IUXTA IMPLANT

SUBPERIOSTEAL

B&B DENTAL
IMPLANT COMPANY

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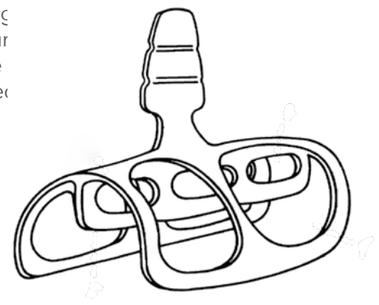
IUXTA IMPLANTS are custom dental devices created throug melting to meet patients' clinical needs. Positioned subperiosteally and secur osteosynthesis screws, they offer an alternative for patients with severe bone unsuitable for traditional implant surgery. Introduced in the 1940s and refine in the following decades, early versions faced challenges like misfitting and hypersensitivity, leading to their abandonment.



Despite efforts, success rates were low, leading to total or partial removal due to misfitting, poor bone quality, exposure of adjacent areas, and potential hypersensitivity from the metal fusion method. Over time, these challenges and low success rates led to the technique being abandoned.

TODAY, advancements in digital technology and planning software have revolutionized implant surgery, overcoming past limitations. Iuxta implants, made possible through digital design and laser melting, offer an effective solution for severe bone atrophy cases where traditional implantology is impractical.

These implants are completely customizable, digitally tailored, and laser-melted for a precise fit with the patient's bone conformation. High-resolution diagnostics, planning, and 3D printing ensure great precision, while fixation with osteosynthesis screws guarantees stability. Patients can avoid lengthy regenerative procedures and benefit from immediate loading and long-lasting rehabilitation.

These implants achieve aesthetic and functional results in complex clinical cases and are currently approved by the FDA in the USA.

TYPES OF GRIDS

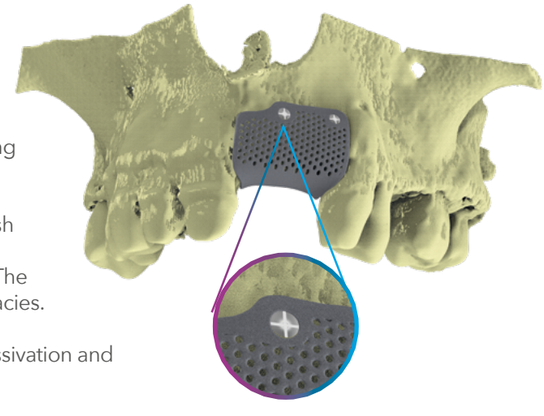
During the creation of the project it is important to decide the type and dimension of the Iuxta implant, based on the 3D radiographic images and on the agreed prosthesis rehabilitation of the patient by the clinician.

GRID TYPE		DESCRIPTION
MICRO Single-element		• IUXTA design with custom abutment insertion and screw seat. • Fabricated via SLM with printed abutment. • Biomodel scanning and realignment with plotted clinical design. • CT/CBCT segmentation data alignment + design and printing of half-arch biomodel.
MINI (MUA) 2-Element rehabilitation		• IUXTA design with custom parallel abutment insertion and screw seat. • Fabricated via SLM + final machining (2 connections). • Biomodel scanning and realignment with plotted clinical design. • CT/CBCT segmentation data alignment + design and printing of half-arch biomodel. • Surgical osteotomy template, design and 3D printing. Produced at clinician's request, if needed.
PARTIAL (MUA) Hemiarch		• IUXTA design with MUA/connection insertion and screw seat. • Fabricated via SLM + final machining (3/4 connections). • Biomodel scanning and realignment with clinical design. • CT/CBCT segmentation data alignment + design and printing of full biomodel. • Surgical osteotomy template, design and 3D printing. Produced at clinician's request, if needed.
FULL (MUA) Total rehabilitation		• IUXTA design with MUA/connection insertion and screw seat. • Fabricated via SLM + final machining (4/5/6 connections). • Biomodel scanning and realignment with clinical design. • CT/CBCT segmentation data alignment + design and printing of half-arch biomodel. • Surgical osteotomy template, design and 3D printing. Produced at clinician's request, if needed.

CUSTOMISED MESH GRIDS

Custom titanium meshes are used in GBR (guided bone regeneration) for vertical and combined defects. Using pre-operative CBCT scans, a virtual model is created to design a digital grid. The STL file is then sent to the lab, where the product is made using laser sintering, a titanium 3D printing method.

The advantage over standard grids is that the customized mesh is designed specifically for the patient's anatomy before the procedure, speeding up execution and enhancing precision. The titanium grids offer elasticity to compensate for CBCT inaccuracies. Rounded
margins and smooth edges improve healing, aiding in the passivation and suturing of surgical flaps.



PROSTHERTIC COMPONENTS

MUA ANALOGUE

Analogues reproduce the position of the implant connection within the model, they must be carefully placed on the transfers inside the impression before proceeding with cast pouring.

ROTATIONAL ANALOGUE
MUA-00586

ROTATIONAL DIGITAL ANALOGUE
3D-00587

TRANSFER MUA

The transfer is screwed onto the MUA for precise position adjustment during the impression taking step.
The screw size ø1.6.

TRANSFER - CLOSED SPOON
MUA-00611

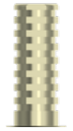
ROTATIONAL TRANSFER - OPEN SPOON
MUA-00610
This code includes screw MUA-00612

MUA ABUTMENTS

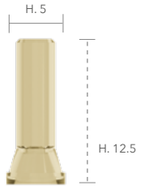
These abutments must be fixed onto the MUA to build structures.

ROTATING

The screw size ø1.6.



TEMPORARY ABUTMENT
MUA-5144



CASTABLE ABUTMENT
MUA-5145

This code includes screw INN-6051

HEALING SCREW MUA

This is used in the patient's healing phase to protect the MUA abutment until the prosthesis is applied.

HEALING SCREW
MUA-6030

MUA SCAN

The MUA scan is a device that takes impressions by means of intraoral scanners.

SCAN
SCAN-MUA-16

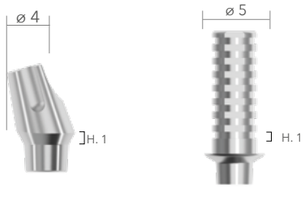
ROTATIONAL ABUTMENTS FOR CONICAL MORSE TAPER

The rotational conical abutments are fixed via a locking screw to the coupling cone and can be used both when cementing and screwing.

ROTATING

IMPORTANT NOTE

To see all of the available rotational abutments for conical morse taper lengths please consult the Product Catalogue on pages: 29, 33 and 40.

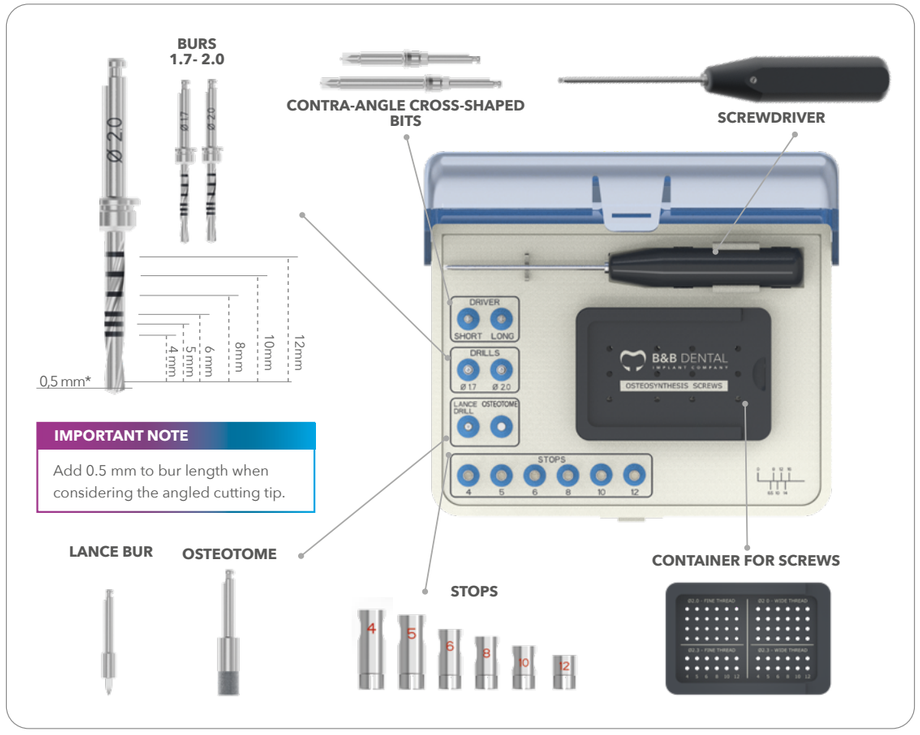


INN-2715/1*

IUXTA SURGICAL KIT

Ergonomic and intuitive, the kit contains all the instruments needed to correctly perform an Iuxta surgical procedure in line with the protocols dictated by B&B Dental.

REF. SUB-00090SC



WORKFLOW

1. DATA COLLECTION

To create an Iuxta implant project a high-resolution tomographic imaging exam is necessary (Cone Beam CT) with a 0.2 mm section. During the exam it is important that the patient wear a dedicated radiological guide or, even better, a duplicate of the prosthesis with radiopaque markers.
The file obtained is saved in DICOM format, so that it can be read by most segmentation software. We can therefore print the 3D model and create a clear and precise image. This is followed by a double scan, just as in a normal guided surgery case, and matching.

2. DIGITAL DESIGN

From this received data, the B&B Dental Team can proceed with the next steps, analysing:
- The DICOM files (Analysis of structure and bone conformation)
- STL files Master model (View of soft tissue and possible residual teeth)
- STL files model with radiological template (View of prosthesis size and matching).
These data allow the team to correctly create a project with the help of CAD programmes, so as to assess the thickness and morphology of the Iuxta implant, the form and the diameters of the holes for the osteosynthesis screws, the emergency profile of the prosthetic abutments and the type of grids.

3. SLM PRINTING
(SINTER LASER MELTING)

Once the design phase is complete, B&B Dental will send the file with the digital project via email to the clinician for written approval, obtained via the filling in of a specific form, without which production cannot be started (the form can be downloaded online). During this phase, certain processing techniques may be requested, such as a temporary implant in PMMA.
Iuxta implants are produced via SLM technology, a highly-advanced method that creates the implants via titanium micro powders: grids are formed with fused titanium layer by layer, thus avoiding any inaccuracies.

4. PROCESSING AND SHIPPING

The Iuxta implant is monitored and sent to a clean room for cleaning and decontamination operations in a controlled atmosphere and via saturated steam. Packaging is also performed in a clean room. All the production processes are meticulously verified by the quality management system and registered, to guarantee traceability in compliance with the most stringent regulations in force. The sterilization of the sealed envelope containing the Iuxta implant must be performed by the clinic performing the procedure.

IUXTA SUBPERIOSTEAL PRICELIST

GRID TYPE		DESCRIPTION
MICRO Single-element $2,550		• IUXTA design with custom abutment insertion and screw seat. • Fabricated via SLM with printed abutment. • Biomodel scanning and realignment with plotted clinical design. • CT/CBCT segmentation data alignment + design and printing of half-arch biomodel.
MINI (MUA) 2-Element rehabilitation $3,500		• IUXTA design with custom parallel abutment insertion and screw seat. • Fabricated via SLM + final machining (2 connections). • Biomodel scanning and realignment with plotted clinical design. • CT/CBCT segmentation data alignment + design and printing of half-arch biomodel. • Surgical osteotomy template, design and 3D printing. Produced at clinician's request, if needed.
PARTIAL (MUA) Hemiarch $5,600		• IUXTA design with MUA/connection insertion and screw seat. • Fabricated via SLM + final machining (3/4 connections). • Biomodel scanning and realignment with clinical design. • CT/CBCT segmentation data alignment + design and printing of full biomodel. • Surgical osteotomy template, design and 3D printing. Produced at clinician's request, if needed.
FULL (MUA) Total rehabilitation $7,400		• IUXTA design with MUA/connection insertion and screw seat. • Fabricated via SLM + final machining (4/5/6 connections). • Biomodel scanning and realignment with clinical design. • CT/CBCT segmentation data alignment + design and printing of half-arch biomodel. • Surgical osteotomy template, design and 3D printing. Produced at clinician's request, if needed.
		• The following items are included in a project: - Stereolithographic model - Osteotomy template (1 or 2 pc) - Test template for osteotomy (1 or 2pc) - IUXTA fixing screws - Osteosynthesis screws • The following costs will be added to the IUXTA implant price: - Project: $850