E-Swirl 2 AdX BIW

Flexible application with long-term quality assurance
Freedom in design – flexible in the process

For excellent material distribution and bonding that stands the test of time – you need a solution that can handle various applications with consistent precision.

If you are aiming for an advanced automated system with additional functionalities and accessories for increased quality, you need to be looking at the E-Swirl 2 AdX BIW paired with a common SCA system controller. The Swirl technology offers a more reliable process window giving you control and avoiding common difficulties with bonding in Body in White.

E-Swirl 2 AdX BIW eliminates the most common pains

Hem flange joints are among the most challenging joining processes in Body in White. And advanced car designs even increase the demand for a flexible bonding application. The E-Swirl pattern ensures an optimal material distribution that eliminates the most common pains such as corrosion and material waste.
**E-Swirl 2 AdX BIW**

**Giving you a competitive edge**

The E-Swirl 2 AdX BIW offers optimal material distribution and a clean application with sharply contoured edges. Just what the industry needs to increase the competitive edge in terms of long-term quality guarantee and a significant reduction of reworks. With this tool you have one product for various applications: both swirl and bead. Giving you an optimal application through changes of width and constrictions that perfectly fit the geometry of the individual component/part.
Multi-applications means one applicator for Swirl and Bead applications

Optimal material dispense with excellent material distribution

Reduced repair time with a standardized part structure, meaning flexible repairs

Features

A Connection for electric drive that drives excenter

B Close to constant temperature reached by radiant heat

C Pneumatic excenter drive, enables different positions for achieving the adjusted excenter position

D Optimized nozzle geometry for clean application

E One applicator for Swirl and Bead applications thanks to adjustable excenter
No squeeze out, no rework

The E-Swirl 2 AdX BIW is answering to the demand for a solution that can dispense the bonding material to efficiently fill the hollow space between hemmed metal parts.

With the material distribution of the E-Swirl 2 AdX BIW you have just the right bead width and filling rate. It also addresses different issues with the material such as viscosity and temperatures, to name a few.

Insufficient gap filling leads to boil out
These panels have insufficient material distribution causing material squeeze out and air gaps that will lead to boil out. Gap problems account for the most significant amount of rework in the manufacturing process. And overspill is waste that accumulates over time.

A sound and long lasting investment.

Make full use of your IAS investment with our wide range of service offers. Global 24/7 programs that make the most of your investment.

Contact us at ias.service-solutions@atlascope.com

Completely filled gap
These panels are joined together with an improved material distribution, giving you a high quality and corrosion free bonding with just the right amount of material applied.
Fixed position 0: Bead application

Swirl application:
• Optimal material dispense and distribution
• Up to 50 mm distance to component
• No change of application width by change of distance
• High robot speed possible
• Easy robot programming possible
• Precise sharply contoured application

Multiple setup options to fit your exact needs

Bead application:
• Optimal material dispense and distribution
• Distance to component corresponds to bead diameter
• Easy adjustments of application via parameter setting

Adjusted position: Swirl application 0.4 to 1.0 mm radius

Maximum position: 1.2 mm radius
## E-Swirl 2 AdX BIW Specifications and ordering number

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight (kg)</th>
<th>Length (mm)</th>
<th>Max working temp. °C</th>
<th>Electric drive (rpm)</th>
<th>Pneumatic drive (bar)</th>
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<td>E-Swirl 2 AdX BIW</td>
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<td>279.2</td>
<td>60</td>
<td>140</td>
<td>Up to 24 000</td>
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### Additional Equipment

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<td>Swirl-box for SYS 6000 connection</td>
<td>90421.821013</td>
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<tr>
<td>Pins for excenter adjustment from 0.4 to 1.0 mm</td>
<td>80658.000210</td>
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<td>Nozzles PVC</td>
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<td>Nozzles Epoxy</td>
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<td>On request: diameter from 0.25 to 1.4 mm</td>
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<tr>
<td>On request: diameter from 0.4 to 1.0 mm</td>
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### Commissioning and Spare parts

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<td>Programming aid</td>
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<td>Electric drive incl. excenter</td>
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<td>Pneumatic excenter drive</td>
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<td>Seal kit material contact</td>
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<td>Seal kit pneumatic drive</td>
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Committed to sustainable productivity

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