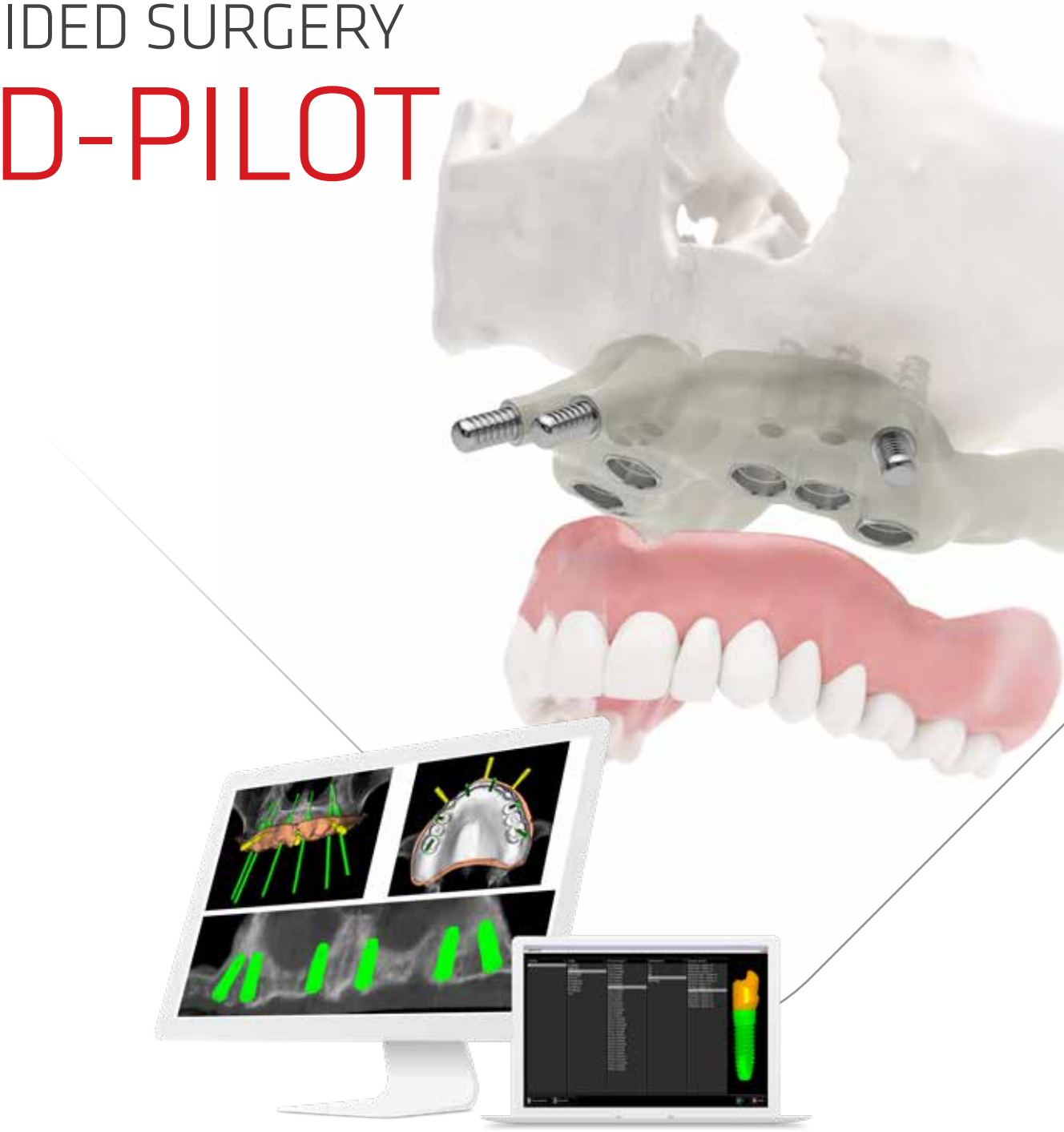
DIGITAL DENTISTRY
CUSTOM-MADE MEDICAL DEVICES

btk Implanting Trust, Smile Again!

GUIDED SURGERY
3D-PILOT



THE FULL DIGITAL SERVICE SUPPORTING PROFESSIONALS

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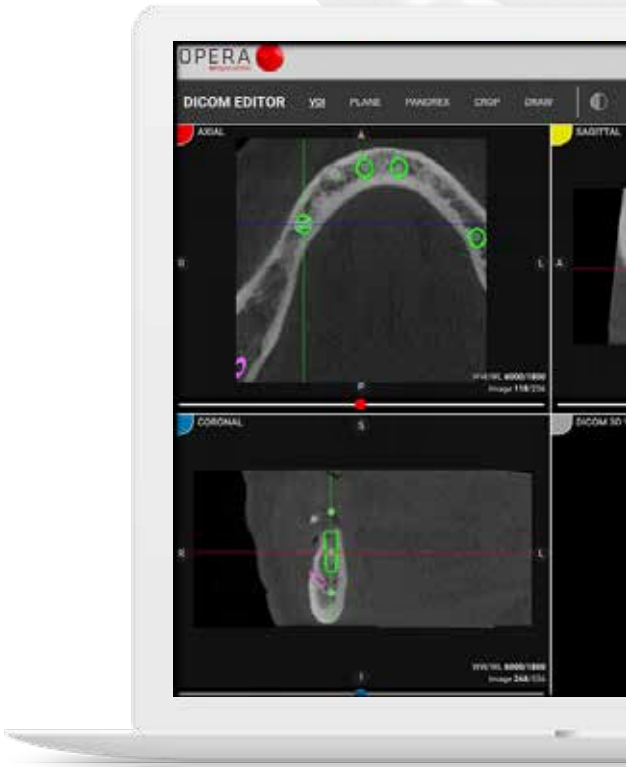
GUIDED SURGERY
3D-PILOT



The software is also available
in the "single patient" version,
for the treatment of single surgical cases.

ADVANTAGES

- VERIFIED PROTOCOLS
- TECHNICAL SUPPORT AND ASSISTANCE
- CASE FEASIBILITY CONTROL
- SIMPLIFIED SURGERY
- DEDICATED SURGICAL KIT

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IMPLANTS AND SURGICAL KITS

3 SURGICAL KITS AVAILABLE

- **BT KLASSIC / BT EVO** Cod. 670NA005
- **ISY KONE / BT SAFE / BT NANO** Cod. 670NA019
- **PTERIGO** Cod. 670NA006

The kits contain all devices needed for the surgery.
The procedure can be used with BTK implants and with implants that are declared to be compatible by BTK.

BT KLASSIC

- Cylindrical body
- 4 apical cutting cavities
- Self-tapping
- Internal and external hexagon connection

BT EVO

- Cylindrical body
- Semi-spherical apex
- Internal and external hexagon connection

ISY KONE

- Excellent primary stability
- Rounded apex
- Self-tapping
- Hexagonal-conical connection, internal and external hexagon

BT SAFE

- Preservation of the cortical bone
- Ideal in cases of poor bone quality
- Hexagonal-conical connection

BT NANO

- Ideal for the rehabilitation of atrophic crests
- Ultra-compact
- It eliminates the need for bone grafts
- Hexagonal-conical connection

PTERIGO

- Ideal for the rehabilitation of upper posterior atrophic saddles
- It eliminates the need for sinus lift
- Self-tapping
- Reduced surgical time

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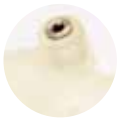
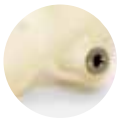
SURGICAL GUIDES AND ANATOMICAL MODELS

High-definition 3D prints with digital precision.

Based on the design confirmed by the clinician and on the clinical needs, anatomical models and surgical guides are developed in a virtual environment.

These devices are produced by means of prototyping techniques with a high-resolution 3D printer.
The production process is validated and traced, to guarantee the highest level of quality and transparency.

TYPES OF GUIDES AND MODELS

	TYPE	CODE
	**SURGICAL GUIDE** Needed for surgery, it includes the sleeves.	C41SP...
	**SMALL SLEEVE** To guide the pilot drill.	690NA171
	**REGULAR SLEEVE** To guide the drills and the implant.	690NA172
	**SLEEVE FOR FIXING PINS** To correctly stabilize the surgical guide.	690NA174
	**ANATOMICAL MODEL** Used to make the provisional for immediate loading purposes.	C4OSP...

3D MOUNTING DEVICES

	TYPE	CODE
	MOUNTING DEVICE 3D EN	690EN003
	MOUNTING DEVICE 3D ER	690ER003
	MOUNTING DEVICE 3D IM	690IM003
	MOUNTING DEVICE 3D IR	690IR003
	MOUNTING DEVICE 3D KR	690KR001
	MOUNTING DEVICE 3D KW	690KW001

The 3D mounting devices are available in single packages or 6-piece packages.

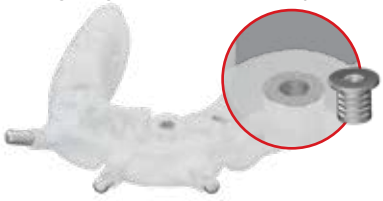
SURGICAL GUIDES

CLASSIFICATIONS:

- Bone support (with surgical flap)
- Tooth support (flapless)
- Mucosal support (flapless)

TWO DIFFERENT SOLUTIONS ARE AVAILABLE:

Surgical guide with sleeves for pilot drill



Surgical guide with sleeves for fully guided surgery

ANATOMICAL MODELS

They are reproductions of the patient's cast models (intraoral scans) and contain the implant analogues selected in the design phase. They represent, therefore, the situation of the patient's mouth after surgery.
The anatomical models are essential if there is a request to make the provisional before surgery, also for immediate loading purposes.

WHY CHOOSE 3D-PILOT

PLANNING WITH BTK AND COMPATIBLE IMPLANTS

The 3D-PILOT method permits surgical plannings with BTK and compatible implants.
This allows to make customized surgical guides, in line with the dental office's needs and habits.

DEDICATED KITS AND VERIFIED SURGICAL PROCEDURE

Years of experience in guided surgery have permitted to improve and fine-tune the surgical procedure while minimizing the risks for complications and intra-op problems.
The surgical kits are complete and equipped with all instruments which are necessary for surgery.

PLANNING BASED ON PROSTHETIC CRITERIA

The position of the implants is planned in line with the restorative needs.
The software integrates the x-ray assessment with information from intraoral scans (cast models).
The final esthetic result and the making of the restorative part are always taken into account during the planning phase.

KNOW-HOW AND EXPERIENCE

The BTK TEAM is always ready to assist you for technical details and useful indications about the usage of the surgical guide and the kit components for the surgical phase. Each case is customized based on the clinical and patient's needs.

IT ASSISTS THE SURGERY

The 3D-PILOT method serves the purpose of an accurate diagnosis and of the preparation of the surgical guide, which is a fundamental support and aid during surgery.

EVEN JUST FOR DIAGNOSTIC PURPOSES AND FOR AN ACCURATE CASE ASSESSMENT

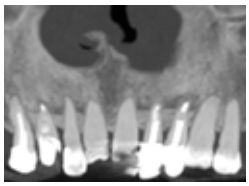
The 3D-PILOT service can be requested to perform an accurate assessment of a surgical case: the software includes several diagnostic instruments, such as:

- VIEWS: 2D, 3D, multiplanar (MPR)
- RECONSTRUCTION of the path of the inferior alveolar nerves and accessory canals
- ACCURATE MEASUREMENTS: ruler, angles, distances, bone density
- CUSTOMIZABLE ALERTS:
  The software generates safety alerts in case of excessive proximity:
  - between the implants and the alveolar nerve
  - between implants
  - between the implants and the fixing pin

PATIENT COMMUNICATION

The software and the custom made devices of the 3D-PILOT service can be of much assistance when communicating with patients and explaining the treatment plan.

DIGITAL WORKFLOW



DIAGNOSIS

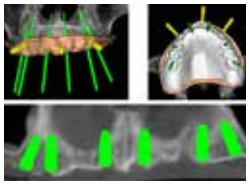
The dental office:

- makes the diagnosis and the clinical assessments
- identifies the best treatment plan
- checks that the patient's mouth opens enough for the drills
- takes the dental impressions and an occlusal index and sends them to a reference dental laboratory for the construction of the radiological guide.

RADIOLOGICAL GUIDE AND CT/CBCT

The reference laboratory makes and sends the radiological guide to the dental office, that:

- tries the guide in the patient's mouth, checking that it fits precisely and that the occlusal registration separates the teeth of the lower and upper arch
- instructs the patient about the right positioning of the radiological guide
- prescribes the patient's CT/CBCT scan
- sends the DICOM data of the CT/CBCT scan to BTK.
- BTK prepares the software licence by matching the CT/CBCT scan images with the scans of the cast model and of the radiological guide (in STL format).



PLANNING AND PRODUCTION OF THE SURGICAL GUIDE

In this phase the dental office:

- receives the software license and plans the surgical case virtually, possibly with the technical assistance of BTK
- BTK products the surgical guide and, if requested, the anatomical model and sends them to the clinical office

SURGERY

In the dental office:

- the surgical guide must be cold-sterilized
- the clinician performs surgery using the dedicated 3D-PILOT surgical kit
- during the same session, the clinician can use the provisional for immediate loading previously prepared by the dental laboratory

http://upload.btk.dental/btk3d

Immediate uploading of the DICOM file of the patient's tomography.

For more INFO write to: btk3d@btk.dental

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SURGICAL PROCEDURE

POSITIONING OF THE SURGICAL GUIDE

The positioning procedure varies depending on the type of support of the surgical guide.
In fully edentulous patients, the 1.5 mm diameter drill and the fixing pins permit to secure and keep the correct position of the guide during surgery. In partially edentulous patients, the surgical guide is generally placed and fixed onto the patient's teeth. The components listed below are all included in the dedicated surgical kit.

MANAGEMENT OF SOFT TISSUES

The surgery can be performed either raising a flap or mini-flaps or with a **flapless** approach. If the right conditions are met, the 3D-PILOT procedure permits to place the implant safely and precisely using the flapless surgery.
In this case a soft tissue management instrument (soft tissue punch) is needed.

PREPARATION OF THE IMPLANT SITE

The dedicated **drills** for the preparation of the implant site have a progressive diameter matching the diameter of the implants to be placed. Furthermore, the **drill reducers** guarantee the highest precision when inserting the drill through the surgical guide.
The **drill stops** are used to prepare the site of the implant in the right depth.

IMPLANT PLACEMENT

The mounting devices are engaged with the implant using the driver and the special fixing screw and have been designed to perfectly slide through the surgical guide.
The mounting device guarantees the right direction and depth when positioning the implant.
The implant can be placed both using the contra-angle handpiece and manually with a torque wrench.

PLACEMENT OF THE PROVISIONAL

The 3D-PILOT guided surgery method permits to virtually plan the placement of the implant and transfer the planning to the **anatomical model**. The **provisional prosthesis** – which will be mounted after the surgery - can be constructed on the model beforehand. This makes **immediate loading** possible. In this way, computer-assisted design enables a better placement of implants in function of the best possible restorative rehabilitation, in line with esthetic canons and respecting the right occlusal relationship and vertical dimension.

The video of the surgical procedure is available on our channel YouTube

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WARNINGS AND RECOMMENDATIONS

The indications given in this brochure describe the 3D-PILOT guided surgery procedure.
The usage of BTK components is exclusively indicated for clinicians who have been specifically trained in implant and restorative techniques and guided surgery. The 3D-PILOT surgical technique is performed in combination with BTK components and instruments.
Clinicians using the system are responsible for the operations performed and for the regular follow-up checks that must be made in order to promptly identify and treat complications, if any, and to make sure that the device works well and is safe.

BTK PERSONAL TUTOR

A program for individual case planning and execution supported by experienced professionals in order to leverage know-how and maximize clinical experience with the aim to achieve sustainable high patient satisfaction rates.

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

CERTIFIED QUALITY SYSTEM

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

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 specialised staff is at your disposal: please call our company at **0444.361251** or write to **btk3d@btk.dental** for any information about the 3D-PILOT method.

btk the smile system®

BIOTEC S.R.L. VIA INDUSTRIA, 53
36031 POVOLARO DI DUEVILLE (VI) - ITALY
TEL: +39 0444 361251 - FAX: +39 0444 361249
mail: info@btk.dental

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