

**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.**

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The Desk SEM Coater model DSR1 is a compact coating system able to coat noble metals such as gold (Au), palladium (Pd), platinum (Pt) and gold/palladium (Au/Pd) thin films on non-conductive or poorly conductive specimens. Uniform thin films with fine-grain sizes are formed in a fast cycle time. The produced thin film is suitable for scanning electron microscopy (SEM) analysis.

The Desk Magnetron Sputter Coater (DSR1) is a high productivity tool that delivers consistent and highly repeatable results in the fully automated system.

The ergonomic design and small footprint of the DSR1 SEM coating system allows easy use of the system.

## Features

- Two-stage, direct drive  $4\text{m}^3/\text{h}$ , rotary vane pump
- High precision quartz crystal thickness monitor.
- Intuitive touch screen to control the coating process and rapid data input
- User friendly software that can be updated via network
- Control coating rate to achieve finer grain structures
- Manual or automatic Timed and Thickness sputtering.
- Easy-to-change specimen stages (rotation stage as standard)
- Two-year warranty
- CE conformity

## Application

The DSR1 is a Scanning Electron Microscope (SEM) sample preparation system equipped with a rotary pump to achieve vacuum less than 50 mTorr which is a suitable vacuum range for noble metals sputter coating.

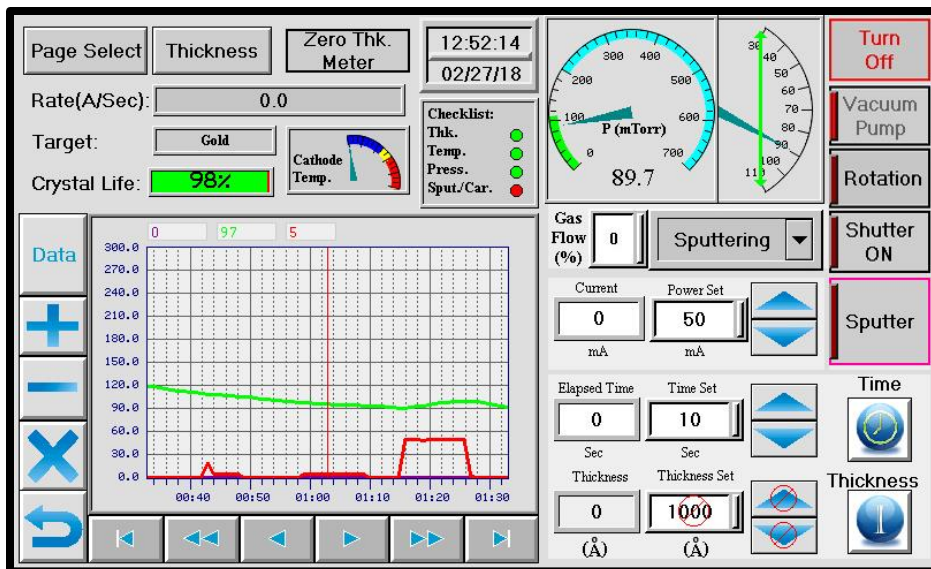


## Note

For sputtering of oxidizing metals, please see the DST1 (Turbo-pumped desk sputter coater).

## Touch Screen Control

DSR1, the desk sputter coater, is 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 Holders



Rotary planetary sample stage



Standard sample stage

The DSR1 can be equipped with different sample stage configurations depending on the user requirements. The standard sample stage is rotatable with adjustable height, angle and can be changed easily.

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

## Specification

- 170 mm OD x 140 mm Pyrex cylinder chamber.
- Dimensions: 45 Cm H x 50 Cm W x 37 Cm D.
- Shipping Weight (included vacuum pump): 42Kg.
- Utilities: 220V-240V, 50/60HZ- 10A.
- 80 Watt DC switching power supply.
- High precision thickness monitor
- Ultimate Vacuum: Less than 40 mTorr.

- 2 inches magnetron cathode.
- Electronic shutter.
- Electronic leak valve.
- Transfer the curves and sputtering process data by USB port to PC.

## Options and Accessories

- Quartz crystal sensors.
- Planetary sample rotation.
- Spare glass chamber.
- Sputtering targets.
- Sealing gaskets.