



CERAMIC IMPLANT  
ONE- AND TWO-PIECE  
LENGTHS FROM  
6 MM AND 8 MM



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**BioWin!**

**Major Step Forward**

**CHAMPIONS** 

# PREFACE



## Are Ceramic Implants Growing in Popularity?

Ceramic implants are ground-breaking, and their use has increased rapidly. Ceramic implants are a viable treatment option since titanium intolerance affects 10-15% of the population because of a placed titanium implant.

The solution is: ceramic implants made from zirconia. In this brochure we would like to present you the BioWin! ceramic implant. Since 2004, it has been on the market without being a new construction. Scientific studies have been conducted, including a 2-year long-term study (Prof. Becker), which has shown a 95.8% osseointegration success rate even in patients with periodontal disease. Without a screw connection, the implant, including the two-piece one, is metal-free.

Convince yourself of the advantages of the ceramic implant and in particular of the BioWin! For any further questions or queries, please do not hesitate to contact the Champions team.

Sincerely,

Dr. med. dent. Armin Nedjat

# VERSIONS



ultra-short

Length 6 mm (ultra-short)  
Two-piece  $\varnothing$  5.5 mm/4.5 mm  
One-piece  $\varnothing$  5.5 mm/4.5 mm



Length 11 mm  
Two-piece  $\varnothing$  5.0 mm/4.5 mm/4.1 mm  
One-piece  $\varnothing$  5.0 mm/4.5 mm/4.1 mm



short

Length 8 mm (short)  
Two-piece  $\varnothing$  5.5 mm/4.5 mm  
One-piece  $\varnothing$  5.5 mm/4.5 mm



Length 13 mm  
Two-piece  $\varnothing$  5.0 mm/4.5 mm  
One-piece  $\varnothing$  5.0 mm/4.5 mm



Length 9 mm  
Two-piece  $\varnothing$  5,0 mm/4.5 mm/4.1 mm  
One-piece  $\varnothing$  5.0 mm/4.5 mm/4.1 mm

Post of the  
two-piece BioWin!



# CONCEPT



Ceramic implants are "in" – however, the aim of Champions is not to offer any ceramic implant, but an implant system that can be integrated in the Champions-Implants concept.

**A ceramic implant system should fulfill the following 4 requirements:**

- placement using the minimally invasive method
- proven implant system with long-term university studies instead of a new construction
- rough surface (patented manufacturing process) to enhance rapid osseointegration
- affordable for patients

BioWin! ceramic implants of Champions-Implants fulfill these 4 requirements.

# CONSTRUCTION

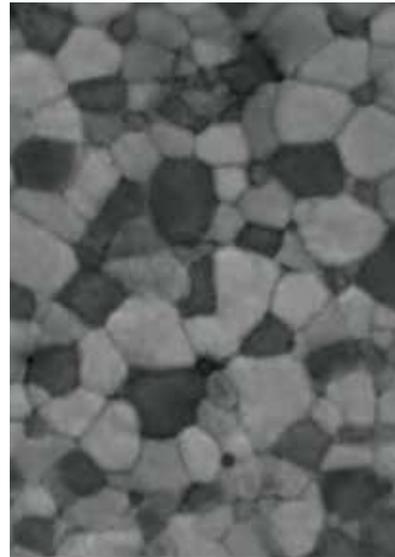
**"Man kann den Bauplan des Eiffelturms nicht auf eine Betonkonstruktion übertragen."  
(You cannot transfer the Eiffel Tower construction plan to the construction of concrete).**

With this comparison, Prof. Mombelli, Geneva, a manufacturer of ceramic implants, emphasizes the error of the construction: ceramic implants, which are based on designs and constructions of titanium implants, cannot function.

The BioWin! implant is an independent construction that is not based on the one of titanium implants. The implant body was newly constructed. Additionally, the roughness of the surface is created using a patented process. What is new is that instead of an abutment, a glass fiber post connects the two-piece implant body with the denture.



# MATERIAL



The BioWin!  
ceramic implant  
consists of only  
0.25% alumina.

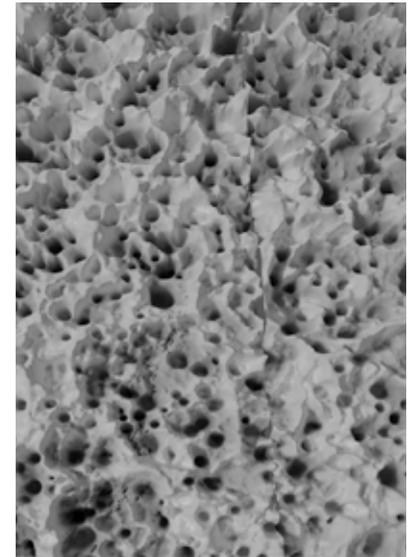
The BioWin! ceramic implant consists of only 0.25% alumina ( $Al_2O_3$ ). In this way, the strength of this ceramic implant type is higher than the strength of the titanium implant. However, strength is not high to such an extent that there is a fracture risk, since higher strength (in MPa) means less elasticity.

The manufacture is not performed via injection molding or in-mold process, but the implant is individually milled. With a user-friendly software, dentists can also order individual implant shapes.

## Comparison of strengths:

Titanium grade 4b (cold-formed)	485 MPa
BioWin!	1,400 MPa
Alumina Toughened Zirconia (ATZ)	2,000 MPa

# SURFACE



The material surface is vital for fast osseointegration. In fact, the surface of a titanium implant can be chemically and/or mechanically designed after production, but not the ceramic implant surface after sintering. Before sintering, the BioWin! surface is treated using a patented procedure to roughen the surface, which is rougher than the titanium implant surface. This surface roughness of the BioWin! results in good, fast osseointegration of the implant.

# POST



What is new about the BioWin! is the post and the type of connection to the implant body.

International studies have shown that a gap between the abutment and the two-piece implant body, which is vulnerable to bacteria, can cause periimplantitis. Ceramic implants with a ceramic abutment have a big gap ( $> 80 \mu$ ), which can harbor bacteria (also MRSA [Methicillin-Resistant Staphylococcus Aureus]) in the inner part of the implant – which can cause periimplantitis, which can lead to implant failure.

The two-piece BioWin! implant is supplied with a glass fiber post. This post is glued with the implant body and allows for a connection without a gap that makes it resistant to bacteria. You can shape the post extra-orally or intra-orally.

# INTEGRATION

Zirconia – no matter from which manufacturer it is delivered – is always hydrophobic, so it does not absorb liquids. In order to enhance osseointegration, a good contact of the implant surface with the blood of the alveolus is necessary. For this Champions-Implants recommends the portable handheld cold plasma device piezobrush, which is used to treat the implant by generating cold plasma chairside for 2 minutes before implant placement.



# INSERTION



BioWin! implants can be placed using the MIMI minimally invasive protocol. You can place the implants using the same tools that you use for Champions titanium implants. You don't need a new surgery tray, and you don't have to familiarize yourself with a new insertion protocol.

Immediate or delayed implantation can be performed with ceramic implants the same way as with titanium implants, using the standard MIMI I protocol, horizontal distraction (MIMI II), or the minimally invasive sinus lift (MIMI V – IDS).

# WORKFLOW

When making impressions, BioWin! is also different from other competitors. Like for a tooth preparation, the impression of BioWin! is made with high-precision polyether or silicone material with a confection spoon or an intraoral scanner. Neither transfer posts, nor laboratory analogs, nor screwing, nor screwing with „open impression“, nor X-rays are necessary.

Make sure that you make good impressions of the 3C-Connection and the crown margins.



# CERAMICS VS. TITANIUM



Ceramic implants are also indicated for patients with titanium oxide intolerance (10–15% of the population – don't confuse titanium oxide intolerance with titanium allergy) or for those who do not want metal implants to be placed into their jaw. Ceramic has been considered as the perfect material for dental implants for many years since it is biocompatible and not recognized as foreign material by the body. Alumina, the material used before, which had not fulfilled the stringent mechanical requirements of an endosseous implant, was replaced by zirconia, which fulfills demanding requirements.

- Since 2004: 95.8% clinical success in osseointegration
- One-piece and two-piece implants
- No micro-gap
- Only 0.25% alumina ( $Al_2O_3$ ) compared to an ATZ-zircon implant: 25%  $Al_2O_3$
- Surface roughness created using a patented process
- Efficient surgery and prosthetic restorations (no transfer posts, no laboratory analogs, no screwing of implant/post)
- Best price/performance ratio for your success
- 100% quality Made in Germany

# HIGHLIGHTS



# Competence in Ceramics since 2004



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