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.
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.

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### Features

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

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### Models

<table>
<thead>
<tr>
<th>MODEL</th>
<th>MAXIMUM LENGTH</th>
<th>OUTLET TYPE</th>
<th>FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binary (BGMA)</td>
<td>4000 mm</td>
<td>Non-replacable, non-adjustable</td>
<td>Highest uniformity (&lt; ± 1.2%) Fast reactive sputtering response time</td>
</tr>
<tr>
<td>Square Tube (SGMA)</td>
<td>4000 mm</td>
<td>Replacable, adjustable</td>
<td>Adjustable uniformity for non-uniform systems</td>
</tr>
<tr>
<td>T-Bar (TGMA)</td>
<td>1500 mm</td>
<td>Non-replacable, non-adjustable</td>
<td>Compact design: for use when limited space is a factor</td>
</tr>
</tbody>
</table>