Conexis® Coating Applicators
Providing a Variety of Solutions for Conformal Coating Applications

Features and Benefits

- **DD-5130 Needle valve**
  - Luer lock adapter for low-to-high material viscosities
  - High flow rate for high cycle time

- **DD-5140 Spray valve**
  - Adjustable spray cap provides the ability to adjust atomizing air for various viscosities
  - Round beam for wide range of fluid viscosities
  - Uniquely designed with guided needle inside the valve

- **DD-5150 Curtain valve**
  - Best performance with optional rotate
  - Non-atomized, uniform film pattern

The Conexis® conformal coating platform provides flexibility and modularity by leveraging a wide range of applicators to meet coating requirements for coverage and quality. Available applicators apply material in a needle bead, atomized spray and curtain coat pattern.

The system can be configured with single, dual, or triple applicators in various combinations. Applicators can be set up with capabilities for tilt and rotate and dual simultaneous coating for increased accessibility and productivity.
**Conexis® Coating Applicators**

**DD-5130 Needle Valve**

The DD-5130 series is a stainless steel high pressure front closing needle valve. One of the unique features is the high flow rate at high viscosity materials and the fast cycle time. The volume can be controlled over the time the valve opened and how far it is opened. An internal micrometer adjust allows you exactly to set the opening of the valve. Max. viscosity 1,000,000 cps. Shot size has a minimum shot size from 0.003 ml, low volume.

**DD-5140 Narrow Beam Spray Valve**

The round spray valve is designed for selective conformal coating but is also used for several other applications. Once the valve is set at a certain width it will apply the material in a path with defined sharp edges making it possible to apply coating exactly there where it is needed while at the same time restricted areas are kept free of coating material. Max. viscosity 5000 cps. Spray diameter: 5 to 15 mm.

**DD-5150 Airless Curtain Valve**

This non-atomized coating curtain valve provides automated, selective application of conformal coating materials. Using this dispensing technology, the curtain valve applies conformal coating material in a controlled, uniform film rather than atomized spray. Material is directed under low pressure through the special designed and pre-centered ceramic nozzle. Material is applied to the circuit board prior of atomization. Viscosities of less than 100 centipoise. Achievable coating thicknesses range from 0.013mm to 0.2mm for solvent-based material and 0.1mm to 0.2mm for 100% solids materials.

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**Conexis® Coating Applicator Specifications**

<table>
<thead>
<tr>
<th></th>
<th>DD-5130 Needle</th>
<th>DD-5140 Spray</th>
<th>DD-5150 Curtain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Viscosity range</strong></td>
<td>1 – 100,000cps</td>
<td>1 – 25,000cps</td>
<td>1 – 125cps</td>
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<tr>
<td><strong>Pass width</strong></td>
<td></td>
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</tr>
<tr>
<td>Min (mm)</td>
<td>N/A</td>
<td>8</td>
<td>5</td>
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<tr>
<td>Max (mm)</td>
<td>N/A</td>
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<td><strong>Dry thickness range</strong></td>
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<tr>
<td>Min (µm)</td>
<td>30</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Max (µm)</td>
<td>200</td>
<td>100</td>
<td>200</td>
</tr>
</tbody>
</table>
Featured Options

- Four Position Tilt and Rotate
- Motorized Rotate with Pneumatic Tilt
- Dual-Simultaneous
- One, two, or three applicator configurations

Fifth-Axis Tilt – Additional Benefits

Tilt and rotate capabilities provide access hard-to-reach areas of the product that may not be achievable with the standard downward approach (0 degrees). Programmers can easily set and modify the rotate and tilt parameters for an applicator within Easy Coat® software.

- Ideal for coating vertical surfaces and underneath components
- The applicator can tilt at 30 degrees, and the mechanism can be rotated in 4 positions – in 90-degree increments (0, 90, 180, and 270) to direct the pattern to the left, right, front or back to coat all four sides of a component
- The motorized rotate allows for rotation in 1-degree increments for precise contouring around components.

For more information, visit our website to locate your local representative or contact your regional office:

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