

3D PRINTED DENTAL IMPLANTS

# IMXTA 3D



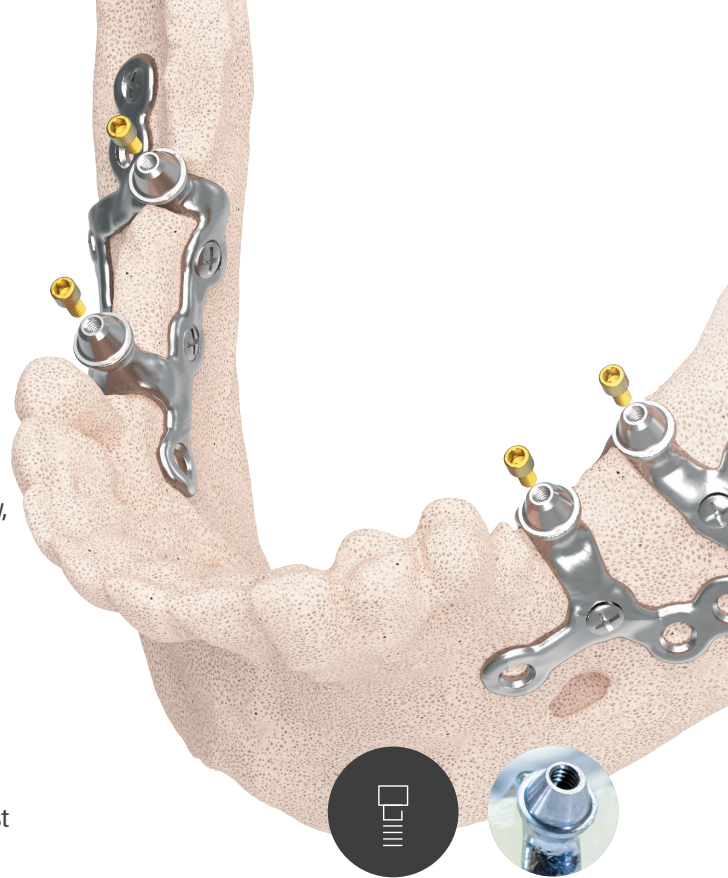
# IUXTA-3D

IUXTA-3D subperiosteal implant represents a real innovation in the solutions for maxilla and mandibular severe atrophy. Through a totally digital workflow, starting with the patient's exams, specialist can perform an accurate project, custom made for the individual needs of the patient.

Thanks to over 20 years of experience in dental implants, and to many documented clinical cases, we update IUXTA-3D subperiosteal implants: **from now they are offered for screw-retained protocol, allowing to obtain appropriate and reliable prosthetic solutions.**

A revolution in iuxta-osseous medical devices, that takes full advantage on the quality and precision of digital methods, by supporting them with the best manufacturing technology.

**It is possibile to perform any kind of rehabilitations: from small edentulism to full arches, for mandibular or maxilla.**



## Innovative features of IUXTA-3D:

- ▶ **DEDICATED TECHNICAL ASSISTANCE**  
Dedicated report for each case from the planning to the surgery.
- ▶ **100% DIGITAL WORKFLOW**  
Customized on each patient.
- ▶ **REPORT CUSTOMIZED FOR EVERY CASE**  
With 3D previews of the project and a detailed analysis of the implant and screws in relation to critical anatomical structures.
- ▶ **IN TITANIUM FOR MEDICAL USE**  
To guarantee the highest standards of biocompatibility and mechanical resistance.
- ▶ **HIGH CONTACT SURFACE**  
Optimized by FEM studies on strenghts analysys.
- ▶ **DESIGN-SHAPED SCREW HOLES**  
To ensure the best precision and facilitate surgery.
- ▶ **SCREW RETAINED PROSTHESYS**  
To ensure accuracy and oral hygiene.
- ▶ **WIDE RANGE OF PROSTHETIC COMPONENTS**  
To meet all restoration requirements.
- ▶ **IMMEDIATE LOADING PROSTHESYS**  
Manufactured and supplied before the surgery.














The IUXTA-3D implant is supplied with a 3D PRINTED RESIN REPLICA of the device and with the patient's BONE MODEL.

If clinician wants to perform bone modeling during surgery, BTK can provide a SURGICAL GUIDE, to drive the ostectomies.

The BTK Milling Center can also manufacture and deliver the temporary restoration for immediate loading for a fully-digital workflow. Otherwise BTK can provide the tecnician the matherials for the costruction of the temporary restoration.

## PROSTHETIC COMPONENTS FOR IUXTA-3D

Iuxta-osseous implants, with **two or more abutments**, have one dedicated connection, called "BS". It is a M.U.A. with a larger dedicated screw than to standard M.U.A. components. The following table lists all the BS prosthetics, dedicated to Iuxta implants with two or more abutments. Only in the case of the Iuxta-osseous implant with a **single abutment**, the connection is with external hexagon ER: refer to the manual of implants with external connection for the choice of the ER prosthetic.

	<b>COVERING CAPS BS</b> H5.7 with screw Kit 4pcs	330BS0A0.04
	<b>BASE BT LINK BS</b> H1mm Ø4.8mm No Cap. Rot with screw	247BS1A1
	<b>TEMPORARY ABUTMENT BS</b> Rotating with screw	210BS1R0
	<b>TRANSFER PROPICK-UP BS</b> Hutile18.5mm Rot. Long Screw	323BS0R0
	<b>IMPRESSION POST PICK-UP SCREW</b> M2 Hex1.20 H18.2mm	690NA308
	<b>IMPLANT REPLICA BS</b> Rotating	301BS0R0
	<b>SCAN ABUTMENT INTRA-ORAL BS</b> Rotating	352BS1A1
	<b>SCAN ABUTMENT EXTRA-ORAL BS</b> Rotating	351BS1A1
	<b>BT LINK BS</b> H1mm Ø4.8mm Rotating	246BS1A1
	<b>CoCr ABUTMENT BS</b> H1.5mm Rotating	240BS1R0
	<b>CASTABLE PLASTIC ABUTMENT BS</b> Rotating	205BS0R0
	<b>RETENTIVE SCREW</b> M2 Hex1.20 for standard prosthetics	690NA307
	<b>RETENTIVE FLAT HEAD SCREW</b> M2 Hex1.20 H5.2mm Tp for BT LINK (CAD CAM prosthesis)	690NA306

# DIGITAL WORKFLOW

## IUXTA-3D



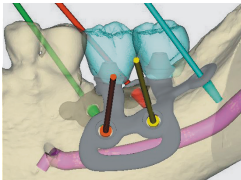
### CONE BEAM CT AND PRODUCTION OF A 3D VIRTUAL BONE MODEL

The process starts with the acquisition of the patient's tomographic imaging and of a DICOM file. During the examination, the patient must wear a **dedicated radiological guide**. The **DICOM file** is sent by the clinician to the **BTK TEAM**. The BTK TEAM checks the feasibility of the case and starts the design phase.



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

<http://upload.btk.dental/btk3d>



### DIGITAL PROCESSING OF THE IUXTA-3D STRUCTURE

IUXTA-3D is virtually modelled on the anatomy of the patient by the BTK specialists, using a dedicated software. **The layout of the device is designed to bear the prosthetic load while guaranteeing the best passive fit.** Abutment and screw positions are carefully evaluated on the bases of the prosthetic restoration and in compliance with soft and hard tissues management. The final project is then shared with the Prescribing Doctor, who can make changes and who confirms it before production takes place.



### TITANIUM LASER MELTING - 3D PRINTING

After receiving the doctor's prescription, BTK produces the device by means of "Selective Laser Melting" technique. Homogeneous layers of highly pure titanium powder are melted using a laser in a selective way, based on the 3D virtual model. Then BTK milling centre finalizes the device screw-retained abutments through a five-axis machine, ensuring the maximum mechanical precision. The final object meets **high purity and microstructural homogeneity standards** that guarantee high mechanical performance.



### CLEANING, DECONTAMINATION, PACKAGING AND SHIPPING

The IUXTA-3D implant is decontaminated in an automatic ultrasonic machine, it is packaged in a cleanroom under controlled atmosphere and delivered ready for sterilization in the clinician's office. All BTK production cycles are controlled and registered so as to guarantee the traceability of the product, in compliance with the most restrictive standards in the Doctor's practice.



### TEMPORARY RESTORATION

If required BTK Milling Centre can produce temporary restoration for immediate loading. Built according to the needs of patient and clinician, it can be used even immediately after surgery.



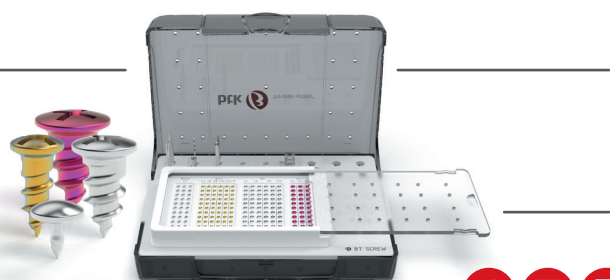
### SURGERY AND SURGICAL APPLICATION

The surgery is performed under local anaesthesia or conscious sedation by qualified doctors.

## BT SCREW SURGICAL KIT

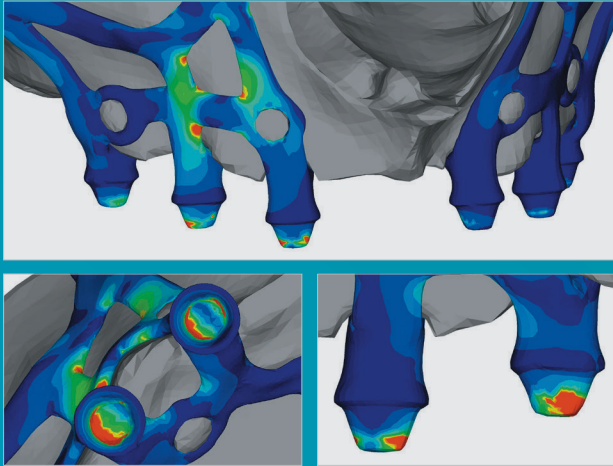
**Cortical screws kit for advanced surgery.**

Ref. kit 667NA001



## FEM ANALYSIS

FEM analysis is a tool that allows to analyze the three-dimensional model of the medical device by predicting its behavior once subjected to the chewing load. It is therefore possible to optimize the device by studying the best points of support, anchoring and the best morphology to ensure the success of the rehabilitation.



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## 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

Certified quality system  
UNI EN ISO 9001 and UNI EN ISO 13485.



CE marked product, in accordance with the directive 93/42/CEE and regulation (UE) 2017/745.

Biotec company is recorded on the Register of medical devices manufactures according to the Health Ministry regulation.

## 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.