS250	Twist Drill HS DLC	Ø2.5mm L32.5mm
	427HS310	Twist Step Drill HS DLC	Ø3.1-2.75mm L32.5mm
	427HS345	Twist Step Drill HS DLC	Ø3.45-3.05mm L32.5mm
	427HS385	Twist Step Drill HS DLC	Ø3.85-3.4mm L32.8mm
	427HS420	Twist Step Drill HS DLC	Ø4.2-3.7mm L32.8mm
	427HS455	Twist Step Drill HS DLC	Ø4.55-4mm L32.8mm
	427HS540	Twist Step Drill HS DLC	Ø5.4-4.7mm L32.8mm
	427HS570	Twist Step Drill HS DLC	Ø5.7-4.95mm L32.8mm

### DRILL STOPS (SNAP-FIT) Ø5 FOR SHORT DRILLS ≤ Ø3.45 mm

	690NA258	Stop Kit	Ø5 S5-12mm BT Safe-Is Kone-BT Nano
	521NA505	Drill Stop	H5mm Snap Fit Short





PICTURE	REF	PRODUCT NAME	SPECIFICATION
	521NA506	Drill Stop	H6mm Snap Fit Short
	521NA507	Drill Stop	H7mm Snap Fit Short
	521NA508	Drill Stop	H8mm Snap Fit Short
	521NA510	Drill Stop	H10mm Snap Fit Short
	521NA512	Drill Stop	H12mm Snap Fit Short
<b>DRILL STOPS (SNAP-FIT) Ø7 FOR SHORT DRILLS ≤Ø3.85 mm</b>			
	690NA259	Stop Kit	Ø7 S5-12mm BT Safe-Is Kone-BT Nano
	521NA705	Drill Stop	H5mm Snap Fit Short
	521NA706	Drill Stop	H6mm Snap Fit Short
	521NA707	Drill Stop	H7mm Snap Fit Short
	521NA708	Drill Stop	H8mm Snap Fit Short
	521NA710	Drill Stop	H10mm Snap Fit Short
	521NA712	Drill Stop	H12mm Snap Fit Short
<b>DRILL STOPS (SNAP-FIT) Ø5 FOR REGULAR DRILLS ≤ Ø3.45 mm</b>			
	690NA256	Stop Kit	Ø5 R5-16mm BT Safe-Is Kone-BT Nano
<b>DRILL STOPS (SNAP-FIT) Ø7 FOR REGULAR DRILLS ≤Ø3.85 mm</b>			
	690NA257	Stop Kit	Ø7 R5-16mm BT Safe-Is Kone-BT Nano
<b>ADAPTERS FOR MANUAL USE, COMPATIBLE WITH REVERSIBLE TORQUE WRENCH (JD)</b>			
	530JD031	Adapter Connection	ISO/HEX3.10-JD L35mm
	530JD032	Adapter Connection	ISO/HEX3.10-JD L7.5mm
	530JD034	Adapter Connection	ISO/HEX3.10-JD L15mm
<b>IMPLANT DRIVERS FOR MANUAL USE, COMPATIBLE WITH REVERSIBLE TORQUE WRENCH (JD)</b>			
	530JD023	Implant Driver JD Conn. KR	L15mm
	530JD024	Implant Driver JD Conn. KR	L23mm
	530JD027	Implant Driver JD Conn. KW	L15mm
<b>HANDPIECE DRIVERS FOR MACHINE USE, COMPATIBLE WITH CONTRA-ANGLE HANDPIECE (ISO)</b>			
	530HS002	Handpiece Driver	HEX0.90 L25mm
	530HS004	Handpiece Driver	HEX1.20 L25mm
	530HS005	Handpiece Driver	HEX1.20 L30mm
<b>SCREWDRIVERS FOR MANUAL USE, COMPATIBLE WITH REVERSIBLE TORQUE WRENCH (JD)</b>			
	530JD003	Screwdriver JD	HEX1.20 L5mm
	530JD004	Screwdriver JD	HEX1.20 L10mm
	530JD006	Screwdriver JD	HEX1.20 L20mm
	530JD007	Screwdriver JD	HEX1.20 L30mm
	530JD011	Screwdriver JD	HEX0.90 L10mm
	530JD036	Screwdriver JD	HEX1.50 L15mm
	530JD037	Screwdriver JD	HEX1.50 L30mm
<b>INSTRUMENTS FOR BT4 TECHNIQUE</b>			
	530HS012	Handpiece Driver	HEX1.20 L30mm Reduced
	530JD015	Screwdriver JD	HEX2.0 L5mm
	530JD038	Screwdriver JD	HEX2.0 L20mm
<b>TREPINE DRILL</b>			
	492HR350	Trepine Drill HR	Ø3.5mm Int
	492HR400	Trepine Drill HR	Ø4mm Int
	492HR450	Trepine Drill HR	Ø4.5mm Int
	492HR500	Trepine Drill HR	Ø5mm Int
	492HR600	Trepine Drill HR	Ø6mm Int

PICTURE	REF	PRODUCT NAME	SPECIFICATION
	492HR700	Trepine Drill HR	Ø7mm Int
	492HR900	Trepine Drill HR	Ø9mm Int






## PROSTHETIC MORSE-TAPER (MTD) KR-KW

### HEALING & SOFT TISSUE CONDITIONING




#### HEALING ABUTMENT Ø 1.8 mm

	201KR2A6	Healing Abutment KR	H2mm Ø1.8mm
	201KR3A5	Healing Abutment KR	H3,5mm Ø1.8mm
	201KR5A3	Healing Abutment KR	H5mm Ø1.8mm
	201KR7A0	Healing Abutment KR	H7mm Ø1.8mm







#### HEALING ABUTMENT Ø 3.5 mm

	201KR1A0	Healing Abutment KR	H1mm Ø3.5mm
	201KR2A1	Healing Abutment KR	H2mm Ø3.5mm
	201KR3A0	Healing Abutment KR	H3.5mm Ø3.5mm
	201KR5A4	Healing Abutment KR	H5mm Ø3.5mm
	201KR7A2	Healing Abutment KR	H7mm Ø3.5mm

#### HEALING ABUTMENT Ø 4.0 mm

	201KW2A0	Healing Abutment KW	H2mm Ø4mm
	201KW4A0	Healing Abutment KW	H4mm Ø4mm
	201KW6A0	Healing Abutment KW	H6mm Ø4mm

#### HEALING ABUTMENT Ø 4.5 mm

	201KR1A1	Healing Abutment KR	H1mm Ø4.5mm
	201KR2A2	Healing Abutment KR	H2mm Ø4.5mm
	201KR3A1	Healing Abutment KR	H3.5mm Ø4.5mm
	201KR5A2	Healing Abutment KR	H5mm Ø4.5mm
	201KR7A1	Healing Abutment KR	H7mm Ø4.5mm
	203KW2A1	Anatomical Healing Abutment KW	H2mm Ø4.5mm






#### HEALING ABUTMENT Ø 5.5 mm

	201KR2A3	Healing Abutment KR	H2mm Ø5.5mm
	201KR3A2	Healing Abutment KR	H3.5mm Ø5.5mm
	201KR5A5	Healing Abutment KR	H5mm Ø5.5mm
	203KW4A1	Anatomical Healing Abutment KW	H4mm Ø5.5mm
	203KW6A1	Anatomical Healing Abutment KW	H6mm Ø5.5mm

#### HEALING ABUTMENT Ø 6.5 mm

	201KR2A4	Healing Abutment KR	H2mm Ø6.5mm
	201KR3A3	Healing Abutment KR	H3.5mm Ø6.5mm
	201KR5A6	Healing Abutment KR	H5mm Ø6.5mm
	203KW4A2	Anatomical Healing Abutment KW	H4mm Ø6.5mm
	203KW6A2	Anatomical Healing Abutment KW	H6mm Ø6.5mm






















#### HEALING ABUTMENT PEEK

	208KR6A0	Millable Healing Abutment KR	H6mm 8x8mm Rotating Peek
	208KR6A2	Millable Healing Abutment KR	H6mm 6x7mm Rotating Peek
	208KR6A4	Millable Healing Abutment KR	H6mm 5x5mm Rotating Peek
	690NA070	Retentive Screw	M1.6 HEX1.20 H8.3mm
	690NA357	Milling kit for Millable Healing Abutment	















### IMPRESSION TAKING

#### IMPRESSION POST





	325KR0A0	Impression Post Pro KR	Plastic Cap
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PICTURE	REF	PRODUCT NAME	SPECIFICATION
	690NA073	Impression Post Screw	M1.6 HEX1.20 H7.9mm
	325KW0A0	Impression Post Pro KW	Plastic Cap
	690NA085	Impression Post Screw	M1.8 HEX1.20 H7.3mm
	690NA091.10	Caps Kit Pro	Ø5.1mm Kit 10pcs
<b>TRANSFER PICK-UP</b>			
	323KR0A0	Impression Post Propick-Up KR	HUseful21.5mm Long screw
	323KR0A2	Impression Post Propick-Up KR	HUseful16.5mm Short screw
	323KR0R0	Impression Post Propick-Up KR	HUseful21.5mm Rotating Long screw
	323KR0R1	Impression Post Propick-Up KR	HUseful16.5mm Rotating Short screw
	690NA071	Impression Post Pick-Up Screw	M1.6 HEX1.20 H21.4mm
	690NA072	Impression Post Pick-Up Screw	M1.6 HEX1.20 H26.4mm
	323KW0A2	Impression Post Propick-Up KW	HUseful21.5mm Long screw
	323KW0A1	Impression Post Propick-Up KW	HUseful16.5mm Short screw
	323KW0R0	Impression Post Propick-Up KW	HUseful21.5mm Rotating Long screw
	323KW0R1	Impression Post Propick-Up KW	HUseful16.5mm Rotating Short screw
	690NA087	Impression Post Pick-Up Screw	M1.8 HEX1.20 H25.3mm
	690NA086	Impression Post Pick-Up Screw	M1.8 HEX1.20 H20.3mm
<b>IMPLANT REPLICA</b>			
	301KR0A0	Implant Replica KR	
	301KW0A0	Implant Replica KW	
<b>DIGITAL IMPLANT REPLICA</b>			
	305KR0A0	Digital Implant Replica KR	
	305KW0A0	Digital Implant Replica KW	
	690NA378	Implant Replica Screw	M2 HEX 1.20 H5mm FH

## TEMPORARY RESTORATION



<b>TEMPORARY ABUTMENTS</b>			
	210KR1A0	Temporary Abutment KR	
	210KR1R0	Temporary Abutment KR	Rotating
	210KR2A0	Temporary Abutment KR	H2mm
	210KR2R0	Temporary Abutment KR	H2mm Rotating
	210KR3A0	Temporary Abutment KR	H3mm
	210KR3R0	Temporary Abutment KR	H3mm Rotating
	215KR0A0	Temporary Abutment KR	Peek
	215KR2A0	Temporary Abutment KR	H2mm Peek
	215KR3A0	Temporary Abutment KR	H3mm Peek
	690NA070	Retentive Screw	M1.6 HEX1.20 H8.3mm
	210KW1A0	Temporary Abutment KW	
	210KW1R0	Temporary Abutment KW	Rotating
	215KW0A0	Temporary Abutment KW	Peek
	690NA084	Retentive screw	M1.8 HEX1.20 H7mm

## CEMENT-RETAINED PROSTHESIS

<b>STRAIGHT ABUTMENT Ø 3.5 mm</b>			
	220KR1A2	Straight Abutment KR	H1mm Ø3.5mm
	220KR2A0	Straight Abutment KR	H2mm Ø3.5mm
	220KR3A0	Straight Abutment KR	H3.5mm Ø3.5mm
<b>STRAIGHT ABUTMENT Ø 4.5 mm</b>			
	220KR1A3	Straight Abutment KR	H1mm Ø4.5mm

PICTURE	REF	PRODUCT NAME	SPECIFICATION
	220KR2A1	Straight Abutment KR	H2mm Ø4.5mm
	220KR3A1	Straight Abutment KR	H3.5mm Ø4.5mm
<b>STRAIGHT ABUTMENT Ø 5.5 mm</b>			
	220KR1A1	Straight Abutment KR	H1.5mm Ø5.5mm
	220KR2A2	Straight Abutment KR	H2mm Ø5.5mm
	220KR3A2	Straight Abutment KR	H3.5mm Ø5.5mm
<b>AESTHETIC ABUTMENT Ø 4.5 mm</b>			
	219KR2A3	Aesthetic Abutment KR	H2mm Ø4.5mm
	219KR3A3	Aesthetic Abutment KR	H3.5mm Ø4.5mm
<b>AESTHETIC ABUTMENT Ø 5.5 mm</b>			
	219KR2A4	Aesthetic Abutment KR	H2mm Ø5.5mm
	219KR3A1	Aesthetic Abutment KR	H3mm Ø5.5mm
	219KR3A4	Aesthetic Abutment KR	H3.5mm Ø5.5mm
	219KW2A1	Aesthetic Abutment KW	H2mm Ø5.5mm
	219KW3A1	Aesthetic Abutment KW	H3mm Ø5.5mm
<b>AESTHETIC ABUTMENT Ø 6.5 mm</b>			
	219KR2A5	Aesthetic Abutment KR	H2mm Ø6.5mm
	219KR3A5	Aesthetic Abutment KR	H3.5mm Ø6.5mm
	219KW2A2	Aesthetic Abutment KW	H2mm Ø6.5mm
	219KW3A2	Aesthetic Abutment KW	H3mm Ø6.5mm
<b>ANGLED ABUTMENT 10°</b>			
	220KR1C0	Angled Abutment KR	10° H1mm Ø3.5mm
	220KR2C0	Angled Abutment KR	10° H2mm Ø3.5mm
	220KR3C0	Angled Abutment KR	10° H3.5mm Ø3.5mm
	220KR1C1	Angled Abutment KR	10° H1mm Ø4.5mm
	220KR2C1	Angled Abutment KR	10° H2mm Ø4.5mm
	220KR3C1	Angled Abutment KR	10° H3.5mm Ø4.5mm
	220KR2C2	Angled Abutment KR	10° H2mm Ø5.5mm
	220KR3C2	Angled Abutment KR	10° H3.5mm Ø5.5mm
<b>ANGLED ABUTMENT 20°</b>			
	220KR1E0	Angled Abutment KR	20° H1mm Ø3.5mm
	220KR2E2	Angled Abutment KR	20° H2mm Ø3.5mm
	220KR3E0	Angled Abutment KR	20° H3.5mm Ø3.5mm
	220KR1E1	Angled Abutment KR	20° H1mm Ø4.5mm
	220KR2E3	Angled Abutment KR	20° H2mm Ø4.5mm
	220KR3E1	Angled Abutment KR	20° H3.5mm Ø4.5mm
	220KR2E4	Angled Abutment KR	20° H2mm Ø5.5mm
	220KR3E2	Angled Abutment KR	20° H3.5mm Ø5.5mm
	220KW4E0	Angled Abutment KR	20° H4mm Ø5.5mm
	220KW4E1	Angled Abutment KR	20° H4mm Ø6.5mm
<b>ANGLED ABUTMENT 30°</b>			
	220KR1G0	Angled Abutment KR	30° H1mm Ø3.5mm
	220KR2G0	Angled Abutment KR	30° H2mm Ø3.5mm
	220KR3G0	Angled Abutment KR	30° H3.5mm Ø3.5mm
	220KR1G1	Angled Abutment KR	30° H1mm Ø4.5mm
	220KR2G1	Angled Abutment KR	30° H2mm Ø4.5mm
	220KR3G1	Angled Abutment KR	30° H3.5mm Ø4.5mm

PICTURE	REF	PRODUCT NAME	SPECIFICATION
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	220KR2G2	Angled Abutment KR	30° H2mm Ø5.5mm
	220KR3G2	Angled Abutment KR	30° H3.5mm Ø5.5mm

### RETENTIVE SCREWS FOR ABUTMENTS

	690NA070	Retentive Screw	M1.6 HEX1.20 H8.3mm
	690NA084	Retentive screw	M1.8 HEX1.20 H7mm

NOTE The retentive screw 690NA070 is used with all types of KR abutments mentioned above; the retentive screw 690NA084 is used with all types of KW abutments mentioned above.




### SCREW-RETAINED/CEMENT-RETAINED PROSTHESIS

#### BT LINK

	246KR1A0	BT Link KR	H1mm Ø4.1mm
	246KR1A1	BT Link KR	H1mm Ø4.1mm Rotating
	247KR1A0	Base BT Link KR	H1mm Ø4.1mm no Cap.
	247KR1A1	Base BT Link KR	H1mm Ø4.1mm no Cap. Rot.
	246KR2A0	BT Link KR	H2mm Ø4.1mm
	246KR2A1	BT Link KR	H2mm Ø4.1mm Rotating
	247KR2A0	Base BT Link KR	H2mm Ø4.1mm no Cap.
	247KR2A1	Base BT Link KR	H2mm Ø4.1mm no Cap. Rot
	246KR3A0	BT Link KR	H3mm Ø4.1mm
	246KR3A1	BT Link KR	H3mm Ø4.1mm Rotating
	247KR3A0	Base BT Link KR	H3mm Ø4.1mm no Cap.
	247KR3A1	Base BT Link KR	H3mm Ø4.1mm no Cap. Rot
	205NA001.05	Castable Plastic Abut. BT Link	H1mm Ø4.7mm Kit 5pcs
	246KW1A0	BT Link KW	H1mm Ø4.5mm
	247KW1A0	Base BT Link KW	H1mm Ø4.5mm no Cap.
	246KW1A1	BT Link KW	H1mm Ø4.5mm Rotating
	247KW1A1	Base BT Link KW	H1mm Ø4.5mm no Cap. Rot
	205NA002.05	Castable Plastic Abut. BT Link	H1mm Ø5.2mm Kit 5pcs
	690NA083	Retentive Screw	M1.6 HEX1.20 H8.3mm FH
	690NA118	Retentive Screw	M1.8 HEX1.20 H6.9mm FH

NOTE The retentive screw 690NA083 is used for components with KR connection; retentive screw 690NA118 is used for components with KW connection.





#### BT LINK - SECTIONABLE







	249KR1A0	Base BT Link KR	H1mm Ø4.1mm Multi Length Closed
	249KR1A1	Base BT Link KR	H1mm Ø4.1mm Multi Length Closed Rotating
	249KR2A0	Base BT Link KR	H2mm Ø4.1mm Multi Length Closed
	249KR2A1	Base BT Link KR	H2mm Ø4.1mm Multi Length Closed Rotating
	249KR3A0	Base BT Link KR	H3mm Ø4.1mm Multi Length Closed
	249KR3A1	Base BT Link KR	H3mm Ø4.1mm Multi Length Closed Rotating
	690NA083	Retentive Screw	M1.6 HEX1.20 H8.3mm FH
	690NA239	Retentive Screw	M1.6 HEX1.50 H7.8mm FH

#### SIR LINK

	244KR0A0	SIR Link KR	H0.8mm Ø4.1mm
	244KR2A0	SIR Link KR	H2mm Ø4.5mm
	244KR3A0	SIR Link KR	H3mm Ø4.5mm
	690NA083	Retentive Screw	M1.6 HEX1.20 H8.3mm FH







#### BT GRIP

	530JD036	Screwdriver JD	HEX1.50 L15mm
	530JD037	Screwdriver JD	HEX1.50 L30mm
	248KR1A0	Base BT Link KR	H1mm Ø4.1mm Multi Length
	248KR1A1	Base BT Link KR	H1mm Ø4.1mm Multi Length Rotating











PICTURE	REF	PRODUCT NAME	SPECIFICATION
	248KR2A0	Base BT Link KR	H2mm Ø4.1mm Multi Length
	248KR2A1	Base BT Link KR	H2mm Ø4.1mm Multi Length Rotating
	248KR3A0	Base BT Link KR	H3mm Ø4.1mm Multi Length
	248KR3A1	Base BT Link KR	H3mm Ø4.1mm Multi Length Rotating
	690NA083	Retentive Screw	M1.6 HEX1.20 H8.3mm FH
	690NA239	Retentive Screw	M1.6 HEX1.50 H7.8mm FH

NOTE The BT LINK 248KR Base is supplied with both the standard retentive screw for KR Ti Bases (690NA083) and the BT Grip retentive screw (690NA239), specifically designed to be used with the BT Grip screwdriver (HEX 1.50), for managing tilted screw channels.

#### CAST-ON TECHNIQUE




	240KR1A0	CoCr Abutment KR	H1.5mm
	240KR1R0	CoCr Abutment KR	H1.5mm Rotating
	690NA070	Retentive Screw	M1.6 HEX1.20 H8.3mm
	240KW1A0	CoCr Abutment KW	H1.5mm
	240KW1R0	CoCr Abutment KW	H1.5mm Rotating
	690NA084	Retentive screw	M1.8 HEX1.20 H7mm

#### SCAN ABUTMENT

	351KR1A0	Scan Abutment Extra-oral KR	
	351KR2A0	Scan Abutment Extra-oral KR	H2mm
	351KR3A0	Scan Abutment Extra-oral KR	H3mm
	352KR1A0	Scan Abutment Intra-oral KR	
	352KR2A0	Scan Abutment Intra-oral KR	H2
	352KR3A0	Scan Abutment Intra-oral KR	H3
	690NA083	Retentive Screw	M1.6 HEX1.20 H8.3mm FH
	351KW1A0	Scan Abutment Extra-oral KW	
	352KW1A0	Scan Abutment Intra-oral KW	
	690NA118	Retentive Screw	M1.8 HEX1.20 H6.9mm FH

### SCREW-RETAINED PROSTHESIS BT4 SLIM



#### ABUTMENTS FOR SOFT TISSUE ATTACHMENT PRESERVATION

	268KR1R0	BT4 Slim Straight Abutment KR	Rotating H1mm
	268KR2R0	BT4 Slim Straight Abutment KR	Rotating H2mm
	268KW1R0	BT4 Slim Straight Abutment KW	Rotating H1mm
	268KW2R0	BT4 Slim Straight Abutment KW	Rotating H2mm




#### COVERING CAPS BT4 SLIM

	330BU0A0.04	Covering Caps BT4 Slim	H4.1 Kit 4pcs
	690NA024	Retentive Screw	M1.4 HEX1.20 10N

#### BT4 SLIM INTERIM RESTORATION

	269BU0A0	BT4 Slim Titanium Abutment	
	207BU1R0	Castable Plastic Ab. BT4 slim	
	690NA024	Retentive Screw	M1.4 HEX1.20 10N
	311BU0A0	Impression Post Pick-up BT4 Slim	with long Screw
	690NA031	Impression Post Pick-Up Screw	M1.4 HEX1.20 H17mm
	303BU0A0	Abutment Replica BT4 Slim	
	305BU0A0	Digital Abutment Replica BT4 Slim	
	690NA378	Implant Replica Screw	M2 HEX 1.20 H5mm FH

#### SCAN ABUTMENT BT4 SLIM

	351BU1A1	Scan Abutment Extra-oral BU	Rotating
	352BU1A1	Scan Abutment Intra-oral BU	Rotating
	690NA078	Retentive Screw	M1.4 HEX1.20 H4.6mm FH








PICTURE	REF	PRODUCT NAME	SPECIFICATION
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BT LINK BT4 SLIM			
	246BU1A1	BT Link BU	H1mm Ø4.1mm Rotating
	247BU1A1	Base BT Link BU	H1mm Ø4.1mm no Cap. Rot.
	205NA001.05	Castable Plastic Abut. BT Link	H1mm Ø4.7mm Kit 5pcs
	248BU1A0	Base BT Link BU	H1mm Ø4.1mm Multi Length Rotating
	690NA078	Retentive Screw	M1.4 HEX1.20 H4.6mm FH
	690NA238	Retentive Screw	M1.4 HEX1.50 H4.1mm FH



NOTE The BT LINK 248BU Base is supplied with both the standard retentive screw for BU Ti Bases (690NA078) and the BT Grip retentive screw (690NA238), specifically designed to be used with the BT Grip screwdriver (HEX 1.50), for managing tilted screw channels when using MUAs Slim.









CAST-ON TECHNIQUE BT4 SLIM			
	240BU1R0	CoCr Abutment BU	H1.5mm Rotating
	690NA024	Retentive Screw	M1.4 HEX1.20 10N




## SCREW-RETAINED PROSTHESIS FOR ALL-ON-4TM, ALL-ON-6TM PROTOCOLS

BT4 STRAIGHT ABUTMENT			
	265KR1R0	BT4 Straight Abutment KR	Rotating H1mm
	265KR2R0	BT4 Straight Abutment KR	Rotating H2mm
	265KR3R0	BT4 Straight Abutment KR	Rotating H3mm
	265KR4R0	BT4 Straight Abutment KR	Rotating H4mm
	265KW1R0	BT4 Straight Abutment KW	Rotating H1mm
	265KW2R0	BT4 Straight Abutment KW	Rotating H2mm
	265KW3R0	BT4 Straight Abutment KW	Rotating H3mm

BT4 ANGLED ABUTMENT			
	266KR2L0	BT4 Angled Abutment KR	17° H2mm Ø4.8mm
	266KR3L0	BT4 Angled Abutment KR	17° H3mm Ø4.8mm
	266KR4L0	BT4 Angled Abutment KR	17° H4mm Ø4.8mm
	266KR3G0	BT4 Angled Abutment KR	30° H3mm Ø4.8mm
	266KR4G0	BT4 Angled Abutment KR	30° H4mm Ø4.8mm
	690NA075	Retentive Screw BT4	M1.6 Angled abutment KR
	266KW3L0	BT4 Angled Abutment KW	17° H3mm Ø4.8mm
	266KW3G0	BT4 Angled Abutment KW	30° H3mm Ø4.8mm
	690NA093	Retentive Screw BT4	M1.8 Angled abutment KW

COVERING CAPS BT4			
	330NA0A0.04	Covering Caps BT4	H5 Kit 4pcs
	690NA024	Retentive Screw	M1.4 HEX1.20 10N

BT4 INTERIM RESTORATION			
	267NA0A0	BT4 Titanium Abutment	
	207NA0A0	Castable Plastic Abutment BT4	
	690NA024	Retentive Screw	M1.4 HEX1.20 10N
	311NA0A0	Impression Post Pick-up BT4	with long Screw
	690NA031	Impression Post Pick-Up Screw	M1.4 HEX1.20 H17mm
	303NA0A0	Abutment Replica BT4	
	305BT0A0	Digital Abutment Replica BT4	
	690NA378	Implant Replica Screw	M2 HEX 1.20 H5mm FH

SCAN ABUTMENT BT4			
	351BT1A1	Scan Abutment Extra-oral BT	Rotating
	352BT1A1	Scan Abutment Intra-oral BT	Rotating
	690NA078	Retentive Screw	M1.4 HEX1.20 H4.6mm FH

PICTURE	REF	PRODUCT NAME	SPECIFICATION
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#### BT LINK BT4

	246BT1A1	BT Link BT	H1mm Ø4.8mm Rotating
	247BT1A1	Base BT Link BT	H1mm Ø4.8mm no Cap. Rot.
	205NA003.05	Castable Plastic Abut. BT Link	H1mm Ø5.4mm Kit 5pcs
	248BT1A0	Base BT Link BT	H1mm Ø4.8mm Multi Length Rotating
	690NA078	Retentive Screw	M1.4 HEX1.20 H4.6mm FH
	690NA238	Retentive Screw	M1.4 HEX1.50 H4.1mm FH

NOTE The BT LINK 248BU Base is supplied with both the standard retentive screw for BT Ti Bases (690NA078) and the BT Grip retentive screw (690NA238), specifically designed to be used with the BT Grip screwdriver (HEX 1.50), for managing tilted screw channels when using straight or angled MUAs.


#### CAST-ON TECHNIQUE BT4

	240BT1R0	CoCr Abutment BT	H1.5mm Rotating
	690NA024	Retentive Screw	M1.4 HEX1.20 10N

## OVERDENTURE








### OT EQUATOR FOR KR CONNECTION

#### OT EQUATOR

	250KR1A1	OT Equator KR BTK	H1mm
	250KR2A1	OT Equator KR BTK	H2mm
	250KR3A1	OT Equator KR BTK	H3mm
	250KR4A1	OT Equator KR BTK	H4mm
	250KR5A1	OT Equator KR BTK	H5mm
	250KR6A1	OT Equator KR BTK	H6mm
	250KR7A1	OT Equator KR BTK	H7mm

NOTE The cap kit and the related prosthetic components are available upon request, for both KR and KW. connections.







#### RING ABUTMENT

	262KR1A0	Ring Abutment KR	H1mm
	262KR2A0	Ring Abutment KR	H2mm
	262KR3A0	Ring Abutment KR	H3mm
	262KR4A0	Ring Abutment KR	H4mm
	262KR5A0	Ring Abutment KR	H5mm
	262KR6A0	Ring Abutment KR	H6mm
	262KR7A0	Ring Abutment KR	H7mm

NOTE Each "Ring Abutment" listed in the table includes the following components: 1 pc titanium abutment, assorted cap kit containing: 1 stainless steel cap holder, 1 black lab cap, 4 retentive caps (1 green, 1 yellow, 1 pink, 1 clear white), 1 protective disc.





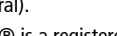

## CONNECTOR

#### ABUTMENT KR (CONNECTOR)

	261KR1A0	Connector Abutment KR	H1mm
	261KR2A0	Connector Abutment KR	H2mm
	261KR3A0	Connector Abutment KR	H3mm
	261KR4A0	Connector Abutment KR	H4mm
	261KR5A0	Connector Abutment KR	H5mm
	261KR6A0	Connector Abutment KR	H6mm

PICTURE	REF	PRODUCT NAME	SPECIFICATION
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**CONNECTOR ACCESSORIES**

	530JD029	Screwdriver JD Locator-Connector	L10mm
	530HS027	Handpiece Driver Connector	L23mm
	530HS028	Handpiece Driver Connector	L29mm
	540MA026	Angle Measur. Guide Connector	
	540MA027.04	Parallel Pin for Connector	Kit 4pcs
	321NA0A0	Impression Post Locator®	
	301CO0A0	Implant Replica Connector Abut.	
	690NA011	Replacement Males Locator®	
	690NA022	Kit Locator®	Metal Cap + Blockout Spacer
	690NA054.04	Replacement Males Locator®	0N Black Kit 4pcs
	690NA006.04	Replacement Males Locator®	15N Blue Kit 4pcs
	690NA008.04	Replacement Males Locator®	30N Pink Kit 4pcs
	690NA010.04	Replacement Males Locator®	50N Clear Kit 4pcs
	690NA005.04	Replacement Males Locator®	10N Red Kit 4pcs
	690NA007.04	Replacement Males Locator®	20N Orange Kit 4pcs
	690NA009.04	Replacement Males Locator®	40N Green Kit 4pcs
	690NA134.04	Replacement Males Locator®	0N Gray Kit 4pcs
	502MA024	Connector Core Tool 3 in 1	
	502MA023	Driver for Connector placement	For Core Tool 3 in 1
	502MA025	Connector Male Removal Tip End	
	690NA320	Retaining Sleeve Connector	Connector core tool

NOTE Every "Abutment" as listed above includes the following products: 1 pc. Abutment Connector, 1 pc. metal cap with ring, 3 pcs. retentive caps (blue/pink/neutral).

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## MATERIAL SPECIFICATIONS

### TITANIUM GRADE 4 IMPLANTS

CHEMICAL COMPOSITION:	MAXIMUM VALUES (%)	TOLERANCE
Nitrogen (N)	0.05	+/- 0.02
Carbon (C)	0.08	+/- 0.02
Hydrogen (H)	0.015	+/- 0.002
Iron (Fe)	0.50	+/- 0.10 (%<0.25) +/- 0.15 (%>0.25)
Oxygen (O)	0.40	+/- 0.02 (%<0.20) +/- 0.03 (%>0.20)
Titanium (Ti)	balance	-

MECHANICAL PROPERTIES:	MINIMUM VALUES
Tensile stress:	550 MPa
Yield strength (0.2%):	483 MPa
Elongation at yield:	15 %
Section reduction:	25 %

This technical information complies with the express specification of the regulations in force for the use of grade 4 titanium in implantology:

- ASTM F67: Standard Specification for unalloyed titanium, for surgical implant applications.
- ISO 5832-2: Implant for surgery – Metallic Materials – Part 2: Unalloyed titanium.

### TITANIUM GRADE 5 PROSTHETICS AND MINI IMPLANTS

CHEMICAL COMPOSITION:	MAXIMUM VALUES (%)	TOLERANCE
Nitrogen (N)	0.05	+/- 0.02
Carbon (C)	0.08	+/- 0.02
Hydrogen (H)	0.012	+/- 0.002
Iron (Fe)	0.25	+/- 0.10
Oxygen (O)	0.13	+/- 0.02
Aluminium (Al)	5.50-6.50	+/- 0.40
Vanadium (V)	3.50-4.50	+/- 0.15
Titanium (Ti)	balance	-

MECHANICAL PROPERTIES:	MINIMUM VALUES
Tensile stress:	860 MPa
Yield strength (0.2%):	795 MPa
Elongation at yield:	10 %
Section reduction:	25 %

This technical information complies with the express specification of the regulations in force for the use of grade 5 titanium in implantology:

- ASTM F136: Standard Specification for wrought Titanium-6Aluminium-4Vanadium ELI (Extra low Interstitial) Alloy for surgical implant applications;
- ISO 5832-3: Implant for surgery – Metallic Materials – Part 3: Wrought titanium 6-aluminium 4-vanadium alloy.

### COBALT CHROME COBALT CCM®

CHEMICAL COMPOSITION: (%)	
Carbon (C)	max. 0.14
Silicon (Si)	max. 1.00
Manganese (Mn)	max. 1.00
Chromium (Cr)	26.00-30.00
Molybdenum (Mo)	5.00-7.00
Nickel (Ni)	max. 1.0
Iron (Fe)	max. 0.75
Nitrogen (N)	max. 0.25
Cobalt (Co)	balance

MATERIAL NO. AND NORMS	
DIN	CoCr28Mo
ISO	5832-12
AFNOR	CoCr28Mo
ASTM	F1537 alloy 1
UNS	R31537

MECHANICAL PROPERTIES	
Coefficient of Expansion (CTE)	13.2•10 <sup>-6</sup> °C <sup>-1</sup>
Melting range	1340-1440°C
Yield strength (R0.2)	up to 1115 MPa
Young Modulus E	241 GPa
Hardness	up to 46 HRC

## PRECIOUS ALLOY FOR ABUTMENTS

COMPOSITION:	
Gold (Au)	60.0 %
Platinum (Pt)	24.9 %
Palladium (Pd)	15.0 %
Iridium (Ir)	0.1 %
PHYSICAL AND MECHANICAL PROPERTIES:	
Density:	18.1 g/cm <sup>3</sup>
Melting range:	1350 – 1460 °C
Coefficient of Expansion (CTE) 25-500°C – 25-600°C:	12.7•10 <sup>-6</sup> °C <sup>-1</sup> – 12.9•10 <sup>-6</sup> °C <sup>-1</sup>
Modulus of elasticity (tensile test):	110 GPa
Elongation at yield:	18 – 12 %
Breaking load:	580 – 810 MPa
Yield strength (0.2%):	450 – 720 MPa
Vickers Hardness HV5/30:	150 – 205 – 230

## PRECIOUS ALLOY FOR GOLD RETENTIVE SCREWS

COMPOSITION:	MAXIMUM VALUES (%)	TOLERANCE
Gold (Au)	0,5	+/- 0.2
Gallium (Ga)	2	+/- 0.2
Copper (Cu)	10	+/- 0.5
Iridium (Ir)	7	+/- 0.5
Ruthenium (Ru)	0.03	+/- 0.02
Rutenio (Ru)	0.1	+/- 0.09
Palladium (Pd)	balance	
MECHANICAL PROPERTIES:	MINIMUM VALUES (%)	
Tensile stress:	586 - 862 MPa	
Yield strength (0.2%):	483 - 690 MPa	
Elongation:	5 - 20 %	
Young's Modulus:	138 GPa	
PHYSICAL PROPERTIES:		
Melting Range	1450 – 1500 °C	
Coefficient of Expansion (CTE) 25-500°C – 25-600°C:	12.3•10 <sup>-6</sup> °C <sup>-1</sup>	

The temporary abutments in PEEK and the SCAN ABUTMENT are made of PEEK / TECAPEEK CLASSIC (chemical name Polietereeterketone). This material is suitable to stay in contact with tissue for up to 180 days.

Depending on the intended use, the Biotec instrumental is made of specific types of stainless steel.

## SYMBOLS USED ON LABELS



Legal manufacturer



Use-by date: indicates the date after which this device is not to be used



Products with the CE mark in accordance with Directive 93/42/EEC and following modifications/integrations



Do not use if packaging is damaged



0426  
Number of the notification body



Do not reuse



Consult instructions for use



Keep away from sunlight



[ifu.btk.dental](http://ifu.btk.dental)

Electronic instructions for use available online [ifu.btk.dental](http://ifu.btk.dental)



Sterile by gamma irradiation



Caution; see instructions for use



Catalogue number



Lot/batch number

## DELIVERY TERMS & CONDITIONS

### RESPONSABILITY

The use of BTK medical devices is reserved exclusively for personnel with the necessary qualifications for the exercise. An improper or incorrect use of the devices can cause the failure or worse, injury to the patient or the user. BTK implant systems should only be used with original BTK components and instruments and in accordance with the specific BTK instructions. Combining with different devices may cause a failure. Biotec must not and can not control the procedures for using the product for implant-prosthetic treatment. Therefore, Biotec assumes no responsibility for the application of the device and its processing nor for any incongruous use of the device under the surgical or prosthetic profile, nor in any case for failure, adverse reactions or damage to the patient or dentist as a result of application of the product.

### STERILITY OF WARRANTY AND DISPOSABLE

Dental implants are supplied STERILE (gamma ray sterilization). The sterility of the medical implant is guaranteed only according to the following conditions: the expiry date stated on the packaging is still valid; there is a red dot on the sterile vial which demonstrates that it has undergone gamma ray irradiation; the sealed package has not been opened and does not show any signs of damage. Compliance with all these conditions must be ensured; alternatively do not use the device.

Surgical components, laboratory accessories and instruments are not supplied in sterile packs, therefore before use they must be properly CLEANED and STERILIZED, as shown in the instructions for use. Biotec dental implants, prosthetics and laboratory accessories are designed for SINGLE USE. In fact, reuse is a potential risk and could damage the construction of the device, making it inappropriate for its intended use. Biotec explicitly declares the single-use of MD and assumes no responsibility for any re-use by users.

### STORAGE

Biotec products must be stored at room temperature and protected from direct heat or sunlight and dust.

### INSTRUCTIONS FOR USE

The information in this manual is not intended to be exhaustive for BTK implant systems. It is recommended that new customers follow the training courses that Biotec makes available with trained personnel and clinicians who are experts in implantology and in the use of BTK devices. The complete and updated user manuals, which allow the correct use of the product, are available online ([www.btk.dental](http://www.btk.dental)) or at BTK and / or the local distributor.

### AVAILABILITY

Not all products described here are available in ExtraEU countries. For more information, please contact BTK and / or your local distributor.

### RETURNS

Biotec does not accept returned goods if the packaging seals are broken or not conforming to the sale specifications of the company.

### GUARANTEE

We constantly guarantee that the quality of our products and services meets the high expectations of our customers and their patients. Specialized professionals are committed to offering complete solutions in applied research, engineering, training and related activities. Biotec is available to customers in the event that a defect in the product or its use is found.

### VALIDITY

The contents are updated at the date of publication. This manual replaces all previous editions.

### CASE DOCUMENTATION AND TRACEABILITY

BTK absolutely recommends documenting implant cases comprehensively at the clinical, radiographic, photographic and statistical levels. The clinician must guarantee the traceability of the devices used. It is advisable to use the adhesive labels included in the packaging of the BTK devices, which show the code and lot of the device used, for the purpose of documentation on the medical records and on the relative implant passport of the patient.

### TRAINING

Comprehensive and regular training ensures long-term implant success.

Be advised that we strongly recommend regular education events in order to update your know-how and clinical expertise.

### DELIVERY TERMS

BTK delivery terms are 1 working day for order received before 12.00 p.m. of the previous day in Italy; except for islands where delivery is evaluated to be 2 working days. For export deliveries contact Biotec offices.

### QUALITY STANDARD

Owing to extensive research, development and to a strict quality standard, we guarantee premium quality materials and products. Our products meet the requirements of directive 93/42 /EEC and subsequent amendments and additions, and therefore have the CE mark, in accordance with the corresponding law. BTK has a quality system certified UNI EN ISO 9001 and UNI EN ISO 13485.

### CAUTION

In addition to the instructions for use, warnings and risks reported both in this document and in the instructions for use, it must always be ensured that the devices used in the oral cavity are not aspirated or swallowed by the patient.

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IMPLANT LINE  
BT SAFE e BT NANO



## BTK ACADEMY

BTK is always at your disposal for any request for further follow-up or information, promoting periodic and ad-hoc training course.



Scan the QR CODE to find out the next BTK courses.

## CERTIFIED QUALITY SYSTEM

BIOTEC is certified UNI EN ISO 9001 and UNI EN ISO 13485.



CE marked product, in accordance with Directive 93/42/EEC and Reg. (UE) 2017/745

## MADE IN ITALY USED GLOBALLY



We constantly ensure that the quality of our products and services meet the high expectations of our customers and their patients. Specialized professionals are taking care to offer comprehensive solutions in applied research, engineering, education and related activities.



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REF: 062/00130 REV 5 - 2.09.2025  
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