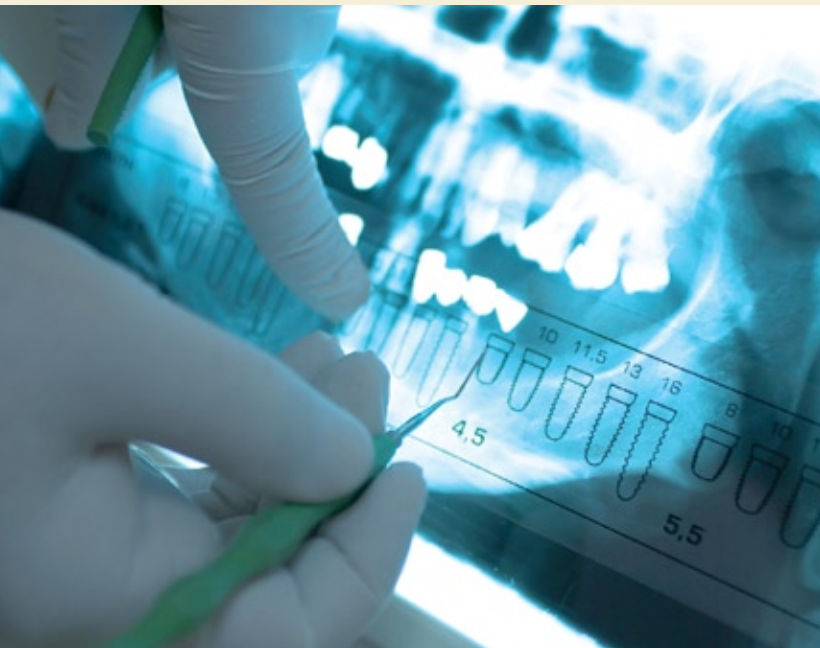


*Z-5™ ceramic  
dental components*





## Z-5™ Ceramic Dental Components

Using state-of-the-art technologies, C5 Medical Werks offers advanced technical ceramic dental components that ensure stability and long wear. Every ceramic dental component is precision engineered to produce the highest quality result and to improve clinician and patient satisfaction. We provide ceramic blanks and completely ground products to your design and specification. Nearly a century of experience manufacturing wear resistant ceramics for high-tech industries supports our prestigious materials pedigree. As always, your designs and patents remain under your ownership.

We produce Ceramic **CAD/CAM Blocks** for dental crowns and copings, as well as precision **Ceramic Abutments** and **Ceramic Implant Jaw Bone Screws** for complete dental implant systems.

Contact our ceramic experts to learn more about premium ceramic dental components. We have ceramic specialists available to work with you on your next generation dental ceramic solution.

### Advantages of C5 Medical Werks

- ISO 13485 certified facility
- World class manufacturing
- High-tech inspection and test capabilities
- Ongoing research & development for next generation materials and processes
- Manufacturer of dental components that meet customer design and specification

### Advantages of Z-5™ Material

- Biocompatible, state-of-the-art dental material
- High fracture durability
- Low wear characteristics
- White and shaded materials deliver excellent aesthetic results

### Available Dental Components

- Ceramic CAD/CAM Blocks
- Ceramic Abutments
- Ceramic Implants
- Ceramic Root Posts
- Ceramic Drill Bits

### Dental Material Options

- Green pressed blanks
- Pre-sintered blanks
- Fully fired blanks and components
- Hot isostatically pressed blanks and components

## Typical Material Properties\*

Property	Method	Units	Z-5™ (YTZP)	Z-5™ (YTZP-Y)
Color	Visual	N/A	White	Yellow
Density	ASTM C-373	g/cm <sup>3</sup>	6.07	6.03
Porosity	ASTM C-373	%	0.0	0.0
Elastic Modulus	ASTM C1198	GPa	210	208
Poisson's Ratio	ASTM C1198	N/A	0.23	0.24
Flexural Strength	ISO 6872	MPa	1500	1100
Hardness	ASTM C1327	(Hv)	1320	1305
CTE	ASTM C372 (25 - 900° C)	1 x 10 <sup>-6</sup> / °C	11.4	11.2
Biocompatibility	ISO 10993-5	N/A	Pass	Pass

\*Note: This chart is intended to illustrate typical properties. Engineering data is representative. Property values vary somewhat with method of manufacture, size and shape of components. Any suggested applications are not made as a representation or warranty that the material will ultimately be suitable for such applications. The customer is ultimately responsible for all design and material suitability decisions. Data contained herein is not to be construed as absolute and does not constitute a representation or warranty for which C5 Medical Werks assumes legal responsibility. ANY WARRANTY OR REPRESENTATION FOR WHICH C5 MEDICAL WERKS IS RESPONSIBLE SHALL BE SUBJECT TO A SEPARATELY NEGOTIATED AGREEMENT. C5 Medical Werks will certify material properties upon request.

