

# Information Sheet Fixed Lengths For CAD/CAM Systems Medical Alloys



Zapp is certified to ISO 9001



**Fixed lengths for CAD/CAM systems at zapp available**  
We lately integrated bars and fixed lengths for CAD/CAM systems into our product portfolio. They are available in pure titanium and in several titanium based and cobalt based alloys.

Materials	Guideline/ Standard	Diameter
CoCrMo*	following DIN EN ISO 22674:2006	from 4 mm
CoCrW*	following DIN EN ISO 22674:2006	from 12 mm
Grade 4	acc. to ASTM F67	from 4 mm
Grade 5 ELI (Grade 23)	acc. to ASTM F136	from 4 mm
Ti6Al7Nb	acc. to ASTM F1295	from 4 mm

\* nickel free

## Lengths

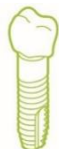
- from 150 mm

## Finish

- chamfered
- pointed

## Application

- crowns and little bridges
- single abutments



## Chemical composition Ergiloy® 9.9229 HW/ CoCrW\*

(Reference Values)

Co	Cr	W	Si	Fe	Mn	C	Ni
60.00	29.00	9.00	1.45	0.15	0.25	0.01	< 0.10

\* Average in mass -%

## Mechanical properties

Tensile Strength	[MPa]	> 1100
Yield Strength	[MPa]	> 550
Elongation	[%]	min. 25
Hardness HV10		approx. > 300

## Physical properties

Modulus of Elasticity E at 20 °C [GPa]	245
Specific Density [kg/dm³]	8.3
CTE Middle lin. Coefficient of Thermal Expansion [10 <sup>-6</sup> *K <sup>-1</sup> ] 25 - 500 °C	14.2
Liquidus temperature [°C]	approx. 1420
Veneering temperature [°C]	max. 1040

## Zapp Precision Metals GmbH

MEDICAL ALLOYS

Letmather Straße 69

58239 Schwerte

P.O. Box 17 20

58212 Schwerte

Phone +49 2304 79-540

Fax +49 2304 79-482

[medicalalloys@zapp.com](mailto:medicalalloys@zapp.com)

[www.zapp.com](http://www.zapp.com)

Further information regarding our products and locations are available in our image brochure and under [www.zapp.com](http://www.zapp.com)

The illustrations, drawings, dimensional and weight data and other information included in this data sheet are intended only for the purposes of describing our products and represent non-binding average values. They do not constitute quality data, nor can they be used as the basis for any guarantee of quality or durability. The applications presented serve only as illustrations and can be construed neither as quality data nor as a guarantee in relation to the suitability of the material. This cannot substitute for comprehensive consultation on the selection of our products and on their use in a specific application. The brochure is not subject to change control.

Last revision: December 2019