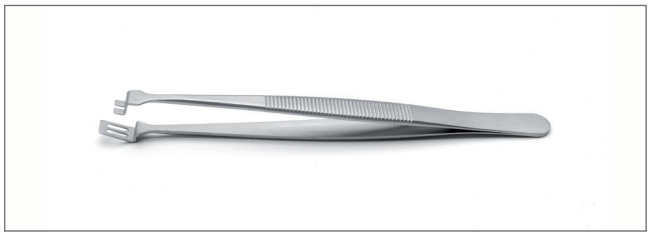
Wafer Tweezers

The several tip shapes and sizes are designed to handle thin and delicate substrates like glass, metal and silicon wafers while avoiding scratching or breaking of thin layers. Tip sizes are available from 5 to 65 mm width. Teflon coating (full body), plastic tips as well as special designs are available for specific applications.

Anti-Acid/Anti-Magnetic SS (SA)

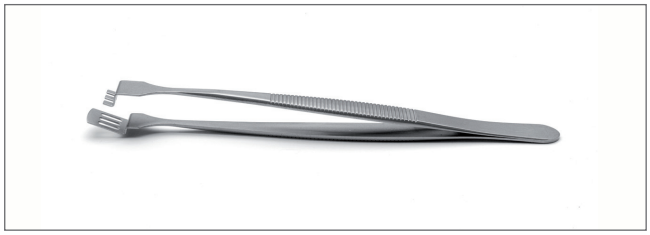
Anti-Acid/Anti-Magnetic SS (SA) - TEFLON COATING (T)

2WF.SA
Serrated handles.Tips: handling 2”, top fingers, stepped bottom paddle. OAL: 120mm



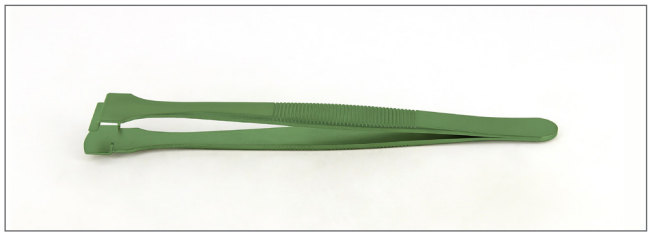
2WFG.SA
Serrated handles.Tips: handling 2”,top fingers,stepped bottom paddle with grid.OAL 120

3WF.SA
Serrated handles. Tips: handling 2”, top fingers, stepped bottom paddle. OAL: 125mm



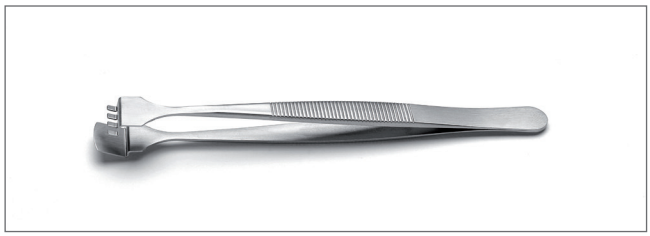
3WFG.SA
Serrated handles. Tips: handling 2”, top fingers, stepped bottom paddle with grid. OAL: 125mm

45WF.SA
Serrated handles. Tips: handling 5”, top fingers, flat bottom paddle. OAL: 130mm



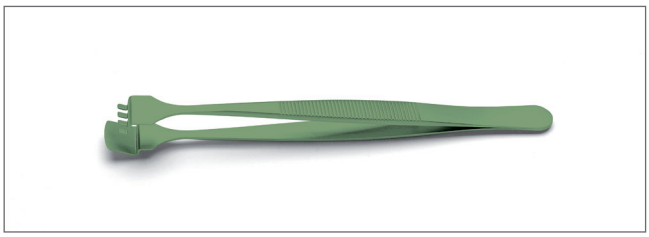
45WF.SA.T
Teflon coated. Serrated handles. Tips: handling 5”, top fingers, flat bottom paddle. OAL: 130mm

48WF.SA
Serrated handles. Tips: handling 6”, top fingers, flat bottom paddle. OAL: 135mm

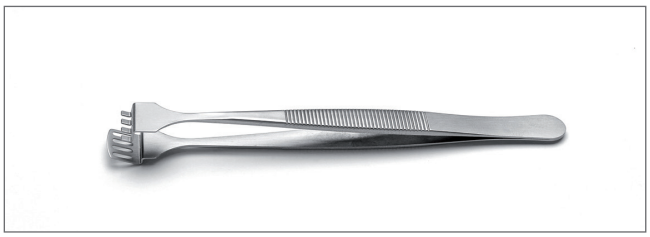


4WF.SA
Serrated handles.Tips: handling 3”, top fingers, stepped bottom paddle. OAL: 125mm

Wafer Tweezers



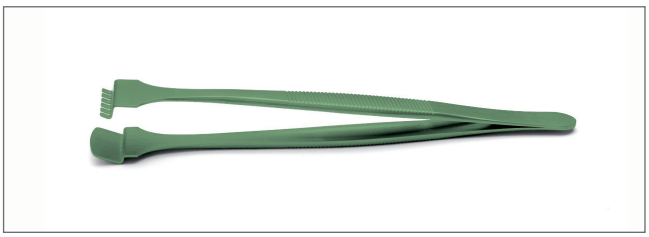
4WF.SA.T
Teflon coated. Serrated handles. Tips: handling 3”, top fingers, stepped bottom paddle. OAL: 125mm



4WFG.SA
Serrated handles.Tips: handling 3”,top fingers, stepped bottom paddle with grid. OAL 125 mm

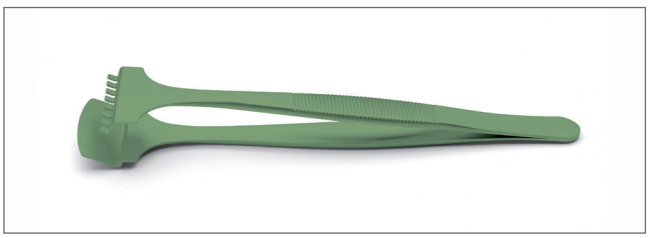
5WF.SA
Serrated handles - tips: handling 5”, top fingers, stepped bottom paddle. OAL: 130 mm

6WF.SA
Serrated handles. Tips: handling 6”, top fingers, stepped bottom paddle. OAL: 130mm



6WF.SA.T
Teflon coated. Serrated handles. Tips: handling 6”, top fingers, stepped bottom paddle. OAL: 130mm

8WF.SA
Serrated handles. Tips: handling 6”, top fingers, stepped bottom paddle. OAL: 135mm



8WF.SA.T
Teflon coated. Serrated handles. Tips: handling 6”, top fingers, stepped bottom paddle. OAL: 135mm

8WNY.SA.1
Serrated handles. Tips: handling 8”, top lip, stepped bottom paddle. Nylon tips. OAL: 150mm

TECHNICAL DATA SHEET

Industrial coating type T

General notes:

» This **solvent-based liquid Teflon® coating** is formulated with special blends of fluoropolymers and other high-performance resins to improve toughness and abrasion resistance

Nonstick

Very few solid substances will permanently adhere to a Teflon® finish. Although tacky materials may show some adhesion, almost all substances release easily

Low coefficient of friction

The coefficient of friction of this Teflon® coating is generally in the range of 0.20 to 0.25, depending on the load, sliding speed, and particular Teflon® coating used

Nonwetting

Since surfaces coated with Teflon® are both oleophobic and hydrophobic, they are not readily wetted. Cleanup is easier and more thorough — in many cases, surfaces are self-cleaning

Heat resistance

Can operate continuously at temperatures up to 150°C and can be used for intermittent service up to 200°C

Unique electrical properties

Over a wide range of frequencies, Teflon® has high dielectric strength, low dissipation factor, and very high surface resistivity

Cryogenic stability

Many Teflon® industrial coatings withstand severe temperature extremes without loss of physical properties. Teflon® industrial coatings may used at temperatures as low as -270°C/-454°F

Chemical resistance

Teflon® is normally unaffected by mild chemical environments. It has good resistance to diluted acids, diluted and concentrated alkalis and organic solvents

TECHNICAL DATA SHEET

Stainless steel type SA

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 (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	**annealed**
Density	**8.0 g/cm^3**
Hardness, Vickers	**230 HV**
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	**15 W/(m·K)**	
Continuos use temperature	**350°C**	
Max service temperature, air	**925°C**	

Electrical properties

Resistivity	**0.75 E-4 Ohm.cm**