

HTL
CAD/CAM-Lab

MANDIBULAR ADVANCEMENT DEVICE

DIGITAL 100%



bti[®]
Human
Technology

HTL MANDIBULAR ADVANCEMENT DEVICE

DURABILITY, QUALITY AND COMFORT DIGITAL WORKFLOW



At BTI Biotechnology Institute, we have optimised the materials and the production processes of our mandibular advancement devices from the original design through to its manufacture, **to protect the teeth and prostheses and provide comfort and durability** in order to guarantee patient satisfaction.

Conditions such as temporomandibular joint dysfunction (TMJ) and **disorders associated with bruxism can now be treated in a safer, more reliable and successful way.**

- Biocompatible material for prolonged use
Clase IIa
- Optimal fit and retention,
digitally personalised.

- Minimum thickness
- Controlled porosity
(reduces odour, unpleasant taste and premature wear)

- Time saved
in appointments for adjustments
- Minimum vertical height



All our devices are produced in a high-precision milling centre, 3D printed (with our own software) and using materials specifically chosen to provide comfort and durability

ADVANTAGES

① SAVINGS

Thanks to digital optimisation, one of the advantages with this device is the time saved on appointments for making adjustments.

② DURABILITY

The material used is hardwearing enough to handle the mechanical forces it will be submitted to on a daily basis.

③ PRECISION

We rely on an Artificial Intelligence (AI) algorithm that offers the optimal design for the device by analysing the biomechanical requirements of the patient.



④ COMFORT

Our splints are designed with the minimal height the patient's anatomy will allow, to have the lowest impact possible on TMJ. **We can even achieve thickness of as little as 1mm.**

⑤ FIT

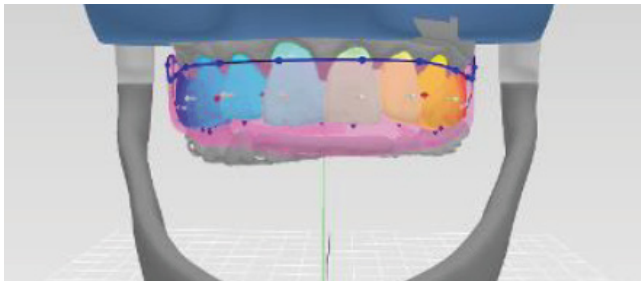
We personalise the biomechanical requirements of each patient to achieve a precise fit in both occlusion and retention.



IN-HOUSE DESIGN AND MANUFACTURING TECHNOLOGY

OBTAINING THE MODELS (.STL)

These models can be obtained by direct intraoral scanning (full digital flow), or by scanning a conventionally taken dental impression.



EXCLUSIVE SOFTWARE (FUNCTIONAL VIRTUAL ARTICULATOR)

We customise the biomechanical movements of each patient to find perfectly defined and adjusted antagonist contacts.



ADJUSTMENT OF THE OCCLUSION

Simulates the seating of the splint in the patient's mouth. The design and the fit of the splint are micrometric. An entry vector is added to the splint, so as not to have to make adjustments in order to fit the splint in the mouth.

ADDITIVE MANUFACTURING

We use the most advanced and sophisticated additive manufacturing technology on the market and a material with a very impressive capacity to respond to thermal stimuli, as **it increases the comfort of the device when it is at body temperature.**

CLINICAL INDICATIONS:

- Temporomandibular disorders, (TMD).
- Bruxism, *prevention of its complications.*
- Protection, *for restorative treatments.*





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BTI's exclusive CAD/CAM Centre

