

# ceraMotion® Z

The symbol for smarter zirconia



Gebrauchsanweisung

Instructions for use

Mode d'emploi

Modo de empleo

Modalità d'uso

**D**  
DENTAURUM

## Limitation of liability

The information in these Instructions for use takes into consideration the applicable norms and regulations, state-of-the-art technology and our many years of knowledge and experience.

The manufacturer provides no warranty and will accept no liability in the following cases:

- Non-compliance with this document.
- Non-compliance with the material safety sheets associated with this product.
- Non-compliance with or unauthorized changes to the procedure as stated for the sintering process.

## Indications

ceraMotion® Z are zirconium oxide blanks for the production of fixed restorations, such as inlays, veneers, single crowns and bridges. Processing is carried out by dental specialists.

Type of restoration:	Single crowns	Bridge up to 3 units	Bridge up to 14 units	Veneers	Inlays	Cantilever bridge unit premolar-size
ceraMotion® Z Hybrid **	●	●	● 1)	●	●	●
ceraMotion® Z Cubic Multishade *	●	●		●	●	
ceraMotion® Z HT Multishade **	●	●	● 2)	●	●	●
ceraMotion® Z HT Shade **	●	●	● 2)	●	●	●
ceraMotion® Z HT White **	●	●	● 2)	●	●	●
ceraMotion® Z White **	●	●	● 2)	●	●	●

1) Up to two pontics

2) Up to 3 sequential pontics in the anterior area, up to 2 sequential pontics in the posterior area

\* Type II class 4 dental ceramics acc. to EN ISO 6872

\*\* Type II class 5 dental ceramics acc. to EN ISO 6872

## Contraindications and adverse reactions

There is no evidence of incompatibility with this material when manufacturing or processing in accordance with the Instructions for use.

Do not use this material if there is a known intolerance to one or more of the ingredients.

Ceramic restorations are not recommended or only to a limited extent in the case of bruxism. Consultation with the attending dentist is strongly recommended.

## Warnings and precautions

To avoid damage, make sure that a collision with hard objects is avoided. It must also be ensured that the material is neither crushed nor exposed to vibrations.

Mechanical processing of the material can lead to the generation of dust. In addition, the processing leads to heat development and possibly to bur formation. Processed material may therefore be hot and/or have sharp edges. We generally recommend that gloves, protective clothing, safety glasses and respiratory protection equipment are worn.

Professional handling is required. The processing of the product is the sole responsibility of trained specialist personnel. The patient may not come into contact with this product before the sintering process has been completed.

## Reuse

The material should not be reused.

## Storage conditions

The product properties are not known to be affected by normal changes in environmental conditions (such as temperature, pressure, humidity or light). In general, the product should be kept dry and at room temperature. As part of general caution, processing within five years of the date of manufacture is recommended.

## Disposal of residual material

The applicable national regulations and the relevant information in the safety data sheets must be observed.

## Serious incidents occurring in connection with this product

Should the user and/or the patient become aware of serious problems arising from the use of the product, it is important that the manufacturer and the competent authority in the country in which the user and/or the patient is resident is informed accordingly.

## Processing instructions

### Milling

ceraMotion® Z is a semi-finished product for the fabrication of all-ceramic dental restorations by subtractive manufacturing. Machining can be done with most commercially available CAD/CAM milling machines or hand-held copy milling machines. Suitable tools should be selected according to the machine manufacturer's operating instructions. Before starting the milling process, make sure that the tools are clamped properly and securely. The machining should be carried out with the milling parameters recommended by the machine manufacturer. After completion of the milling process, the framework must be removed from the blank. A diamond disc is recommended to be used for cutting out. Any particles or dust remaining on the surface must be removed with the aid of compressed air.

### Shading the frameworks

The shade of the framework can be matched to the desired tooth shade using the commercially available coloring solutions approved for zirconia ceramics. An infrared lamp should be used for drying. In this context, the instructions of the manufacturer of the coloring solution must be observed.

## Sintering

Commercially available furnaces are suitable for sintering zirconia ceramics. To avoid impairing the sintering behavior, it must be ensured that no other ceramic materials are in the furnace. If other ceramic materials have previously been treated in the furnace, an empty firing at maximum furnace temperature is recommended before sintering the zirconia ceramics. Use the appropriate sintering program for the sintering process (see following pages).

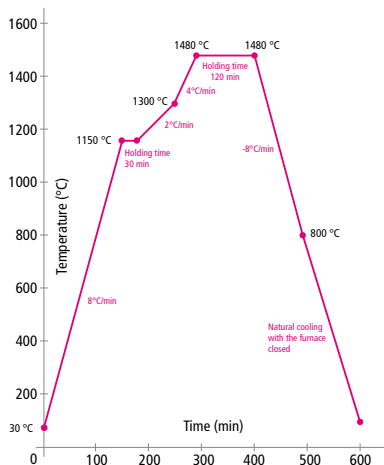
After a temperature of 800 °C has been reached during the cooling process, continuous cooling to room temperature should take place. The framework can then be removed.

## Control and post-processing

Check seat and margin fit of the framework on the working model. If reworking is required, it should be performed by grinding and polishing.

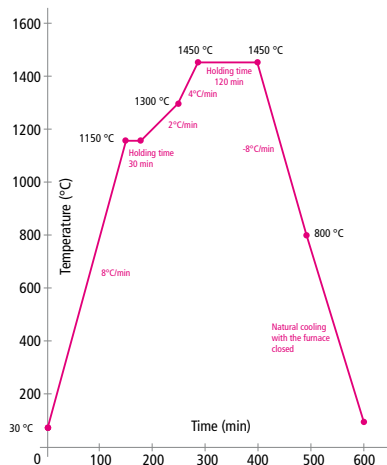
Blasting of the framework with  $\text{Al}_2\text{O}_3$  with a grain size of 50  $\mu\text{m}$  with 2.0 bar is recommended.

## ■ ceraMotion® Z Hybrid



Step	Temperature (°C)	Heating rate (°C/min)	Final temperature (°C)	Holding time (min)
1	30	8	1150	30
2	1150	2	1300	—
3	1300	4	1480	120
4	1480	-8	800	—

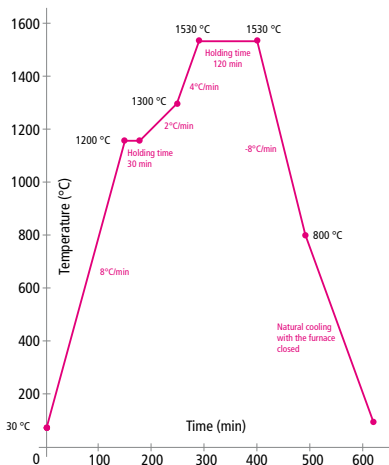
## ■ ceraMotion® Z HT Cubic Multishade



Step	Temperature (°C)	Heating rate (°C/min)	Final temperature (°C)	Holding time (min)
1	30	8	1150	30
2	1150	2	1300	—
3	1300	4	1450	120
4	1450	-8	800	—

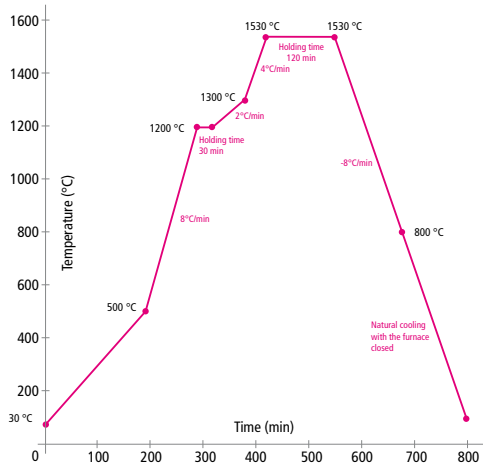


## ■ ceraMotion® Z HT Multishade, ceraMotion® Z HT Shade



Step	Temperature (°C)	Heating rate (°C/min)	Final temperature (°C)	Holding time (min)
1	30	8	1200	30
2	1200	2	1300	—
3	1300	4	1530	120
4	1530	-8	800	—

## ■ ceraMotion® Z HT White, ceraMotion® Z White



Step	Temperature (°C)	Heating rate (°C/min)	Final temperature (°C)	Holding time (min)
1	30	2.5	500	—
2	500	8	1200	30
3	1200	2	1300	—
4	1300	4	1530	120
5	1530	-8	800	—

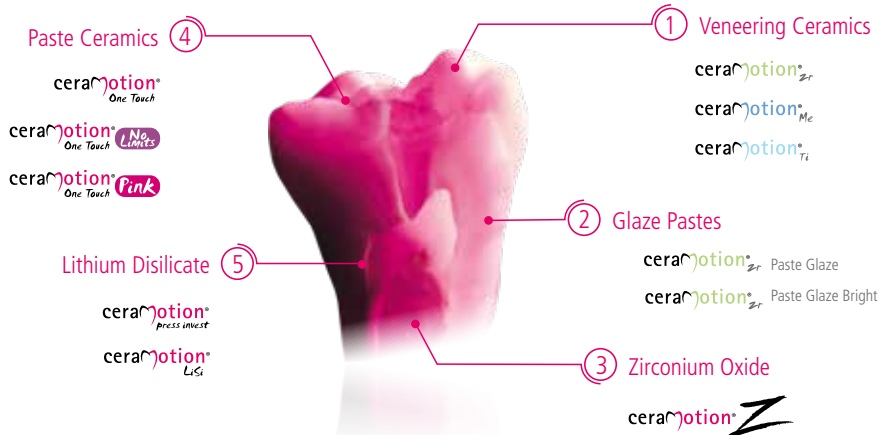
## Veneering and glazing

The framework can be veneered with a commercially available veneering ceramic made for zirconia and they can be finished with a commercially available glaze material made for zirconia according to the manufacturer's instructions. The CTE of all ceraMotion® Z blanks is determined according to DIN EN ISO 6872 and is  $10.5 \pm 0.5 \cdot 10^{-6} \text{ K}^{-1}$  (25 °C-500 °C).

For a perfect result we recommend all materials of the ceraMotion® system:

ceraMotion® Zr (classic zirconia veneering ceramic) and ceraMotion® One Touch Pastes (ceramic paste specially developed for monolithic and cut-back solutions).

## Ceramic solutions – made by Dentaureum



# Dentaurum

Germany | Benelux | España | France | Italia | Switzerland | Australia |  
Canada | USA | and in more than 130 countries worldwide.



DENTAURUM  
QUALITY  
WORLDWIDE  
UNIQUE

- ➔ Informationen zu Produkten finden Sie unter [www.dentaurum.com](http://www.dentaurum.com)
- ➔ For more information on our products, please visit [www.dentaurum.com](http://www.dentaurum.com)
- ➔ Vous trouverez toutes les informations sur nos produits sur [www.dentaurum.com](http://www.dentaurum.com)
- ➔ Descubra nuestros productos en [www.dentaurum.com](http://www.dentaurum.com)
- ➔ Informazioni su prodotti sono disponibili nel sito [www.dentaurum.com](http://www.dentaurum.com)

Stand der Information | Date of information | Mise à jour | Fecha de la información | Data dell'informazione: 09/21

Änderungen vorbehalten | Subject to modifications | Sous réserve de modifications |

Reservado el derecho de modificación | Con riserva di apportare modifiche

CE 0483

**D**  
DENTAURUM

Turnstr. 31 | 75228 Ispringen | Germany | Telefon +49 72 31/803-0 | Fax +49 72 31/803-295  
[www.dentaurum.com](http://www.dentaurum.com) | [info@dentaurum.com](mailto:info@dentaurum.com)