

SOLDER CONNECTION

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Technical Bulletin

Issue 1 - 22/06/23

Precision Tweezers

DESCRIPTION

A complete range of precision tweezers manufactured in anti-magnetic stainless steel. Typical applications include tools and equipment for laboratory and medical applications in mild aggressive chemical environments.

FEATURES AND BENEFITS

- Made of Stainless steel
- (Low carbon austenitic steel material number 1.4404 DIN X2CrNiMo 17-12-2 AISI number 316L Thyssen steel)
- Contains from 16.5 to 18.5 wt% chromium and has important quantities of nickel and molybdenum as additional alloying elements.
- Non-magnetisable.
- Good corrosion resistance and toughness are primary requirements.
- Typical applications include tools and equipment for laboratory and medical applications in mild aggressive chemical environments.

COMPOSITION

Component	Wt %	Component	Wt%	Component	Wt%
С	<0.03	Si	<1.0	Mn	<2.0
Р	<0.045	S	<0.03	Cr	16.5 – 18.5
Мо	2.0-2.5	Ni	10.0 - 13.00		

Mechanical Properties:

State Anr		ealed			
Density	8.0 g/cm3				
Hardness HB30	<215				
Hardness Rockwell B	79				
Tensile strength ultimate	500-700 MPa				
Tensile strength yield	290				
0.2% Yield stress	>200 MPa				
Elongation, break	40%				
Modulus of elasticity 200 GPa		l i i i i i i i i i i i i i i i i i i i			
Thermal Properties:					
Coef of lin therm expansion		16.0 E-6/degrees C	20-100 degrees C		
Coef of lint herm expansion		17.0 E-6/ degrees C	20-300 degrees C		
Specific heat capacity:		0.50J (g.K)			
Thermal conductivity:		15W/m.K)			
Continuous use temperature:		300 degrees C			
Max service temperature	, air	825 degrees C			
Electrical Properties					
Resistivity:		0.75 E-4 ohm.cm			

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