

NanoStructured Coatings Co.



Nanostructured Coatings Co.
The Products & Specification

Nanostructured Coatings Co. is the owner and manufacturer of the Sputter & Vacuum Coaters.

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DSCT, Desk Sputter & Carbon Coater equipped to Turbo Pump



The DSCT is configured as a sputter coater and fiber carbon coater with interchangeable heads in one instrument suitable for Scanning Electron Microscope (SEM) sample preparation. A wide range of materials could be deposited by DSCT such as gold (Au), platinum / palladium (Pt / Pd) alloy, silver (Ag), chromium (Cr), tungsten (W), iridium (Ir) and etc.

This high vacuum coater offers high quality uniform films with fine grain sizes which are suitable for specimens that require high resolution and high quality characterization such as FE-SEM, EDS/WDS, TEM, and EBSD.

The DSCT with a 2" magnetron cathode, 80 W switching DC power supply and high current power supply for carbon evaporation, could be used for research and different thin film applications.

Features

- High vacuum turbo pump 90 l/s Leybold
- Two stage rotary vane pump as a backing pump
- Full range vacuum gauge
- Carbon fiber evaporation head
- Pulsed or flash carbon fiber coating modes
- Quartz crystal thickness monitor with precision of 1nm and resolution of 1 Å
- Intuitive touch screen to control the coating process and rapid data input
- User friendly software that can be updated via network
- Controls coating rate to achieve finer grain structures
- Manual or automatic Timed and Thickness sputtering
- Able to record and plot coating parameters graphs
- Equipped with electronic shutter
- Easy-to-change specimen stages (rotation stage as standard)
- Two-year warranty

Pulsed Carbon Fiber Evaporation

The small chamber, desk vacuum sputter /carbon coater is able to perform pulsed carbon fiber evaporation. Short pulses provide more controlled deposition and significantly reduces the amount of debris associated with traditional carbon deposition.

Sample Stages



Standard sample stage

The DSCT can be equipped with different sample stage configurations depending on the user requirements. The sample stages are rotatable with adjustable height that can be changed easily.

The rotary planetary sample stage is a good choice for uniform coating of porous specimens.



Rotary planetary sample stage

Specifications

- **Ultimate Vacuum:** Less than 7×10^{-7} Torr
- **Controls the rate of sputtering to achieve finer grain structure**
- **Automatically controls the power of sputtering independent of pressure**
- **Precision Mass Flow meter (MFC) for fine control of the vacuum pressure**
- **Able to record and plot coating parameter graphs**
- **Transfers curves and deposition process data by USB port to PC**
- **Utilities:** 220V-240V, 50/60HZ- 10A
- **Shipping Weight:** 42kg

Options and Accessories

Desk Sputter coater model DSCT has the following options and accessories:

- **Carbon rod evaporation head**
- **High current power supply for carbon rod**
- **Quartz crystal sensor**
- **Planetary sample rotation**
- **Spare glass chamber**
- **Sputtering targets**
- **Carbon Fiber**
- **Sealing gaskets**