

**NanoStructured Coatings Co.**



**Nanostructured Coatings Co.**  
The Products & Specification

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

## **NANOSTRUCTURED COATING CO.**

Unit No.14&15 , 4rd Floor , Apartment No.5

Ghadir St. , Azadi Ave ,Tehran , Iran

Tel: +98 21 66067785, +98 21 66033555

Fax:+98 21 66033450

E-mail: [Info@pvd.ir](mailto:Info@pvd.ir)

Web: [www.pvd.ir](http://www.pvd.ir)

**For technical and applications advice plus online order for spares and consumables parts visit [www.pvd.ir](http://www.pvd.ir)**

## Desk Carbon Coater – DCR

Desk Carbon Coater is a compact carbon fiber coating system suitable for sample preparation for the use in scanning electron microscope (SEM), Transmission electron microscope (TEM) and X-Ray analysis (EDX).



This device is available in two formats:

- DCR  
DCR is a rotary-pumped carbon coater that is suitable for SEM sample preparation, EDS/WDS and thin film applications.
- DCT



DCT is a turbo-pumped carbon coater that is ideal for FE-SEM, EDS/WDS, TEM, EBSD and thin film applications.

This high vacuum coater offers high quality uniform carbon films with fine grain sizes which are suitable for specimens that require high resolution and high quality characterization.

## Features

- Quartz crystal monitoring system used for real time thickness measurement (1nm precision).
- Pulsed or flash carbon fiber coating modes.
- Intuitive touch screen to control and monitor the coating process with a capability of rapid data input.
- User friendly software that can be updated via network.
- Able to record and plot coating parameters graphs.
- Easy-to-change specimen stages (rotation stage as standard).
- Two-year warranty.
- CE conformity.

## Pulsed Carbon Fiber Evaporation

The Desk vacuum 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.



## Touch Screen Control

DCR & DCT are equipped with a 7" colored touch screen and full automatic control and data input that can be operated by even inexperienced users. The vacuum, current and deposition information can be observed as digital data or curves on the touch screen. Information of the last 300 coating can also be saved in the history page.

## Sample Holder



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

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

## Specification

- High vacuum turbo pump 70 l/s. (For DCT format)
- Diaphragm backing pumps. (For DCT format)
- Two-stage, direct drive  $\epsilon$ m<sup>3</sup>/h, rotary vane pump. (For DCR format)
- Full range vacuum gauge. (For DCT format)
- 170 mm OD x 140 mm Pyrex cylinder chamber.
- 0-100 A switching Pulsed DC power supply.
- Ultimate Vacuum: Less than  $2 \times 10^{-5}$  torr. (For DCT format)
- Ultimate Vacuum: Less than 50 milli torr. (For DCR format)
- Dimensions: 450 x 500 x 370 mm (H x W x D)
- Utilities: 220V-50Hz - 10A.
- Intuitive touch screen with colored display unit.
- Sample holder with planetary rotation.
- Electronic shutter.
- Automatically controlled coating - independent of pressure.
- Precision metering valve for fine control of vacuum pressure.
- Real time plots of coating parameters.
- Simple transfer of coating data plots via USB port to PC.
- Shipping Weight: 46 Kg

## Options and Accessories

- Quartz crystal
- Sample rotation
- Spare glass
- Fiber carbon