

### **4WFG Wafer Tweezers**



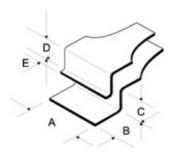
A 0.47" 12.0 mm

B 0.35" 9.0 mm

C 0.10" 2.5 mm

D 0.15" 4.0 mm

E 0.1" 2.5 mm



4WFG.SA

### **Anti-Magnetic Anti-Acid Stainless Steel**

#### **General Notes**

- low carbon austenitic steel (Material number 1.4435, DIN X2CrNiMo18-14-3, AISI number 316L)
- contains from 16.5 to 18.5 wt% chromium and has important quantities of nickel and molybdenum as additional alloying elements

- non-magnetizable
- good corrosion resistance to most chemicals, salts and acids
- generally used where corrosion resistance and toughness are primary requirements
- typical applications include tweezers for the electronic industry, watch-makers, jewelers and laboratory and medical applications in moderately 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	17.0-19.0
Мо	2.5-3.0	Ni	12.5-15.0		

### **Mechanical properties:**

State	annealed
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

## **Thermal properties**

Coef. of lin. therm expansion	16.0 E-6/°C	20°C-100°C
Coef. of lin. therm expansion	17.0 E-6/°C	20°C-300°C
Specific heat capacity:	0.50 J/(g·K)	
Thermal conductivity:	15W/(m·K)	
Continuos use temperature:	350°C	
Max service temperature, ait	925°C	

## **Electrical properties**

Resistivity 0.75 E-4 Ohm.cm