

BioBiteCorrector® The mandibular protrusion hinge

BioBiteCorrector® MS



BioBiteCorrector® SP



BioBiteCorrector® FA



BioBite**Corrector®** SA



BioBiteCorrector® Applications

The BioBiteCorrector[®] Hinge is a versatile mandibular protrusion hinge designed for the following BBC applications:

- Treatment of Temporomandibular joint diseases
- Treatment of primary snoring and mild to moderate sleep apnoea in dental sleep medicine
- Orthodontic correction of Angle Class II malocclusions
- Use as an anchorage appliance for orthodontic gap closure in the posterior region of the lower jaw

Applications in general dentistry

The BioBite**Corrector**[®] SA und MS versions without internal open coil spring are used as a lower jaw protrusion hinge in dental sleep medicine and in TMJ therapy. BioBite**Corrector**[®] SA and MS are the first mandibular protrusion hinges made entirely of titanium.

The BioBite**Corrector**[®] Sleep Appliance is used to treat primary snoring and mild to moderate sleep apnoea.

In TMJ therapy, the BioBite**Corrector**[®] SA and MS versions are used for mandibular advancement splints.





BioBiteCorrector® Applications





Orthodontic applications

The BioBite**Corrector**[®] (BBC) appliances are mainly used to correct an Angle II malocclusion in orthodontics.

Use of the BBC can avoid extraction of permanent teeth or even surgical corrections of Class II malocclusions.

The fixed appliances:

The fixed appliances (e.g. BBC Herbst/ BBC with Multibracket appliance) can be used for patients who are non-compliant in wearing removable devices or show low residual jaw growth, for adolescents and adults.

The removable solutions:

In combination with removable dental braces the BioBite**Corrector**[®] hinge forms a modern functional orthodontic appliance.

The BioBite**Corrector**[®] Twin Appliance combines high speaking and wearing comfort with reliable therapeutic success.

Two treatment philosophies:

The BioBiteCorrector[®] hinges are available with and without internal coil spring.

Passive-rigid:

The BioBite**Corrector**[®] MS and SA versions (without compression spring) are largely based on the functional principles of the Herbst appliance. This passive-rigid appliance is able to precisely guide the mandible into bilateral Class I occlusion and therefore does not need coil springs.

Hybrid appliances:

The BioBite**Corrector**[®] SP und FA versions (with internal compression spring) guarantee a certain amount of protrusion of the mandible due to their rigid parts, and their internal coil spring (240cN) also ensures gentle advancement.

Advantages

• Biocompatible Titanium

The BBC designs are entirely manufactured of titanium and laser welded. Fixing screws and spacers are manufactured of titanium as well. BBC SP and BBC FA versions have an internal stainless steel spring.

• Functional principle of the Herbst appliance without the use of coilsprings The BBC MS and BBC SA appliance does not use coil springs, unlike most other intermaxillary non-compliance Class II appliances. The BioBite**Corrector**[®] is largely based on the functional principles of the Herbst-appliance.

• Internal spring mechanism

BBC SP and BBC FA versions advance the lower jaw with a gentle spring force. The internal stainless steel compression spring has a force of 240cN.

• Direct Class I with precise adjustment of the mandible

Using the C-shaped titanium spacers, which are clamped on the telescope bars, the mandible can be advanced easily and precisely.

• Easy handling

The BBC MS and BBC SP are supplied completely pre-assembled and ready to install. There is no need for orthodontists to assemble the device from various parts.

• Multibracket appliance: Bands and Tubes are not required

Thanks to the screwable connection, the BBC does not require bands on the molars for proper placement of the appliance.

• Screw Connectors

The BBC MS and BBC SP screw connectors guarantee a quick and easy inserting process. This design prevents any sliding on the wire and causes no pressure on the adjacent brackets.

• Ball Joint Design for better comfort

The ball joints enable lateral movements and sufficient opening of the mouth, improving wearing comfort.

• Multi-telescope design

This design ensures extended mobility without disengaging like the conventional Herbst-appliance.

• Available in Two Sizes

Standard is the most commonly used size; 23mm in length, extends up to 57mm. Small can be used if there is an extraction in the upper jaw; 19mm in length, extends up to 45mm.





BioBiteCorrector® MS & BioBiteCorrector® SP

BioBite**Corrector**[®] versions MS (without compression spring) and SP (with compression spring) have a screw connector. These versions can be screwed to a square wire.

BioBite**Corrector**[®] MS and SP versions are always placed interproximally due to their screw connectors. The screw connector is placed between the canine and the 1st premolar in the lower jaw and between the 1st molar and the 2nd premolar in the upper jaw.

The BioBite**Corrector**[®] SP supports the advancement of the lower jaw with an internal coil spring. The BBC MS works based on the functional principles of the Herbst-appliance and therefore does not have an internal coil spring.



BioBiteCorrector[®] SA & BioBiteCorrector[®] FA

Der BioBite**Corrector**[®] SA (without internal spring) and the BioBite**Corrector**[®] FA (with internal spring) designs have a flat wire connector. This connector can be directly polymerized into resin or fixed on special tubes (see BioBite**Corrector**[®]Herbst appliance).

Thanks to the flat wire connector, the BioBite**Corrector**[®]SA and FA versions are placed centrally on the 1st premolar in the lower jaw and on the 1st molar in the upper jaw. So these connectors do not have to be placed interproximally, like the screw connectors of the BBC SP and MS.

The BioBite**Corrector**[®] FA supports the advancement of the lower jaw with an internal coil spring. The BBC SA works based on the functional principles of the Herbst-appliance and therefore does not have an internal coil spring.

BioBiteCorrector® with multibracket appliance

The BioBite**Corrector**[®] versions MS and SP with a screw connector can be easily attached to multibracket wire. This orthodontic combination is used for treatment of Angle Class II Malocclusion.



BioBite**Corrector**[®] MS Without internal spring



BioBite**Corrector**[®] SP With internal stainless steel spring

The BioBite**Corrector**[®] MS as a passive-rigid appliance is able to precisely guide the mandible into bilateral Class I occlusion and therefore does not need coil springs.

The BioBite**Corrector**[®] SP supports the advancement of the lower jaw with an internal coil spring.



The BBC MS and BBC SP screw connectors guarantee a quick and easy inserting process. This design prevents any sliding on the wire and causes no pressure on the adjacent brackets.





BioBiteCorrector® Twin The modern functional appliance

Die BioBite**Corrector**[®] Twin (BBC-Twin) is a removable functional appliance for the correction of Class II malocclusion.



Advantages:

- Does not cause any tongue space restriction for high speaking comfort.
- The BBC Twin has no occlusal pads, for easy deep bite correction with high wearing comfort.
- The BBC Twin Appliance has the proven reliable BioBite**Corrector**® telescope advantages.
- The result is high wearing and speaking comfort with reliable therapeutic success.

All BioBite**Corrector**[®] (BBC) versions can be used to fabricate a BBC Twin appliance The BioBite**Corrector**[®] versions MS and SP are screw-connected to a square wire, which is polymerized into an active plate (Schwartz plate).

If patient compliance is insufficient, the BBC hinge can be unscrewed from the Schwartz plate and later fixed to a multi-bracket appliance on the same patient.

The BioBite**Corrector**[®] SA (without compression spring) and the BioBite**Corrector**[®] FA (with compression spring) Versions with a flat wire connector are directly polymerized into resin.

The flat wire connectors are placed centrally on the 1st premolar in the lower jaw and on the 1st molar in the upper jaw. They do not have to be placed interproximally like the screw connectors.

BBC-Twin

Re-use on the same patient

BioBiteCorrector® Herbst The CAD/CAM BBC Herbst



Advantages:

- High wearing comfort thanks to flat design
- High patient acceptance
- Construction bite is not required
- All BBC components can be replaced chairside
- High speaking comfort
- Completely digital CAD/CAM manufacturing process
- Metal-3D printing
- BioBiteCorrector® SA and FA hinges can be combined with a BBC Herbst
- Reliable BioBite**Corrector**[®] hinge benefits:
 - Ball joint design for better comfort
 - Ball joint design enables lateral movements and sufficient opening of the mouth, improving wearing comfort
 - Multi-telescope design ensures extended mobility without disengaging like the conventional Herbst appliance

BioBiteCorrector[®] Herbst Placement in detail



Completely digital design



Detail view



Metal printed without a weld



Individually bending a stainless steel wire



Stainless steel wire with BBC



Bending the distal end of the wire

BioBiteCorrector[®] Sleep Appliance The CAD/CAM anti-snoring device





Advantages:

- Biocompatible titanium The BioBiteCorrector® Sleep Appliance is the world's first anti-snoring appliance featuring all-titanium mandibular protrusion hinges
- Digital 3D-Design (CAD/CAM)

The milled splints are designed as preferred by the therapist.

- Thermoactive flexibility
- MMA-free (0% residual monomer)
- Self-adjusting with memory effect

• High speaking and wearing comfort

- Low-level vertical bite opening
- Without unlocking process
- Unrestricted mouth opening
- Direct adjustability

With precise lower jaw adjustment by means of C-shaped spacers or infinitely variable calibration.

• No tongue space restriction This design does not reduce the wearing comfort or lead to tongue retrusion.

- Ball joints in the upper and lower jaws Enable lateral lower jaw movements and increase wearing comfort.
- Multiple telescope

This design ensures extended mobility without disengaging like the conventional Herbst-appliance.

For a Sleep Appliance (anti-snoring device), only the BioBite**Corrector**[®] MS and BioBite**Corrector**[®] SA versions are used. These BioBite**Corrector**[®] versions have no internal compression spring.

BioBiteCorrector® with transparent aligner

All BioBite**Corrector**[®] (BBC) versions can be combined with a transparent aligner or splint. The BioBite**Corrector**[®] is a highly versatile hinge, suitable for retention devices, removable functional devices or sleep appliances.



BioBite**Corrector**[®] versions MS (without compression spring) and SP (with compression spring) are screw-connected to a square wire, which is embedded in the splint. If necessary the BBC hinge can be unscrewed from the splint.

The BioBite**Corrector**[®] SA (without compression spring) and the BioBite**Corrector**[®] FA (with compression spring) versions with a flat wire connector are directly embedded in resin.

BBC MS and SA versions work based on the functional principles of the Herbstappliance and therefore does not have an internal coil spring.

The splint can be fabricated using completely digital or conventional processes.



Connection in detail after unscrewing the BioBite**Corrector**®



Accessories

Titanium spacer 20 pieces 1,0 mm Part no. 205-2010-32 1,5 mm Part no. 205-2010-33

BBC Titanium Fixing Screw



BBC Open End Wrench 1 piece for BBC SA Part no. 205-2019-55



BBC Screwdriver 1 piece for Q Screw Handle 20 mm Part no. 205-Q2113 30 mm Part no. 205-Q2113L



BBC Box 1 piece Part no. 205-BOX13





Part no. 205-2010-44

Q Screw Handle 1 piece Part no. 205-Q2112

10 pieces

BioBite**Corrector**® SA

(without coil spring) Standard Size

BioBite **Corrector**[®] SA **1 Pair** Part no. 205-2015-31

BioBiteCorrector® SA Right

Part no. 205-2015-32



BioBiteCorrector® FA

(with internal coil spring) Standard Size

BioBite**Corrector**® FA **1 Pair** Part no. 205-2016-31



BioBite**Corrector®** FA **Right** Part no. 205-2016-32



BioBite**Corrector**® SA **Left** Part no. 205-2015-33



BioBite**Corrector®** FA **Left** Part no. 205-2016-33

Accessories

BBC MS Body with screw 4 pieces, Auxiliary element for the laboratory Part no. 205-2018-11



BBC Square Wire 4 piece, 0,25 x 0,25 x 50 mm Auxiliary element for the laboratory Part no. 205-W025-18

BioBiteCorrector[®] SA & FA products are only available through our dental laboratory service, as components of a BBC Herbst Appliance or BBC Sleep Appliance and as replacement parts.

For further information visit: **www.bbc-orthotec.de**

• Clinical examples • Patient information and education • Installation video • Direction for use



Design by

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