

[Introduction]

BioXZR™ Zirconia Discs are made of ZrO2 (Yttrium oxide-stabilized Zirconia which are available in four different translucency and strength, represented as Anterior(Ultra Translucent zirconia), Natura(Full contour zirconia),Compact(extra strength zirconia) and Multi-layer(Full contour multi-layered zirconia), each of which is comprised of a variety of shades and thicknesses.

[Intended Use]

The material is an oxide ceramic characterized by its particularly high strength along with functional translucency. An appropriate disc can easily be selected depending on the indication and esthetic or functional needs of the final restoration

[Composition]

ZrO2, Y2O3, HfO2 , Al2O3 and other oxides

[Specification]

Coefficient of thermal expansion(50~500°C, 10⁻⁶K⁻¹): 11.5

Chemical Solubility(µg/cm³): 31.4

Flexural Strength(MPa): 1,100~ 1400

[Classification]

Type II, class 6

[Indications]

- ⚙ **Anterior (Ultra Translucency):** Full Contoured, fully or partially frameworks, Crowns, Bridges up to 3 units and etc.,
- ⚙ **Natura (Full Contour):** Full Contoured, fully or partially frameworks, Crowns, Bridges up to 14 units and etc.,
- ⚙ **Compact(Extra Strength):** Copings and Framework construction, Crowns and long span Bridges up to 16 units
- ⚙ **Layer FC (Multilayer):** Full Contoured, fully or partially frameworks, Crowns, Bridges up to 6 units and etc.,

[Preparations]

- Check the product is the same as the one intended for use.
- Make sure that other foreign substances are not mixed.
- Use the product in a place with good ventilation.
- Be fully aware of the instructions for use by the manufacturer before use and observe the instructed methods.
- The user of this product should calculate its shrinking rate properly for its sintering environment before using it.
- Check if the product is damaged or contaminated with any foreign matter by naked eyes.

[How to Use]

- Fix BioXZR™ Zirconia into the fabricating device properly in the fabricating direction by using JIG.
- Set and check the position information of the prepared block.
- Input the compensated value needed for cutting.
- Cut it by fabricating device.
- Detach the JIG from the fabricating device.
- Detach the fabricated artificial tooth, prostheses and etc from the JIG.
- Sinter it in sintering furnace.

[Sintering program]

Standard sintering schedule (recommendation for bridge frameworks with 8 or more units):

Heat from room temperature to 900°C in 180 minutes, to 1530°C in another 240 minutes, hold for 120minutes at 1530°C, then allow to cool slowly to room temperature in 180 minutes. The total sintering cycle takes approx. 12 hours.

Speed sintering schedule:

Heat from room temperature to 900°C in 90 minutes, to 1530°C in another 120 minutes, hold for 120minutes at 1530°C, then allow to cool slowly to room temperature in 180 minutes. The total sintering cycle takes approx. 8-1/2 hours.



Temperature (°C)	#Standard	#Speed
	Holding Time(min)	Holding Time(min)
Room 25 - 900	180	90
900 - 1530	240	120
1530 - 1530	120	120
1530 - Room 25	180	180
Hating Rates	10(°C/min)	25(°C/min)
Application	Crowns, Small Bridges, Large unit bridges	Crowns, Small Bridges and up to 3 units

Important!

BioXdent is not responsible for any kind of damage caused by not complying with BioXZR™ Zirconia IFS build-up technique and sintering program, including but not limited to damage to or damage caused by the sintered objects such as abutments and restorations.

[Restoration build-up technique-Minimum thickness]

- Anterior : 0.5mm
- Molar, premolar : 0.8mm

[Cautions]

- 1) The user must fully understand the product to prevent problems or disputes arising out of using the product
- 2) Do not use the product for other than its intended using purpose. It must not be used by other (child, elderly and etc) than experts.
- 3) Carefully use the product so that its particle cannot get into eye.