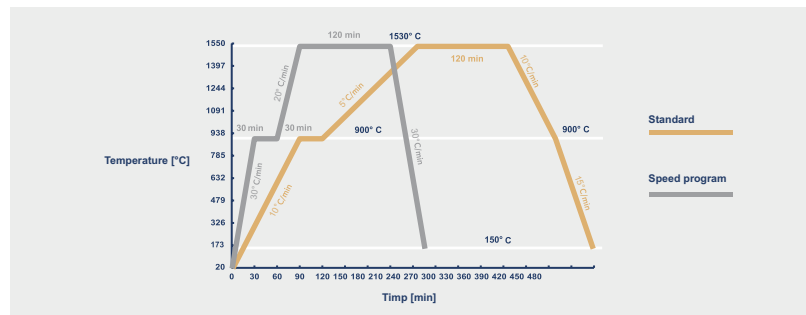


**SINTERING INSTRUCTIONS** – Please follow the sintering parameters as below:  
**SINTER TEMPERATURE 1530 °C**



PROGRAM	NORMAL	SPEED
Usable for	All types of restorations	Maximum 4 units, not for curved restorations
Max. sintering load	Total sintering capacity	
Step 1	START	START
Step 2	↗10°C/min. → 900°C	↗30°C/min. → 900°C
Step 3	900°C → 30 min.	900°C → 30 min.
Step 4	↗15°C/min. → 1530°C	↗20°C/min. → 1530°C
Step 5	1530°C → 120 min.	1530°C → 120 min.
Step 6	↘10°C/min. → 900°C	↘30°C/min. → 900°C
Step 7	↘15°C/min. → 150°C*	↘30°C/min. → 150°C*
Step 8	STOP	STOP

\* Or passive cooling

**SYMBOL EXPLANATION**  
The symbols on the box:

<b>REF</b> Reference number	Manufacturing location
<b>SN</b> Serial number	Storage temperature
<b>DIM</b> Product size	Keep it dry
<b>SCALE</b> SCALE Size multiplier for milling	Handle with care
Expiration date	See instructions for use
Do not use if package is damaged	

No glass transition temperature below 1400 °C

**CTE**  
 HS: 10,3 × 10<sup>-6</sup> 1/°C  
 HT: 9,9 × 10<sup>-6</sup> 1/°C  
 UHT: 9,6 × 10<sup>-6</sup> 1/°C

**ISO 6872:2015**  
 HS: II. class 5.  
 HT: II. class 5.  
 UHT: II. class 5.



Please visit our website at [www.kerodental.com](http://www.kerodental.com) for more product information.



**Kerox offers a 100-year warranty**  
 If the failure of the restoration is due to a failure of the ZIRCOSTAR® zirconia blank, the blank for the restoration will be provided by Kerox for 100 years, free of charge.

**PRODUCT OPTIONS**  
Meaning of Rereference number (REF):

Example	CA1N9820AP
C	Kerox Dental Product code
A1	Color
N	Kerox Dental Manufacturing code
9820	Geometry
AP	Unique features

Thank you for choosing ZIRCOSTAR® pre-sintered zirconium-dioxide blank. The ZIRCOSTAR® blanks are the best solution for the production of dental restorations as crowns, bridges, superstructures, inlays and onlays by manual and CAD/CAM machine milling, based on dental anamnesis. The quality of our products is guaranteed by Kerox Ltd.'s quality inspection on every piece. It can be used in any age group, its physical properties are similar to those of natural teeth. Especially recommended for metal allergic patients due to its metal-free composition.

**ZIRCOSTAR®**  
 HASZNÁLATI ÚTMUTATÓ

**SAFETY WARNING**

Please carefully read and follow these instructions before processing. Kerox does not assume liability for any result derived from improper use of any product of Kerox Kft.

**Please check the following after unwrapping each blank from its package:**

- No defects or damage on the packaging.
- No defects or damage on the product (cracks, discoloration).
- Trademark of Kerox and product information.

**In case of any defect or missing information, do not start processing the blank!**

**ATTENTION!**

Please read and follow the Safety Instructions in order to avoid any hazards during processing the blanks. The Safety Instructions can be downloaded from the [www.kerodental.com](http://www.kerodental.com) website. The processing of the product can only be performed by a trained dental technician and the insertion into the mouth can only be completed by a dentist.

It cannot be used for implants; superstructures, abutments directly related to the implant. In case of Bruxism it is not recommended.

The restorations require regular, yearly medical control.

The finished prosthesis should be cleaned like natural teeth.

After removal from the mouth, the material has to be disposed as a hazardous material.

## OPERATING INSTRUCTIONS

The ZIRCOSTAR® blank is packaged in pre-sintered (ready-to-process) form. Careful handling is necessary during unwrapping, storage and processing. Please avoid causing damage to blanks during the processing.

## RECOMMENDED STORAGE BEFORE PROCESSING:

Always in original packaging. In dry place, between -20°C and 50°C.

Do not expose the blanks to impact, abrasion!

The blanks should not come in contact with liquid or gel material!

Avoid contamination!

Before milling, please set the individual shrinkage values of each blank in the CAM panel of the milling machine.

## MILLING INSTRUCTIONS

### DURING MILLING PROCESS:

Before milling, please set the individual shrinkage values of each blank in the CAM panel of the milling machine.

Air blasting and using liquids is allowed for cooling/lubricating as long as they do not cause contamination after sintering.

### SINTERING INSTRUCTIONS:

Before sintering, make sure that the restoration is fully dry. Do not sinter anything that is still wet! Please follow all instructions regarding the maintenance of your equipments! Please always apply the recommended sintering parameters for the specific blank!



Sintering parameters see on the folded sheet



Please only work with milling machine, tools and CAM software compatible to process zirconium-dioxide. Please follow the instructions regarding using all the equipment.

Please leave 1mm distance from the edges.

Use the CAM producer's factory settings developed for zirconium-dioxide blanks.

Consistently check the quality of your tools and apply proper usage at all times.

## PLEASE DO THE FOLLOWING WITH EACH MILLED BLANK:

Pay special attention to cutting the connectors!

Clean the restoration of all dust (material can be rinsed with water)!

Thoroughly inspect it for discolorations, cracks and breakages (In case of any of the above, stop further processing of the blank)!

In case of wet milling please dry the milled units completely!

## COLORING PRIOR TO SINTERING:

Please use coloring materials only fully compatible with zirconium-dioxide. Please follow all instructions and pre-cautions during coloring. In order to achieve the best result, please use Kerox e4k colouring liquids.

## POST-SINTERING PROCESSES:

In case the adjustment is inevitable, please use only water-cooled diamond-coated tools. Thinning or any post-modification of loadbearing connections is not permitted. The case thickness must not be less than what is shown in the user instructions table. Do not create sharp edges, corners. In case of full contour restorations, carefully and thoroughly polish the occlusal surface, in order to avoid abrasion of the antagonist natural teeth.

## VENEERING INSTRUCTIONS:

Please apply veneering materials that are compatible with zirconium-dioxide. Please follow all instructions regarding the application of the veneering materials. In order to achieve the best result, please use Kerox Dental VenStar® ceramics modeling fluid.

## USE OF THE FINISHED PRODUCT:

During the bonding of the ceramics to the teeth, please apply adhesive materials, which are compatible with zirconium-dioxide. Please follow all instructions regarding the application of the adhesive materials. If the product has been mechanically damaged or contaminated during the prosthetic process or the dental implementation the further using is prohibited.

SINTER TEMPERATURE 1530 °C

+CODE: in REF number 4. position  
When milling, we advise to stay a minimum of 1.00 mm from the edge of the blank.  
— not applicable \* applicable \*\*\* recommended

		Anterior crown		Anterior bridge		Posterior crown		Posterior bridge		Full-arch bridge		
		Coping	Full contour	Frame	Full contour	Coping	Full contour	Frame	Full contour	Coping	Full contour	
Code N+	High Strength (HS)	Applications	***	—	***	—	***	—	***	—	***	—
		Maximum units (pcs)	—	—	6	—	—	—	5	—	14	—
		Minimal wall thickness / occlusal thickness (mm)	0.5/0.7	—	0.5/0.7	—	0.5/0.7	—	0.5/0.7	—	0.5/0.7	—
		Minimal connector size (mm <sup>2</sup> )	—	—	6	—	—	—	9	—	6-12	—
Code C+	High Translucent (HT)	Applications	***	*	***	*	***	***	***	***	***	*
		Maximum units (pcs)	—	—	6	6	—	—	5	5	14	14
		Minimal wall thickness / occlusal thickness (mm)	0.4/0.5	0.5/—	0.4/0.5	0.5/—	0.5/0.7	0.6/—	0.5/0.7	0.6/—	0.5/0.7	0.6/—
		Minimal connector size (mm <sup>2</sup> )	—	—	6	7	—	—	9	9	6-12	7-13
Code U+	Ultra High Translucent (UHT)	Applications	—	***	—	***	—	***	—	*	—	*
		Maximum units (pcs) With max. 2 pontics	—	—	—	6	—	—	—	5	—	14
		Minimal wall thickness / occlusal thickness (mm)	—	0.6/0.8	—	0.6/0.8	—	0.6/0.8	—	0.6/0.8	—	0.6/0.8
		Minimal connector size (mm <sup>2</sup> )	—	—	—	7	—	—	—	12	—	7-13

## GENERAL PROCESSING GUIDE

Please consider the following precautions during the design of the restorations: