

## **Characteristics and scope of application**

- Optimized chemical composition for dental, medical and surgical instruments/applications for trauma and reconstructive surgery.
- This alloy exhibits a combination of exceptionally high strength and high corrosion resistance in the harshest environments, as well as benefiting from medical bio-compatibility.
- In cold-worked and age hardened condition, it can achieve UTS values of up to 2000 MPa.

## **Standard designations**

- DN Meditech designation 2.4999/70, CoNi35Cr20Mo10FeTi
- Alloy number / UNS 2.4999 / R30035
- Specifications
- ASTM F562, ISO 5832-6
- Typical chemical composition Co 35%, Ni 35%, Cr 20%, Mo 10%

## **Physical properties**

Density	Temperature liquidus line	Electrical resistivity	Mean coefficient of thermal expansion
kg/dm³	°C	Ohm mm²/m	10 <sup>-6</sup> /K   RT to 100°C
8.43	1440	1.033	12.8

## **Mechanical properties**

Ultimate tensile strength	Yield strength	Elongation
МРа	МРа	%
900*	410*	60*
2000**	1925**	10**

\* soft annealed

\*\* cold-worked and aged



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