

Metoxit Zirconia - aesthetic, strong, biocompatible

High-performing ceramics for implantology,
according to your individual needs.



*Deeply rooted in
Swiss precision*

Competence

We offer knowledge, pioneering history and innovations - all under one roof. With over 40 years of experience in high-tech ceramics, Metoxit is your ideal partner for reaching the next milestone in dental applications.

Whether in green body condition, as pre-milled pieces, or completely finished implants according to your design - Metoxit is ready to apply its expertise to deliver customized solutions to its clients.

Metoxit is where it starts, it begins with you.

Materials

The following materials are available:

- TZP-A BIO-HIP®
- ATZ BIO-HIP®
- Zircapore® surface coating
- Custom-made developments

All materials are available in BIO-HIP® quality, sintered or pre-sintered.

Solutions

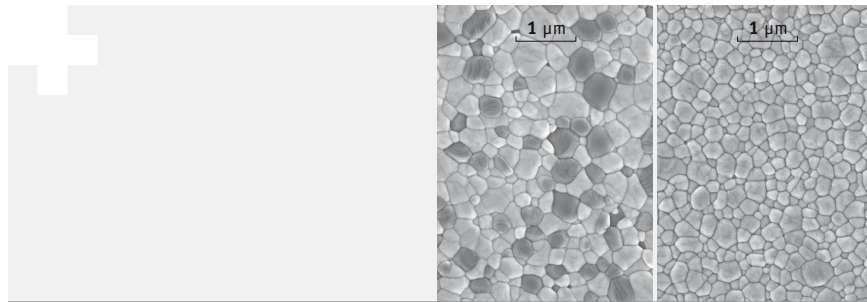
Ceramics can be implemented in most areas of dental prosthetics:

- Implants
- Abutments
- CAD/CAM-blanks
- Root posts
- Instruments
- semi-finished products

About Metoxit

Founded in 1978, Metoxit possesses extensive experience in the field of high-tech ceramics. Together with our clients, we develop high quality components for the dental and medical industries. As a certified manufacturer of medical products, quality and precision are our main priorities. Our products are exclusively made in Switzerland.

Our **Implant Materials** – Pure, reliable, and based on long-standing expertise.



	Units	ATZ BIO-HIP®	TZP-A BIO-HIP®
Chemical Composition			
Constituents		ZrO ₂ /HfO ₂ /Y ₂ O ₃ /Al ₂ O ₃	ZrO ₂ /HfO ₂ /Y ₂ O ₃ /Al ₂ O ₃
Purity	wt%	> 99.5	> 99.5
MgO	wt%	≤ 0.04	≤ 0.04
SiO ₂	wt%	≤ 0.02	≤ 0.02
Fe ₂ O ₃	wt%	≤ 0.01	≤ 0.01
Na ₂ O	wt%	≤ 0.04	≤ 0.04
Properties			
Density	g/cm ³	5.50	6.08
Bending strength (4-point)	MPa	≥ 1300	≥ 1100
Grain Size	µm	≤ 0.6	≤ 0.4
Fracture Toughness K _{1c}	MPa√m	8	6
Hardness HV ₁₀	-	1400	1250
Coefficient of thermal expansion	10 ⁻⁶ /K	9	10
Thermal conductivity	W/mK	6	2.5
Suggested applications			
		Bioceramics such as dental implants, small joint implants	Bioceramics such as dental implants, small joint implants

Further materials are available on request.

All information and data correspond to the present state of our knowledge concerning properties and applications. They do not guarantee certain properties for products designed for specific applications utilizing material(s) described.

Our materials **TZP-A BIO-HIP®** and **ATZ BIO-HIP®** are the outcome of longterm research and development. Their purity, biocompatibility and strength make them an excellent choice for dental implants, leading to superior patient satisfaction.

ATZ BIO-HIP® combines outstanding fracture toughness with exceptional bending strength. The certified BIO-HIP® treatment makes it an ideal material for implants.

TZP-A BIO-HIP®'s polycrystalline structure highly reduces the risk of cracking and makes it a reliable and versatile material for a wide range of dental applications.

