

# K575X & K575XD Turbo Pumped High Resolution Sputter Coaters

automatic operation with 165mm chamber - for oxidising and non-oxidising metals



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SPUTTER COATERS



## clean, high vacuum sputtering

K575X sputter coater



### K575X and K575XD Sputter Coaters

The K575X uses a 60 litre per second turbomolecular pump backed by a rotary vacuum pump, with the complete pumping sequence being under automatic control. The vacuum can be adjusted to suit conditions for chromium or other oxidising metals, as well as noble metal targets, and has a timer to allow for a range of sputtering periods.

The K575K uses a DC magnetron target assembly fitted with a 54mm diameter quick change target. The sputter head is Peltier cooled to give high performance fine grain coatings (no cooling water required). The sputtering parameters can be pre-set, a gas bleed needle valve with electromagnetic back up is fitted.

The K575X has a 165mm (6") diameter chamber and is suitable for samples up to 100mm (4") in diameter. A typical sputtering cycle will take 5 minutes.

### Pumping

A 50L/min rotary pump in need to "back" the turbomolecular pump (see product specifications)

### Key Features & Benefits

- High vacuum turbo pumping - allows sputtering of fine grain oxidising metals such as Chromium
- Fully automatic control - easy to set up and run
- Menu-driven 'user' key inputs - easy operation by multiple users
- Peltier cooled sputter head - no cooling water required
- Fine coating (order of 0.5nm Cr grain size) - reproducible ultra high resolution coatings
- Rotate/tilt stage fitted as standard
- Wide choice of target materials
- Dual sputter head (K575XD) version available - allows sequential coatings without breaking vacuum

### Options

K575D (Dual Head) version of the K575X is fitted with two sputter heads. This enables the deposition of two sequential coating materials without the need to break vacuum.

### K250 Carbon coating attachment

See K500X and K550X for information.

**Note:** the K250 has a single carbon fibre or carbon rod source and is therefore suitable for coating small samples up to 50mm (2"). For carbon coating larger samples see: SC7680.

### K150X Film Thickness Monitor (FTM)

See K500X and K550X for information.

### EK4181 High vacuum penning gauge

### EK4197 Rotate/oscillate sample stage

Features rotary planetary style movement



EK4197 sample stage

### EK4225 Vacuum shutdown

This allows the vacuum chamber to be kept under vacuum after the K575X/K575XD has been shut down.

### SEM-Basic-1

Starter kit (sample mounting stubs, boxes, mounting media and tweezers).

See: [www.quorumtech.com](http://www.quorumtech.com) for full technical specification and additional details.



### PRODUCT SPECIFICATIONS

Supplied with	TK8845 Cr target, pump hose, hose connectors, operation manual and accessory pack, implosion guard
Electrical	230V 50Hz (8A max including pump), 115V 60Hz (19A max including pump)
Specimen stage	60mm with 6 concentric stub holes. Motor driven rotation and tilt facility (0°-90°)
Target	Disc type Cr target, 54mm 0.2mm thick
Additional targets	Please see the "Sputtering Target" table at the rear of this catalogue
Weight & dimensions	450mm W x 350mm D x 175mm H, glass chamber: 165mm D x 125mm H. Weight: 42kg (unpacked)
Pumping	60L/sec turbomolecular pump included. A 50L/min "backing" rotary pump is also needed (see: Emitech EK3175)
Operating vacuum	1 x 10 <sup>-2</sup> to 1 x 10 <sup>-4</sup> mbar
Sputter timer	0 to 4 minutes



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