**Stage Program Rate/Minute Temperature (Hours)**

1. Heating Ramp 7°C/Minute 900°C 125 Minutes
2. Heating Ramp 10°C/Minute 1450°C 55 Minutes
3. Heat Soak 1450°C 120 Minutes
4. Cooling Ramp 6°C/Minute 1000°C 75 Minutes
5. Cooling Ramp Natural Cool 650°C 134 Minutes

*After this controlled cooling segment, the framework can cool naturally.*

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**Material Properties**

**ARGENZ ANTERIOR**

**STRENGTH**

- Flexural Bending Strength — ArgenZ Anterior >765 MPa mean value

- Density ≥ 6.00 g/cm³

**COMPOSITION**

- ZrO₂ + HfO₂ + Y₂O₃
- Y₂O₃ > 99 wt%
- Al₂O₃ 8.5 - 10 wt%
- Fe₂O₃ < 0.1 wt%
- HfO₂ < 0.1 wt%
- TiO₂ < 5 wt%
- SiO₂ < 0.1 wt%

**THERMAL EXPANSION COEFFICIENT**

25-300°C = 10µm/m-°C

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**Adjusting ArgenZ**

- Only use burrs specifically designed for adjusting Zirconia. Always ensure that Zirconia is wet during the grinding process. A high-speed wet hand piece, at low speed, is recommended during the adjusting process in order to keep heat to a minimum.
- Avoid grinding the basal grooves and tooth connections.
- If possible, smooth rough or sharp edges.
- Do not sandblast.

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**Hazards Identification - Emergency Overview**

- **Eye Contact:** Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.
- **Skin Contact:** Mechanical skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.
- **Inhalation:** During grinding, scraping or sanding, inhalation of particles may occur, resulting in upper respiratory tract irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
- **Ingestion:** No health effects are expected.

Please refer to the complete MSDS sheet provided with your order.

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**ARGENZ Technischer Support**

For further questions or technical support, please contact Argen’s Technical Support staff at (800) 255-5095.
**Instructions for Use**

ArgenZ Anterior (super translucent) dental zirconia is indicated for the production of full contour restorations. The following instructions provide general guidelines for handling, designing, milling, coloring, sintering and adjusting of ArgenZ material and should be followed very carefully to avoid any loss of aesthetics, fit, durability or overall quality.

**Indications for Use**

ArgenZ Anterior (super translucent) zirconia can be used for the production of full contour single unit anterior and posterior restorations, and 3-unit anterior bridges.

**Handling ArgenZ**

Inspect each shipment for damage and do not use damaged discs for the production of dental restorations. Store ArgenZ in a cool, dry, temperature-stable environment (between 5°C and 50°C) in the original packaging.

**Designing ArgenZ**

Design Option

Drill Compensation

Cement Gap

Extra cement Gap

Distance to Margin Line

Smooth Distance

Drill Radius

Drill Compensation Offset

Margin Line Offset

Offset Angle #1

Extension Offset

Wall Thickness

Bridge Connectors

**Milling ArgenZ**

Pre-sintered (or “green”) zirconia material has an inherent shrinkage rate associated with each production lot. This shrink rate, usually formatted as 1.XXXX, can be found on the side of the actual disc. This number must be input into the milling preparation software to ensure the accuracy of the eventual restoration.

When milling ArgenZ, always follow these general guidelines:

- Only use sharp end mills with carbide or diamond coating.
- Do not use any restoration that has chips and/or cracks. Remove the units from the disc using a handpiece with a diamond-coated bur.
- Smooth the support areas with a medium-grit rubber polishing wheel.
- Remove any residual zirconia dust with an art brush.
- If a wet mill is used make sure all the zirconia is completely dry before sintering. Air dry for at least 15 minutes prior to sintering. Damp zirconia will crack if placed in the sintering oven.

**Coloring ArgenZ**

ArgenZ Anterior is compatible with all major dental zirconia coloring systems.