RTVision.t
High quality in-line bead inspection for industrial dispensing applications
100% real-time inspection for safety critical applications

Quality and productivity is a major focus in car manufacturing. Both need to be kept high – all while staying on budget.

The RTVision.t is a reliable solution for high quality bonding applications within your set cycle time. Reduce quality costs at high productivity levels.

This system solution works with all application patterns such as bead, stitch-bead or swirl for all types of adhesives and surfaces. It allows a 100% visual inspection with a simple and fast set up.

Reliable bead inspection
Safety critical, structural bonds are highly demanding processes in BIW production. This is why a reliable bead inspection is crucial. The RTVision.t detects errors in width, position and continuity of the bead, providing direct feedback allowing immediate reaction.

Full performance without any compromises
Not only applications in BIW production call for quality assurance solutions. Battery assembly comes with challenges such as air bubbles or bead accuracy, which have a significant impact on the performance and lifetime of the battery application’s result.

The RTVision.t ensures full conductivity and heat dissipation between modules and cooling plates for a long lasting battery.

Different application patterns such as bead, stitch bead or swirl can be processed. As the lightning color can be chosen individually, the system is able to detect any material color with highest contrast quality.

In-line monitoring immediately detects quality issues without additional cycle time
High image processing frequency allows high productivity levels with robot speeds up to 600mm/s
360° coverage of the application ensures 100% bead inspection

HOW IT WORKS:
During application the adhesive bead is accurately inspected and any deviations in continuity, width or position are reported to the system – precisely, with no additional cycle time.

±0.1mm accuracy in position
±0.1mm accuracy in width
±0.5mm accuracy in adhesive gaps

Width
Position
Continuity
Quality and profitability with the RTVision family

With our 30 years experience in image processing and adhesive bonding, we offer a range of visual quality inspection products and solutions for both off-line and in-line inspections. We ensure the optimal inspection of all conventional adhesive and sealant application types and colors. Your individual manufacturing process and specific needs determine your choice of solution. Increasing quality and profitability in your manufacturing process.

Sensor variants

<table>
<thead>
<tr>
<th></th>
<th>RTVision.t</th>
<th>RTVision.tr</th>
<th>RTVision.t Swirl</th>
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<tbody>
<tr>
<td></td>
<td>Standard</td>
<td>Integrated bead repair functionality</td>
<td>Customized variant for SCA Swirl applicator</td>
</tr>
<tr>
<td>Robot speed</td>
<td>up to 600mm/s</td>
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<tr>
<td>Working distance</td>
<td>75mm - 230mm</td>
<td>75mm - 230mm</td>
<td>95 +/- 20mm</td>
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<tr>
<td>Accuracy in position</td>
<td>± 0.1mm</td>
<td>± 0.1mm</td>
<td>± 0.1mm</td>
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<tr>
<td>Accuracy in width</td>
<td>± 0.1mm</td>
<td>± 0.1mm</td>
<td>± 0.1mm</td>
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<tr>
<td>Accuracy gaps</td>
<td>± 0.5mm</td>
<td>± 0.5mm</td>
<td>± 0.5mm</td>
</tr>
<tr>
<td>Sensor dimensions</td>
<td>45mm, Ø152mm</td>
<td>45mm, Ø152mm</td>
<td>45mm, Ø169mm</td>
</tr>
<tr>
<td>Inner diameter</td>
<td>Ø28mm, Ø45mm</td>
<td>Ø28mm, Ø45mm</td>
<td>Ø 64mm</td>
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<tr>
<td>Weight</td>
<td>620g</td>
<td>620g</td>
<td>720g</td>
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</tbody>
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Bead inspection for high quality gap filler applications – watch this video to learn more!