

# BioBiteCorrector<sup>®</sup>

The mandibular protrusion hinge

BioBiteCorrector<sup>®</sup> MS



BioBiteCorrector<sup>®</sup> SP



BioBiteCorrector<sup>®</sup> FA



BioBiteCorrector<sup>®</sup> 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 BioBiteCorrector MS and SA versions without internal open coil spring are used as a lower jaw protrusion hinge in dental sleep medicine and in TMJ therapy. BioBiteCorrector SA and MS are the first mandibular protrusion hinges made entirely of titanium.

The BioBiteCorrector Sleep Appliance is used to treat primary snoring and mild to moderate sleep apnoea.

In TMJ therapy, the BioBiteCorrector SA and MS versions are used for mandibular advancement splints.



## BioBiteCorrector® Applications:



### Orthodontic applications

The BioBiteCorrector (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 Multibacket 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 BioBiteCorrector hinge forms a modern functional orthodontic appliance.

The BioBiteCorrector 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 BioBiteCorrector 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 BioBiteCorrector 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 BioBiteCorrector<sup>®</sup> 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**

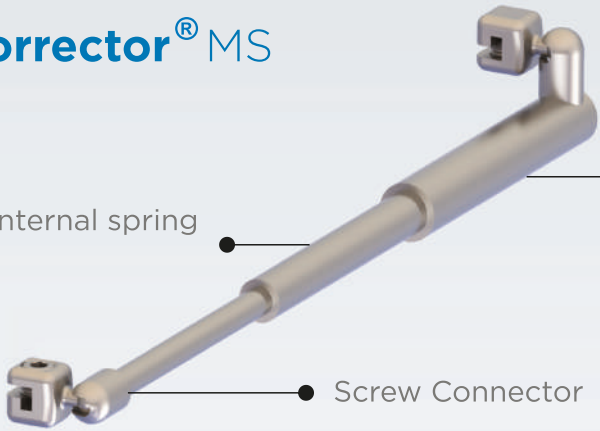
This design ensures extended mobility without disengaging like the conventional Herbst-appliance.

### ■ **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<sup>®</sup> MS

Without internal spring

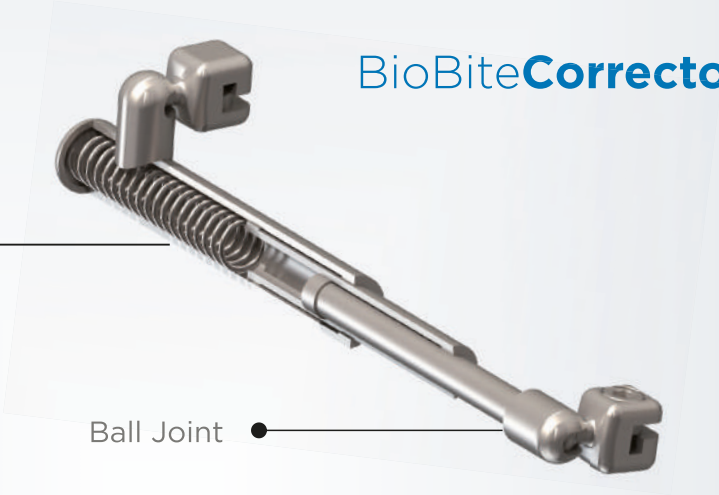


Screw Connector

Made entirely of titanium

BioBiteCorrector<sup>®</sup> SP

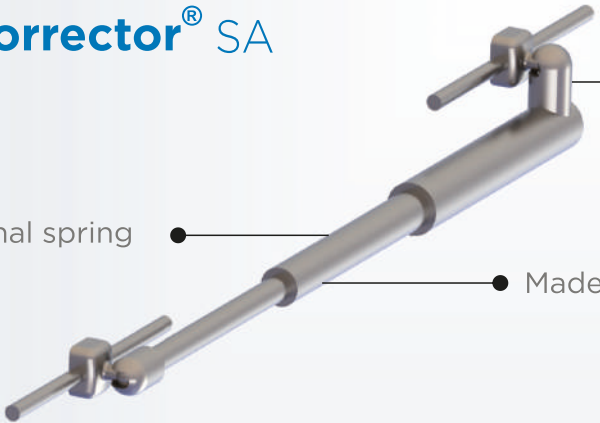
With 240cN open coil spring



Ball Joint

BioBiteCorrector<sup>®</sup> SA

Without internal spring

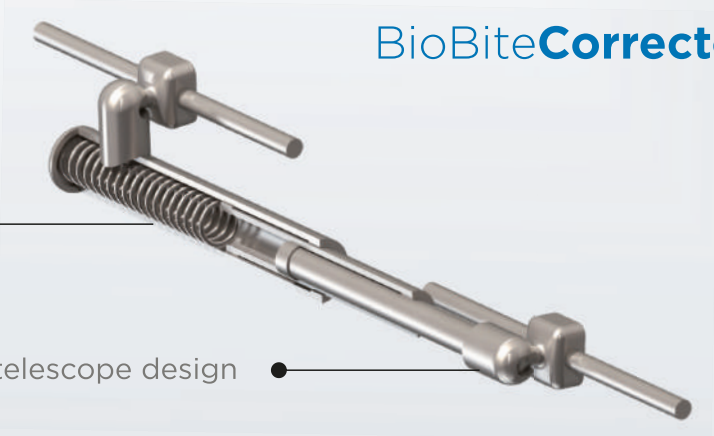


Made entirely of titanium

Wire Connector

BioBiteCorrector<sup>®</sup> FA

With 240cN open coil spring



Multi-telescope design

## Features

### BioBiteCorrector<sup>®</sup> MS



- Screwable Connector
- Without internal spring
- Made entirely of titanium

### BioBiteCorrector<sup>®</sup> SP



- Screwable Connector
- With internal stainless steel spring

## BioBiteCorrector MS and BioBiteCorrector SP

BioBiteCorrector versions MS (without compression spring) and SP (with compression spring) have a screw connector. These versions can be screwed to a square wire.

BioBiteCorrector 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 BioBiteCorrector<sup>®</sup> 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.



## Features

### BioBiteCorrector<sup>®</sup> SA



- Bondable, weldable and customizable wire connection
- Without internal spring
- Made entirely of titanium

### BioBiteCorrector<sup>®</sup> FA



- Bondable, weldable and customizable wire connection
- With internal stainless steel spring

## BioBiteCorrector SA and BioBiteCorrector FA

The BioBiteCorrector SA (without internal spring) and the BioBiteCorrector FA (with internal spring) designs have a flat wire connector. This connector can be directly polymerized into resin or fixed on special tubes (see BioBiteCorrector Herbst appliance).

Thanks to the flat wire connector, the BioBiteCorrector 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 BioBiteCorrector<sup>®</sup> 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<sup>®</sup> with multibracket appliance

The BioBiteCorrector 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.



BioBiteCorrector MS  
Without internal spring



BioBiteCorrector SP  
With internal stainless steel spring

The BioBiteCorrector<sup>®</sup> 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 BioBiteCorrector<sup>®</sup> SP supports the advancement of the lower jaw with an internal coil spring.

### BBC appliance on a patient



Before placement of BBC



After placement of BBC



Class I after treatment

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



The BioBiteCorrector SA 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 BioBiteCorrector telescope advantages
- The result is high wearing and speaking comfort with reliable therapeutic success

All BioBiteCorrector (BBC) versions can be used to fabricate a BBC Twin appliance. The BioBiteCorrector 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 BioBiteCorrector SA (without compression spring) and the BioBiteCorrector FA (with compression spring). Versions with a flat wire connector are directly polymerized into resin.

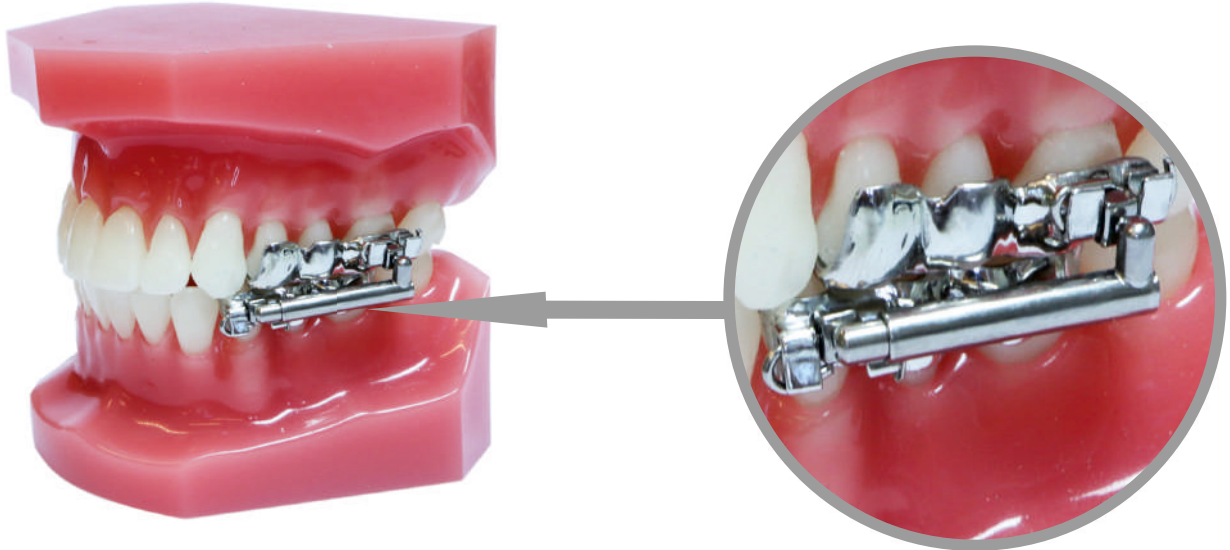
The flat wire connectors are placed centrally on the 1st premolar in the lower jaw and on the 1st molar in the upper jaw. They do not have to be placed interproximally like the screw connectors.

### Re-use on the same patient:



## BioBiteCorrector® Herbst

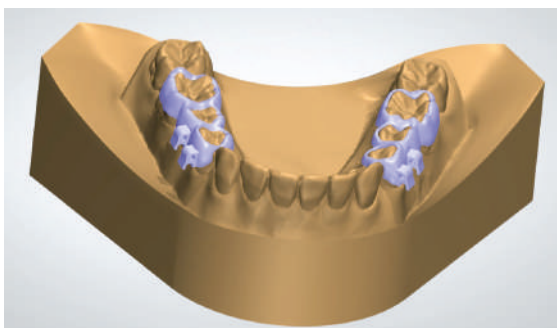
### The custom-cast splint appliance



### 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 or conventional manufacturing process
- All BioBiteCorrector (BBC) hinges can be combined with a custom-cast splint
- Reliable BioBiteCorrector 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



Cast attachments



Individually bending a stainless steel wire



Connection to stainless steel wire  
with protection against rotation



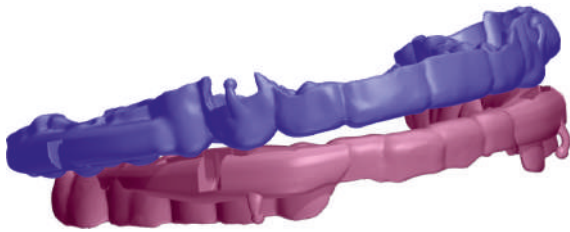
Bending the distal end of the wire



0.5mm gap between cast base and  
BBC body for additional mobility

# BioBiteCorrector® Sleep Appliance

## The anti-snoring device



## Advantages

### Biocompatible titanium

The BioBiteCorrector® SA is the first mandibular protrusion hinge made completely of titanium.

### Customized splint design

As preferred by the therapist, and based on the actual anatomical findings.

### 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.

### 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.

### Digital design

The BioBiteCorrector® Sleep Appliance can be fabricated using completely digital or conventional processes.

For a Sleep Appliance (anti-snoring device), only the BioBiteCorrector MS and BioBiteCorrector SA versions are used. These BioBiteCorrector versions have no internal compression spring.



## BioBiteCorrector® with transparent aligner

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



The BioBiteCorrector 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 BioBiteCorrector SA (without compression spring) and the BioBiteCorrector 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 Herbst-appliance 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 BioBiteCorrector

## BioBiteCorrector® MS

(with internal coil spring)  
Standard Size and Small Size



### BioBiteCorrector® MS Pair

4 Titanium Fixing Screws  
Standard Size  
Part no. 205-2015-11  
Small Size  
Part no. 205-2015-21



### BioBiteCorrector® MS Right

2 Titanium Fixing Screws  
Standard Size  
Part no. 205-2015-12  
Small Size  
Part no. 205-2015-22



### BioBiteCorrector® MS Left

2 Titanium Fixing Screws  
Standard Size  
Part no. 205-2015-13  
Small Size  
Part no. 205-2015-23



### BioBiteCorrector® MS-Kit

3 Pairs - BBC MS Standard  
20 Titanium Spacers  
Q Screw Handle  
Screwdriver Hex 20mm  
Part no. 205-2015-10

## BioBiteCorrector® SP

(without internal coil spring)  
Standard Size



### BioBiteCorrector® SP Pair

4 Titanium Fixing Screws  
Standard Size  
Part no. 205-2016-11



### BioBiteCorrector® SP Right

2 Titanium Fixing Screws  
Standard Size  
Part no. 205-2016-12



### BioBiteCorrector® SP Left

2 Titanium Fixing Screws  
Standard Size  
Part no. 205-2016-13



### BioBiteCorrector® SP-Kit

3 Pairs - BBC SP Standard  
20 Titanium Spacers  
Q Screw Handle  
Screwdriver Hex 20mm  
Part no. 205-2016-10

## Accessories



### Titanium spacer

20 pieces  
1.0mm Part no. 205-2010-32  
1.5mm Part no. 205-2010-33



### Torque-Ratchet

1 piece  
Part no. 205-QX30



### BBC Titanium Fixing Screw

10 pieces  
Part no. 205-2010-44



### BBC Screwdriver

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



### Q Screw Handle

1 piece  
Part no. 205-Q2112



### BBC Box

1 piece  
Part no. 205-B0X13



**BioBiteCorrector® SA**  
(without coil spring)  
Standard Size



**BioBiteCorrector® SA Pair**  
Part no. 205-2015-31



**BioBiteCorrector® SA Right**  
Part no. 205-2015-32



**BioBiteCorrector® SA Left**  
Part no. 205-2015-33

**BioBiteCorrector® FA**  
(with internal coil spring)  
Standard Size



**BioBiteCorrector® FA Pair**  
Part no. 205-2016-31



**BioBiteCorrector® FA Right**  
Part no. 205-2016-32



**BioBiteCorrector® 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**  
025 x .025, 4 x 5cm  
Auxiliary element for the  
laboratory  
Part no. 205-W025-18

BioBiteCorrector SA & FA products are available only 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.com](http://www.bbc-orthotec.com)

- Clinical examples
- Patient information and education
- Installation video
- Directions for Use

**Design by**



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