

# DST3

## Triplet Target Sputtering System

A versatile, high vacuum sputtering solution for thin film and SEM applications

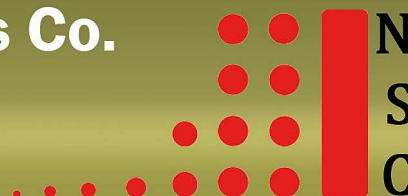


### DST3 features

- Triplet sputter head
- Large format chamber
- High resolution turbomolecular pumping
- Fully automated colorful touch-screen control
- Able to plot sputtering parameters graphs
- Including USB port for graph and data extraction and software updates
- Thickness monitor system for thickness measuring during coating process

**Nano Structured Coatings Co.**

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## Desk Sputter Coater DST3

The DST3 is available in two options:

### **DST3 S - Linear (or Straight) cathodes**

The DST3 is a coating system with a large chamber and turbo molecular-pump. It is suitable to sputter large single sample with specimen diameter up to 20 cm. Smaller multiple specimens can be sputtered over a similar diameter.

To ensure an even deposition ratio over a large diameter, the DST3 is equipped with three sputtering heads. The system is capable to sputter both oxidizing metals and non-oxidizing noble metals.

### **DST3 A- 30 degree angled cathodes**

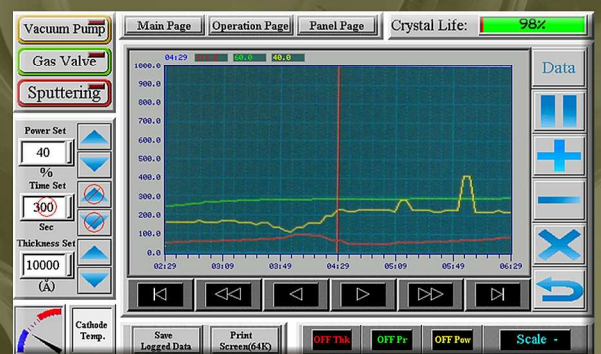
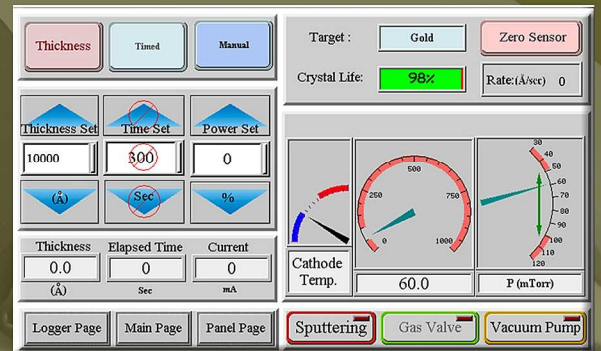
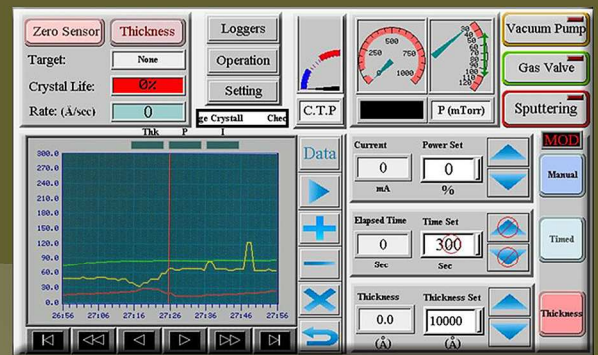
DST3A model is a desk sputter coater equipped with turbo molecular pump. It can sputter metals, semiconductors and dielectric targets. It is also capable to co-sputter two or three cathodes simultaneously by using three angular cathodes via a common focal point.

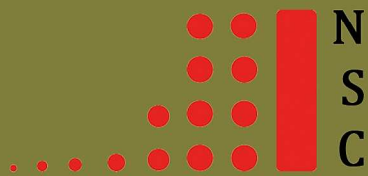
# STANDARD FEATURES

- Two-stage, direct drive 170 lpm, rotary vane pump
- High vacuum turbo pump 60 l/s
- 3 water cooled 2" cathodes
- Deposition continuously without need to rest
- 300 mm OD x 180 mm Pyrex cylinder chamber
- 0-100 mA DC power supply
- 7" touch screen control panel; includes features such as a log of the last 200 coatings carried out
- Ultimate Vacuum: Less than  $4 \times 10^{-5}$  millitorr
- Dimensions: 50 Cm H x 60 Cm W x 47 Cm D
- Utilities: 220V-50Hz - 6A
- Gas: Argon - 99.999% (regulated to 2 - 5 psig); recommended but not required.
- Manual or automatic Timed and Thickness sputtering.
- Control the rate of sputtering for any cathode independently, to achieve finer grain structure
- High precision quartz crystal thickness monitor.
- Protection of samples against heating during sputtering process
- System automatically vents when turned off.
- Automatically controlled the power of sputtering independent of pressure
- Automatically controlled the temperature of cathodes in order to protect the life time of the magnets
- Equipped with rotary sample holder with ability of tilting in direction of cathode
- Data is rapidly entered using fully automatic touch screen control
- Precision Mass Flow meter (MFC) in order to fine control of the vacuum pressure
- Drawing the pressure, thickness and current curves.
- Transfer the curves and sputtering process data by USB port to PC
- Shipping Weight: ~ 27 Kg (without vacuum pump). ~ 43 Kg with pump

## Options

- 300 W RF power supply and matching box
- 500 mA DC power supply
- Nitrogen venting gas
- Substrate bias voltage
- Rotatable sample stage
- Angled sample stage





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