QCoat

Quorum

TurboQ

The New Generation of Hi-Vacuum EM Coaters

SPECIALISTS IN ELECTRON MICROSCOPY SAMPLE PREPARATION
E: SALES@QUORUMTECH.COM • **T:** +44 (0) 1323 810981 • **W:** QUORUMTECH.COM

TurboQ

High-Vacuum Coating System

The TurboQ is an automated and versatile turbo pumped coater offering unparalleled ease of use. Recommended for sample preparation for the examination of specimens using Electron Microscopy (EM).

Available in 3 configurations based on your application needs

TurboQ S

Sputter coater for noble and/or oxidizing metals. Cr target offered as standard.

Options available: Pt, Ir, Au, W, Au/Pd, Pd, Cu, Ag, Ti, Co, Sn, ITO, Mg, Ta, Fe, Al, Mo, Ni

TurboQ E

Evaporation coater for carbon/ metal evaporation. Carbon rod source offered as standard.

Options available: Carbon string

TurboQ ES

Combined coater offering both sputter coating and carbon and metal evaporation. Cr target and carbon rod source available as standard.

Options available: Pt, Ir, Au, W, Au/ Pd, Pd, Cu, Ag, Ti, Co, Sn, ITO, Mg, Ta, Fe, Al, Mo, Ni

Options available: Carbon fibre

SPECIALISTS IN ELECTRON MICROSCOPY SAMPLE PREPARATION
E: SALES@QUORUMTECH.COM • **T:** +44 (0) 1323 810981 • **W:** QUORUMTECH.COM

TurboQ

Features

- High vacuum instrument for ultra-high-resolution EM up to and beyond 200k
- Ultra fine grain size for high-resolution analysis
- Rapid cycle time for maximum sample throughput
- Tilt stage design giving uniform coating of complex 3D structures
- Film Thickness Monitor (FTM) to control deposition of coating
- Intuitive and responsive touchscreen colour panel design
- Multi-colour LED visual status indicator offering process updates
- Pre-set recipes for standard protocols resulting in sample reproducibility
- Customizable recipes for tailored applications
- Easy and quick set-up of profiles
- Multiple stage options based on application needs

SPECIALISTS IN ELECTRON MICROSCOPY SAMPLE PREPARATION
E: SALES@QUORUMTECH.COM • **T:** +44 (0) 1323 810981 • **W:** QUORUMTECH.COM

TurboQ

The TurboQ is designed to meet the requirements of various applications, ranging from biological sciences to material sciences.

TurboQ S

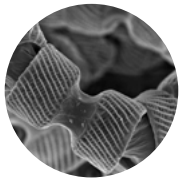
Biological SEM Applications

K850
Critical Point Dryer

Sample
Mounting

Sputter
Head

TurboQ S
Coating



SEM
Imaging

TurboQ E

TEM Applications

Carbon Rod Head

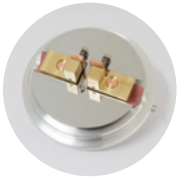
TurboQ E
Carbon Coating

GloQube
Glow Discharge

TEM Grids

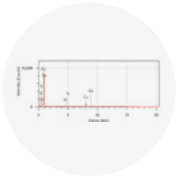
TurboQ ES

Materials Workflow



Carbon
Fibre Head

TurboQ ES
Carbon Coating



Elemental
Analysis

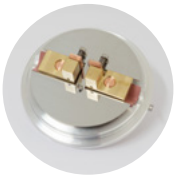
SPECIALISTS IN ELECTRON MICROSCOPY SAMPLE PREPARATION
E: SALES@QUORUMTECH.COM • **T:** +44 (0) 1323 810981 • **W:** QUORUMTECH.COM

TurboQ

Coating Inserts


Sputter Head


Carbon Rod

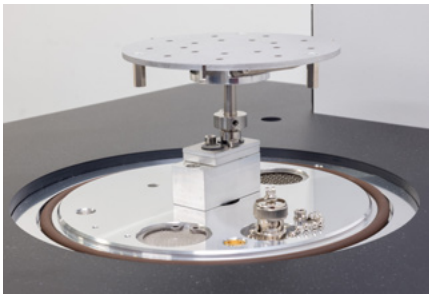

Carbon String

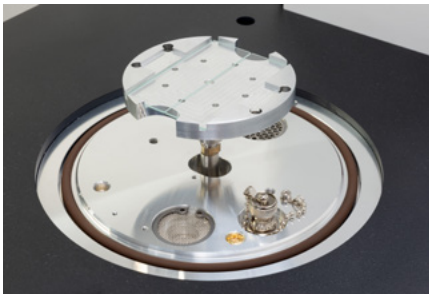

Glow Discharge


Metal Evaporation

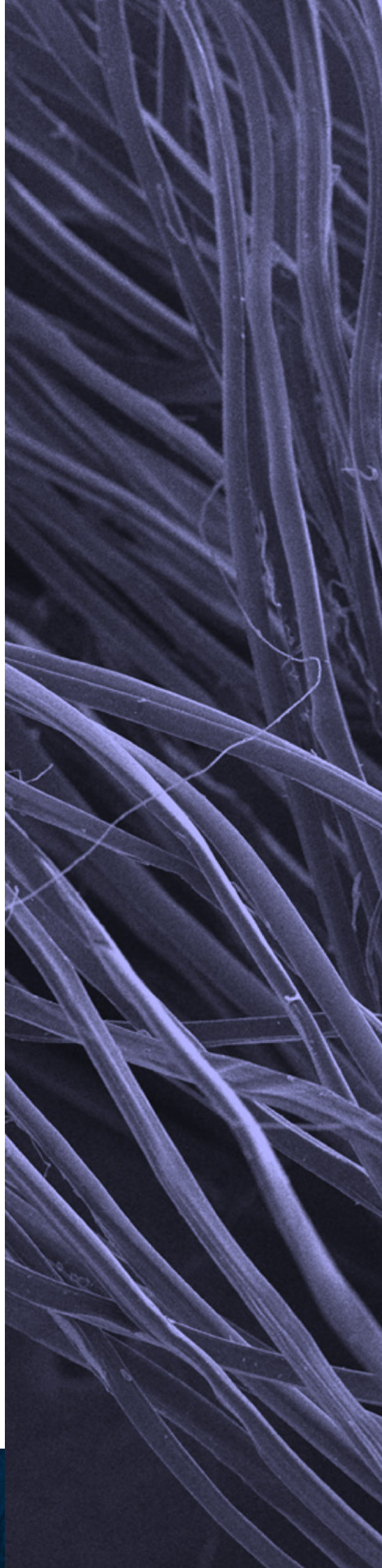
Stage Options


Rota Cota


4'Wafer stage


Slide Stage

Specifications	
Unit Weight	38 Kg (ES model)
Packed weight	54 Kg (ES model)
Instrument size	440 mm (W) x 556 mm (H) x 551 mm (D)
Instrument size with chamber open	440 mm (W) x 860 mm (H) x 551 mm (D)
Specimen stage	Short stage: 65 mm (H) from chamber base, 50 mm Ø diameter
	Tall stage: 145 mm (H) from chamber base, 50 mm Ø diameter
Chamber size	150 mm Ø diameter, 220 mm (H)
Ultimate vacuum	$1x10^{-6}$ mbar
Operational vacuum	$5x10^{-6}$ mbar
Vacuum gauge range	1000 to $x10^{-9}$ mbar
User interface	Touch screen colour display
Supply voltage	100V – 240V
Sputter Coater (TurboQ S and TurboQ ES)	
Sputter target	Target Disc style, 57 mm Ø diameter x 0.3 mm (thickness) (Cr supplied as standard)
Specimen Stage	50 mm Ø diameter rotating stage
Deposition Current	1-150 mA
Deposition Rate	0.1-20 nm/min (e.g. for gold)
Sputter Timer	0-60 min
Evaporation Coater (TurboQ E and TurboQ ES)	
Evaporation current (rod)	5-75 A (dependent on process)
Outgas current	1-40 A
Carbon source	3.2 mm rods or carbon fibre



Quorum Technologies
Judges House
Lewes Road
Laughton
East Sussex
BN8 6BN
United Kingdom

T: +44 (0) 1323 810981
E: sales@quorumtech.com
W: www.quorumtech.com

Products are for research use only.