

e-Cathode™ Process Lids

Sputtering Components e-Cathode™ process lids are a turnkey solution for new or existing coaters. They are available in both digital and analog formats and customized to end user needs.

For easy operation, they feature local and remote control with full safety interlocks. Designed for the application, target-to-substrate distance is determined by the user. Optional MFC, gas bar and anode integration can be included. The lids feature customized discrete I/O connector and a high voltage quick disconnect to make target changes quick and easy.

With new systems, SCI provides OEM manufacturers complete turnkey solutions, ready to interface with their systems. SCI can provide as much controls integration as desired onboard the e-Cathode™.

With users needing to add additional cathodes to their system or upgrade their end blocks and magnetics, SCI can provide a plug-and-play solution. Our e-Cathode™ clones match current external mechanical and electrical interfaces but use SCI end blocks, magnet bars and control system. SCI offers direct end block bolt-in replacements for most major OEMs.

Lids can be sent to our facility for retrofit, or we will provide the components for field upgrades. Trained technicians are also available to help you with your installation. The upgraded systems remain compatible with existing control systems.



Horizontal e-Cathode™ process lid system



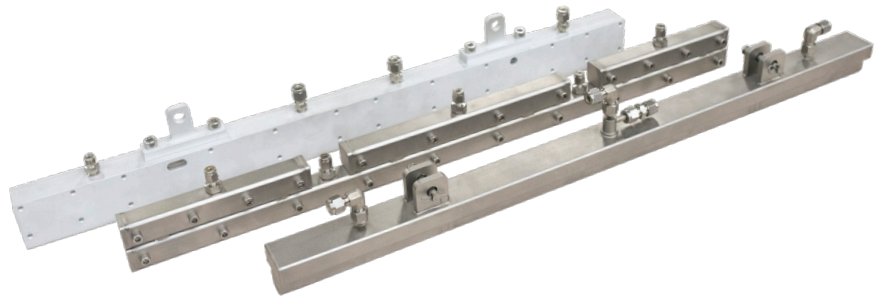
Vertical e-Cathode™ process lid system

FEATURE	DIGITAL E-CATHODE™	ANALOG E-CATHODE™	BASIC E-CATHODE™
Onboard Logic	▶ PLC	Relay	None
Interlocks	▶ Full	Full	HV only
Control	▶ Local (touch screen) Remote (Ethernet, Profibus, DH+)	Local (light, switches) Remote (discrete I/O)	All sensors wired to the connector
Monitoring	▶ Real time and advanced parameter	Basic parameter	Real time
Water Flow	▶ Flow rate (LPM)	Flow switch	Customer supplied, external
Water Temperature	▶ Water temp	No	No
Onboard MFC Option	▶ Yes	No	No
Differential Pumping Option	▶ Yes	Yes	Yes

Gas Manifolds

Available in three models, SCI gas manifolds are segmented for main gas and additional process gases.

They have a robust, simple design and are easily cleaned. Mounting hardware and waste shielding are included.



MODEL	MAXIMUM LENGTH	OUTLET TYPE	FEATURES
Binary (BGMA) ▶	4000 mm	Non-replacable, non-adjustable	Highest uniformity ($\pm 1.2\%$) Fast reactive sputtering response time
Square Tube (SGMA) ▶	4000 mm	Replacable, adjustable	Adjustable uniformity for non-uniform systems
T-Bar (TGMA) ▶	1500 mm	Non-replacable, non-adjustable	Compact design: for use when limited space is a factor