# Zirkonzahn® Human Zirconium Technology

## SINTERMETALL

CAD/CAM milled in one's own laboratory



# Zirkon zahn

# SINTERMETALL



With the self-developed Chrome-Cobalt alloy, non-precious restorations can now be manufactured with the CAD/CAM system in one's own laboratory. This provides your lab with increased added value.

- + Chrome-Cobalt alloy for metal frameworks for veneering with ceramics
- increased added lab value through manufacturing of non-precious restorations in one's own laboratory with the Zirkonzahn CAD/CAM system
- + CAD/CAM system doesn't have to be upgraded for processing
- + high fracture strength through seamless material bond and smooth surfaces
- + no smearing when processing
- sintering in the Zirkonofen 700 under vacuum with shielding gas and special sinter adapter (no additional furnace is required)
- + special manufacturing technology prevents poisonous gases from escaping during the sintering

Sintermetal

ZirkonE

+ very rapid cooling of the sinter metal works is possible



Non-precious metal restoration veneered with ceramics



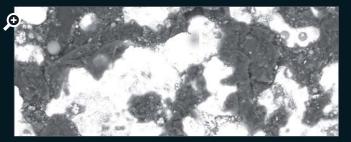




100% Sintermetall Milled with the CAD/CAM system 5-TEC

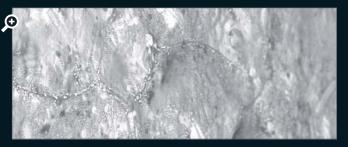
### **MATERIAL MANUFACTURE AND SINTERING PROCESS**

#### Sintering with continuous flooding



High porosity\*

#### Sintering with vacuum and shielding gas



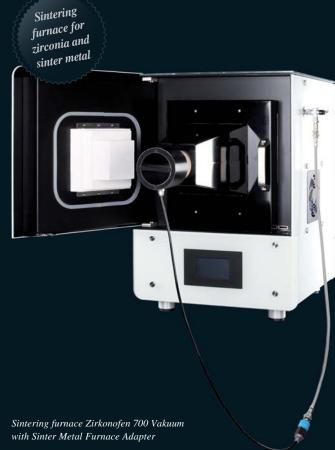
Low porosity\*

\* Material surface under the Scanning Electron Microscope (SEM)



Sinter Metal Furnace Adapter (patent pending)

The Chrome-Cobalt alloy can simply be sintered using the sinter adapter in the Zirkonofen 700 with vacuum and shielding gas (e.g. Argon). The innovative material manufacturing technology prevents poisonous residual gases from escaping during sintering and guarantees excellent processing of the material without there being any smearing. Our sintering process leads to a seamless material bond and smooth surfaces, this results in comparatively high fracture strength.

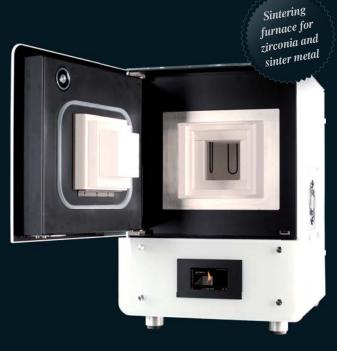


- + very economical, because no additional sintering furnace
  - is required
- + operational after a few simple steps
- + low maintenance, very robust
- no escaping of residual gases though a special material manufacturing technology
- no demand of the heating elements of the Zirkonofen 700
  Vakuum
- + very quick cooling of the sinter metal works is possible

# Zirkonzahn

# SINTERING FURNACE FOR ZIRCONIA AND SINTER METAL

#### Sintering furnace Zirkonofen 700 Vakuum



- + Easily adaptable for sintering of sinter metal through a special sinter adapter
- + equipped with high vacuum for sinter metal
- + very rapid cooling of sinter metal works is possible
- can be charged with three different shielding gases
  (e.g. Argon) for oxygen-free firing
- + low shielding gas consumption
- + Prettau<sup>®</sup> zirconia is even more translucent
- + equipped for novel material technologies
- + in-furnace-cooling
- + big firing chamber
- + modern, high-quality full glazing
- + control element 4.3" colour touchscreen
- + 14 pre-saved programmes
- + updateable via USB interface
- + space for up to 2,000 programmes
- + special firing programmes upon customer request

More sintering furnaces from our product range



SINTERING FURNACE ZIRKONOFEN 600/V3



furnace for zirconia and sinter metal

SINTERING FURNACE ZIRKONOFEN 700 retrofittable with vacuum

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MICROWAVE FURNACE MIKROWELLENOFEN 1800 for high-speed sintering

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#### MICROWAVE FURNACE MIKROWELLENOFEN 1800 VAKUUM

- + for high-speed sintering
- + chargeable with 3 different shielding gases for oxygen-free firing

ZIRKONZAHN Worldwide – T +39 0474 066 680 – info@zirkonzahn.com – www.zirkonzahn.com

