

# Kit of 3 ESD Epoxy Coated Tweezers

## Specification

- 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 (80%)
- 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.%
C	≤0.03	Si	≤1.0	Mn	≤2.0
P	≤0.045	S	≤0.03	Cr	17.0-19.0
Mo	2.5-3.0	Ni	12.5-15.0		

## Mechanical Properties

State	<b>annealed</b>
Density	<b>8.0 g/cm<sup>3</sup></b>
Hardness HB30	<b>≤ 215</b>
Hardness Rockwell B	<b>79</b>
Tensile strength, ultimate	<b>500-700 MPa</b>
Tensile strength, yield	<b>290</b>
0.2% Yield stress	<b>≥ 200 MPa</b>
Elongation, break	<b>40%</b>
Modulus of elasticity	<b>200 GPa</b>

## Thermal Properties

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

## Electrical Properties

Resistivity	<b>0.75 E-4 Ohm.cm</b>
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### Art. Nr.

RND 550-00333

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## Kit Includes:

### ESD Epoxy Coated Tweezers, Fine/Bent, 155 mm



Tip type	Fine, bent
Product OAL (mm - in)	155.00 - 6.102
Product width (mm - in)	8.00 - 0.315
Product height (mm - in)	13.00 - 0.512
Tip length (mm - in)	12.00 - 0.472
Tip thickness A (mm - in)	0.20 - 0.008
Tip width B (mm - in)	0.35 - 0.014
Net weight (g-lb)	19 - 0.042
Degree of bending	40

### ESD Epoxy Coated Tweezers, 45° Angled, 115 mm



Tip type	Angled
Product OAL (mm - in)	115.00 - 4.528
Product width (mm - in)	10.00 - 0.394
Product height (mm - in)	11.00 - 0.433
Tip thickness A (mm - in)	0.30 - 0.012
Tip width B (mm - in)	1.60 - 0.063
Net weight (g-lb)	16 - 0.035
Degree of bending	45

### ESD Epoxy Coated Tweezers, 45° Angled, 115 mm



Tip type	Straight
Product OAL (mm - in)	120.00 - 4.724
Product width (mm - in)	10.00 - 0.394
Product height (mm - in)	10.00 - 0.394
Tip thickness A (mm - in)	0.25 - 0.01
Tip width B (mm - in)	2.00 - 0.079
Net weight (g-lb)	15 - 0.033