# Ergitan® 3.7035 (Grade 2) Data Sheet CAD/CAM Blanks dental Medical Alloys



### Zapp is Certified to ISO 9001





## Ergitan® 3.7035

Ergitan® 3.7035 is an unalloyed pure titanium. This material has an exceptional biocompatibility and is accepted by the human body because of its non-toxic and non-allergic elements. CAD/CAM blanks are available from stock or can be produced acc. to customer-specific drawings.

# Typical fields of application

- Crowns
- Bridges
- Individual designed constructions

# Corresponding standards

o ASTM F67 (UNS R50400)

### Guideline

Following DIN EN ISO 22674:2006

## Magnetism

Ergitan® 3.7035 is not magnetizable.

# Corrosion resistance

Ergitan® 3.7035 is characterized by an extraordinary corrosion resistance because of the low Fe content. This material also has a high resistance against pitting corrosion. Due to the formation of a dense oxide layer Ergitan® 3.7035 shows good corrosion resistance in an oxidizing environment.

## Machining

In annealed condition, machinability of Ergitan® 3.7035 is good. In comparison to high quality steels, the cutting rate of Ergitan® 3.7035 should be reduced. It is important to ensure very good cooling.

#### Chemical composition \*

Fe	0	Н	С	N	Ti	
max. 0.30	max. 0.25	max. 0.015	max. 0.08	max. 0.03	Bal.	

<sup>\*</sup> Average in mass -%

### Mechanical properties

Tensile Strength	[MPa]	min. 345
Yield Strength	[MPa]	min. 275

Physical properties	
Modulus of Elasticity E at 20 °C [GPa]	105
Specific Density [kg/dm³]	4.5
Thermal Conductivity at 20°C [W/m*K]	22
CTE Coefficient of Thermal Expansion [10 <sup>-6*</sup> K <sup>-1</sup> ] 25 - 500 °C	9.6
Specific Heat at 20 °C [kJ/kg*°C]	526
Electric Resistivity ρ at 20 °C [Ω*mm²/m]	0.48

## Delivery conditions\*

Range of Dimension	98 – 100 mm	
Finish	Processed surface	
Shape	_ Round _ Round with step _ Acc. to drawing	
Thickness	8.00 10.00 12.00 13.50 14.00 15.00 16.00 17.50 18.00 20.00 up to 28.00	
Service Conditions	_ Labeled or laser marked on demand _ Single or multiple packing units	

<sup>\*</sup> All others on request

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Further information regarding our products and locations are available in our image brochure and under www.zapp.com

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