

e-Cathode™ Process Lids, Gas Manifolds



SCI e-Cathode™ process lids are a complete, turnkey lid solution. They are available in both digital and analog formats and customized to your coater.

Features

- Local and remote control
- Optional MFC, gas bar and anode integration
- Full safety interlocks
- Customized discrete I/O connector
- High voltage, quick disconnect included
- User defined target-to-substrate distance

Digital-only features

- Integrated PLC and touch panel
- Real-time monitoring
- Advanced parameter monitoring
- Communicates via Ethernet, Profibus, DH+ and more

Analog-only features

- Analog control interface
- Basic parameter monitoring

Installations

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™.

Lid replacements: End users needing to add additional cathodes to their system look to SCI for plug-and-play solutions. Our e-Cathode™ clones match current external mechanical and electrical interfaces but use SCI end blocks, magnet bars and control systems.

End block upgrades: 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



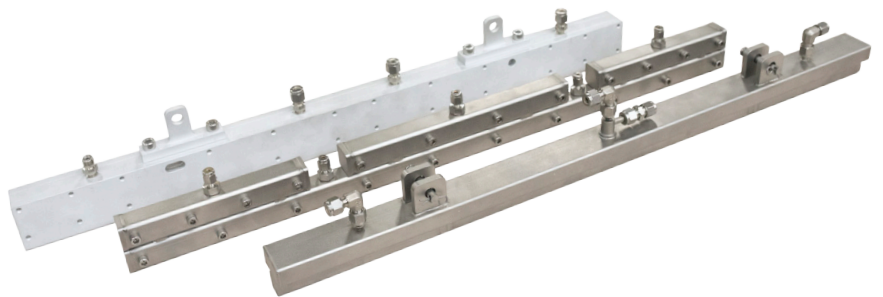
Vertical e-Cathode™ process lid system

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, etc.)	Local (lights, switches) Remote (discrete I/O)	All sensors wired to the connector
Water flow	Flow rate (LPM) report	Flow switch	Customer supplied, external
Water temperature	Water temp report	No	No
Onboard MFC option	Yes	No	No
Differential pumping option	Yes	Yes	Yes
Customizable	Yes (operating hours, kWh, etc.)	No	No

Gas manifolds

Available in three models, SCl 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-replaceable, non-adjustable	Highest uniformity ($\pm 1.2\%$) Fast reactive sputtering response time
Square tube (SGMA)	4000 mm	Replaceable, adjustable	Adjustable uniformity for non-uniform systems
T-bar (TGMA)	1500 mm	Non-replaceable, non-adjustable	Compact design: for use when limited space is a factor