

# ESD Diamond coated tweezers

Anti-Magnetic precision tweezers with ESD diamond coating (resistivity 10E6). The biocompatible coating protects fine tip tweezers from wear, and it has high hardness and high elasticity.

High-tek coating DC (tips only) is available for any Ideal-tek tweezer model. Here you will find our most popular selection:



**0.SA.DC**

Flat edges with fine tips - OAL 4 3/4" / 120 mm



**00.SA.DC**

Strong, flat edges, thick - OAL 4 3/4" / 120 mm



**2A.SA.DC**

Flat accurate round tips - OAL 4 3/4" / 120 mm



**3.SA.DC**

Very sharp, fine - OAL 4 3/4" / 120 mm



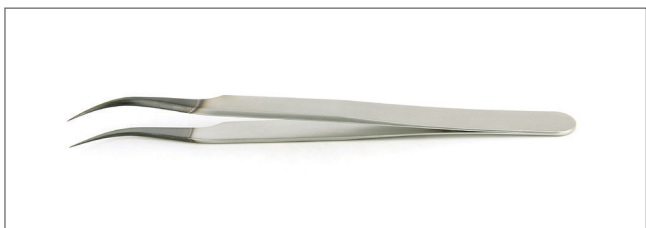
**3C.SA.DC**

Very sharp, fine - OAL 4 1/4" / 110 mm



**5.SA.DC**

Extra fine tips, superior finish - OAL 4 1/4" / 110 mm



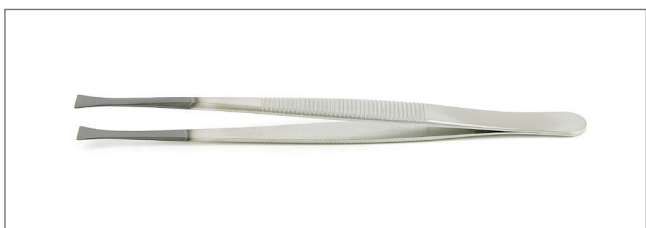
**7.SA.DC**

Very fine, curved - OAL 4 1/2" / 115 mm



**SS.SA.DC**

Extra fine tips - OAL 5 1/2" / 140 mm



**35A.SA.DC**

Smooth to hold delicate parts - OAL 4 3/4" / 120 mm



**65A.SA.DC**

Very fine bent tips - OAL 5 1/2" / 140 mm

TECHNICAL DATA SHEET

# High-tek coating DC

**General notes:**

» This coating is composed of carbon clusters which develop a crystal structure similar to a natural diamond and practically retain the same properties of the diamond. The quota of the sp<sup>3</sup>-configured carbon lies at around 80-95%, which is the reason for the high quota of diamond structure. This high-tech coating is done by a very innovative plasma-assisted deposition technique. Furthermore, due to its procedure, the coating is completely free of hydrogen. During this process a pure diamond film grows directly on the exposed surfaces of the metallic substrate (this is not diamond powder adhesively bonded on the metal surface)



High hardness (up to 80 GPa)  
 High adhesion to the metallic substrate  
 Black colour  
 Low thickness (2 microns), high elasticity



Extremely high wear and abrasion resistance (protects fine tip tweezers from wear)  
 No particulate shedding (no contamination of the handled components)



Chemically inert up to 350°C  
 Bio-compatible (maintain cell integrity, no inflammatory response), no contamination of biological tissue with metal particles

Very clean material

**NVR (Non Volatile Residue)**

*0.088 µg/cm<sup>2</sup>*

**LPC 0.5 µm (Liquid Particle Count)**

*7043 counts/cm<sup>2</sup>*

**IC (Ion Chromatography)**

*chloride 0.039 µg/cm<sup>2</sup>*

*nitrate not detected*

*sulfate 0.005 µg/cm<sup>2</sup>*

*total anions 0.114 µg/cm<sup>2</sup>*



ESD safe coating

Static Charge

**1.30 Volts**

Triboelectric Charge

**2.30 Volts**

Surface Resistance

**10<sup>6</sup> ohms**

Decay Time

**1.10 sec**

This document contains information based on average values as obtained from the results of laboratory tests and observations made on the material. Ideal-Tek SA declines all responsibility from an improper use of the product described in this document.