BioConnect

A BioComp© dental implant system





The power of simplicity

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About BioComp

'The appropriate solution for every indication'

BioComp has been offering a well-balanced implant system since 1992 for the experienced implantologist, dental surgeon and the starting dental implantologist, and is also easy to use for the dental technician and dental prosthetician. Whatever your indication is, the BioComp implant system offers a suitable solution.

The system developed and produced in the Netherlands is distinguished mainly by its simplicity, solidity, unique design and HAVD coating. Clinical and scientific research has proven that the BioComp implant system is not only safe and reliable, it is also very user-friendly. Many satisfied users preceded you!

Unique design worldwide

The BioComp implant is recognizable worldwide due to its unique two-step design.

It is a biomechanical, excellently balanced implant, with retention elements at positions where stresses have to be guided to the adjacent bone (neck and tip), and is manufactured from the high quality Titanium Grade V (TiAl46V). Not only the shape, but also the HAVD surface structure (with a thickness of only 1.2 micron) ensure an optimal ingrowth of the implant.



'BioComp. The power of simplicity.'

Only one ingenious drilling system

BioComp offers one unique, patented drilling system for all implant diameters and lengths.

The simplicity and accuracy of the drilling protocol and the excellent guidance through the integrated drill guide during implantation ensure a predictable outcome for all indications.

You can also flexibly respond to undersized drilling or counterbore drilling the desired retention / osteocompression. The BioComp implant drills can be used over 250 times.



Only one user-friendly insertion tool

The surgical insertion instruments have been specially developed for the BioComp implant system, with user-friendliness as the starting point. All implants, cover screws and healing abutments can be placed with only one instrument, the so-called 'double hexagon'. For the prosthetic treatment only one hexagonal screwdriver is needed.



Only one connection

BioComp has two product lines: BioComp and BioConnect. Within these product lines each implant has the same connection, regardless of the diameter of the implant. This means that all products of the same product line are interchangeable. As a result, you only need a limited stock and it simplifies the creation of a treatment plan.



Only one fixation screw

Within the same product line, all abutments for crown make use of the same model fixation screw.



Only one tightening moment

The same tightening torques apply to both the BioComp and BioConnect products:

Implant level (crown, bar, ball or center abutment, bar)	32 Ncm
Abutment level (bar, secondary parts for angled base)	20 - 25 Ncm
Cover screw, healing abutments, impression post	10 - 15 Ncm

2 The BioConnect dental implant system

BioConnect is the latest product line from BioComp. Like the BioComp implant system, the BioConnect system is based on decades of clinical experience, research and testing. Starting points in the development of the BioConnect implant system were aesthetic results and optimal stability, but with the same ease of use as the existing BioComp implant system (see pages 2 and 3). The result is a revolutionary system in which - depending on the indication - even more security for both the user and the patient is offered.

Two stepped design

The BioConnect implant is, just like the BioComp implant, recognizable by its unique two-step design. A biomechanical, balanced, implant with retention elements at positions where stresses have to be guided to the adjacent bone (neck and tip). A design suitable for all indications, made from the high quality Titanium Grade V (TiAl46V).

Preservation of the crestal bone

The axial load that the implant can carry significantly increases because of the microgrooves. Interface shear stresses are lower and therefore provide a greater preservation of the crestal bone.

Less trauma of the bone

The threadless section prevents unnecessary stress concentrations in the spongy bone and ensures the preservation of laminar bone.

Faster implant placement

The screw path to only 6 mm facilitates and speeds up placing the implant.

Lots of placement possibilities

Due to the narrow apex of 0.6 to 0.9 mm narrower than the coronal diameter, there are a placement possibilities between two elements.

Preservation of marginal bone level and improved aesthetics

The platform switch ensures preservation of the marginal bone level. Enlarged space for mucosa ensures improved aesthetics.

Good primary stability

The gradually increasing osteocompressibility of the self-tapping conical thread ensures good primary stability.

Good grip

The self-tapping conical thread ensures good grip even after extraction.

Osseointegration stimulating surface

Blasted and etched surface, combined with a hydroxyapatite coating of only 1.2 μ thick.

Unique implant-abutment connection

The BioConnect implant-abutment connection involves a deep connection with a large conical contact surface. This ensures optimal power transfer and prevents peak stresses in the bone. In combination with the fixation screw with conical screw head, 'a whole' is created with minimal space for micro movement. The harmonized design with coordinated tolerances in combination with very precise production methods results in a stable and durable implant system:

The perfect basis for red-white aesthetics.

Conical screw head for optimum clamping force

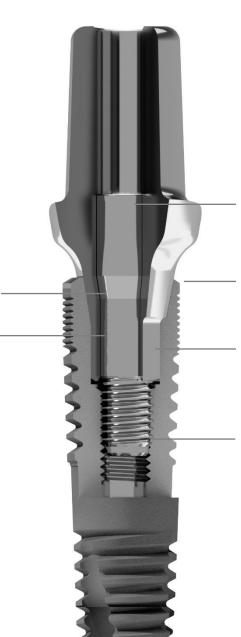
Optimum clamping force due to parallelism with the conical plane of the implant. Prevents loosening of screw.

Minimum micro movement

Easy assembly through cylindrical guidance.
Minimizes micro movement.

Stability and good power transfer

The 3.5 mm deep connection ensures stability and good power transfer.



Minimum passage for screwing

Screw head of only Ø2,1 mm. Screwdriver of only Ø1,4 mm.

No leakage and optimal power distribution

Conical connection to prevent leakage and optimal power distribution.

Accurate and stable coupling

Internal hexagon for precise and stable coupling between implant and abutment, with great flexibility for the body.

Good abutment retention

The unique and fine internal thread ensures optimal screw connection and therefore good abutment retention.

Platform switch

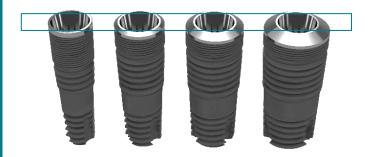
The BioConnect system offers a platform switch on every diameter.



Only one connection. Limited stock needed. Simple treatment plan.

As with the BioComp implant system, every implant within the BioConnect system has the same connection, regardless of the diameter of the implant. As a result, you only need a limited stock and it is very easy to make a treatment plan.

Note: Because the parts of the BioConnect system have a different connection than the components of the BioComp system, the components between these two systems are not interchangeable. However, you can use the same instruments.



Same tools as the BioComp implant system

For the BioConnect system you can use the same instruments as for the BioComp system. All dental implants from BioConnect can be placed with the same handy bore set and without additional tapping. In other words: If you already own BioComp instruments, you do not have to invest in new instruments.

'No new investments needed when you already use the BioComp implant system'

Available sizes

The BioConnect implants are available in the following sizes:



Production

The BioConnect products are developed and produced in-house. We work entirely in accordance with European and Dutch quality standards. We opt for only reliable Dutch producers. These are all experts within their own discipline. Every specific specialist step in the production process ensures a guaranteed end product. BioComp works according to the NEN-EN ISO 13485 standard and is CE certified.

Co creation

Implantology is dynamic. Therefore it is continuously developing. BioComp closely follows all developments in implantology and strives to adapt its range accordingly, so that we can provide you with state-of-the-art products and services. We believe in a close collaboration with our users, and invite our users to share possible points of improvement with us, so that we can investigate them and make improvements where possible.

3 Restaurations with BioConnect

The BioConnect implant system offers a series of abutments that help you easily achieve the optimal aesthetic result for the patient.

The BioConnect implant system offers various models and sizes of abutments to realize an optimal restoration, that is a fully adapted to the individual situation of each patient.

A simple way to a natural result

Thanks to the location specific shapes - round, oval and rectangular - in combination with a consistently implemented emergence profile, it is easy to realize the gums to a true-to-life situation from the healing phase up to and including the final restoration.





An overview of all products from the BioConnect implant system you will find in the back of this brochure.

All abutments can be applied in various conventional or digital ways to achieve the desired end result. They can all be fastened with the same hexagonal screwdriver and the same model screw (if applicable).



Healing abutments

A cover screw is available for the first phase of a two-phase operation. For the healing of the mucosa, different healing abutments are available, which can be used in both a single phase and a two phase operation. The titanium healing abutments are available in different shapes, gingiva heights, lengths and dimensions.

In addition, an angled healing abutment is available. This abutment gives an eccentric permucosal shape, suitable for both the 'round-low' angled abutment for crown (BCC-192-E15058) and - in limited interdental space - for the straight preformed abutment for crown (BCC-192-E15008).



Temporary abutments for crown

In situations where the mucosa needs to be adjusted for aesthetics, it is often better to first make an emergency crown or bridge on, for example, the temporary abutment made of the material PEEK. Because the PEEK material is easy to handle, a good basis for a temporary construction can be made with a limited amount of time. If desired, the temporary abutment can also function as a healing abutment.

The PEEK abutments are available in the different site-specific forms.

Abutments for crown

The BioConnect system offers various pre-formed titanium abutments for the final restoration.

With the abutments for crown, the emergence profile and the shape of the abutments for crown up to the outline correspond to those of the matching healing abutments. Thanks to the available variation in shape of the abutment and the height of the shoulder, minimal grinding work and thus limited time effort create an optimal basis that corresponds to the anatomical conditions of the patient:

- The collar, where the visible side contains more crown mass and the palatal-lingual side contains more titanium mass, ensures that the outline of the crown can be easily positioned on, or above, the mucosa side.
- The angled variant makes it easier to model a crown in an implant position where a straight abutment is placed outside the dental arch.
- The cone-shaped abutment, without collar, (BCC-190-E14008) also offers a solution for limited interdental space.



CAD/CAM

The titanium 'base' abutments offer you complete freedom for the digital workflow in combination with the certainty of a stable, accurately fitting, implant-abutment connection. With the basic abutments, an individual restoration can be made without grinding completely CAD / CAM.



Continuation CAD / CAM on next page >>

Thanks to the various variants of the base and the base for bridge you can easily respond to the situation in the mouth and the preferences for the restoration.

Based on a digital model obtained with a scan by the scan body, an individual CAD / CAM abutment (crown) design can be designed in, for example, 3-shape, DentalWings and ExoCad. The required library is available at BioComp.

In addition to a digital model obtained by a scan with the scan body, it is also possible to design a restoration on the base for crown / CEREC® via the CEREC® workflow using a scan cap.

Impression

Thanks to the complete interchangeability within the system, both the impression post, scan body and lab analogue on implant level, are always suitable for every diameter and length of the BioConnect implant.

The printing can be done with a impression tray and the impression post. Additionally a 3D model is possible in various ways.



The impression post at implant level for open spoon is a pin with large undercuts and three vertical flat surfaces. This model guarantees good retention in the impression mass.

The screw protrudes in a way that it is easy to find in the spoon. If desired, the impression post can be shortened to a length of 8 mm, by cutting it at first constriction. Therefore there is a screw available, that can be shortened.

The implant-level scan body is made of PEEK, a material that is known for its sound scan results. The geometry guarantees a good reference and alignment in the CAD software. With the help of the corresponding BioConnect Library, crowns and bridges can be designed directly on the various basis abutments.

The BioConnect Library, containing the necessary files, can be requested at BioComp or the software supplier. With these digital data can be worked in programs like 3-Shape, DentalWings and Exocad.





The crown / CEREC® bases have been developed to produce chair-side manufactured CAD / CAM restorations using the CEREC® system. The positioning can be digitally recorded using the CEREC scan folder.

By directly scanning the abutments, it is possible - even without using the library – adapting anatomic shapes for constructions of adjusted abutments, crowns and bridges.

The emergence profile and the shape of the abutments for crown also correspond, up to the outline, with those of the matching healing abutments.

Bite registration post

The bite registration post is a practical, reusable tool for making crown and bridge work on implants. In free-ending situations it is often necessary to first make a bite registration plate to determine the bite. When using the bite registration post, this step can be skipped and the treatment can be shortened with one conventional session. An accompanying advantage is that these bite registration posts are more stable than a bite registration plate.



Model

The 'laboratory analogs at implant level' offers a good grip in the plaster model, thanks to the retention ridges and the large anti-rotation surface.

Because of the precision-made external geometry with a ingenious built-in click function, the analog can also be placed in a 3D-printed model. The geometry for the hole in the 3D-printed model is also included in the BioConnect Library.



4 BioConnect product overview



