Objective
The robotic dispensing system must automatically identify the part from a wide range of types, prepare (scuff) the surface to promote material adhesion, and accurately dispense beads of material in three axes.

Parts
Twenty-seven (27) unique truck cab components including structural frames and formed sheet metal body panels involving two- and three-dimensional dispense patterns.

Material
Epoxy structural adhesive
  ➢ Two-part material with a 2:1 ratio

Customer Benefits
This system provides several benefits:
  ➢ Elimination of more expensive riveting process
  ➢ Cleaner more stylish cab exterior appearance
  ➢ Improved finished-product structural integrity
  ➢ Higher productivity and less manual labor
  ➢ Greater automation reliability than previous process

Key System Features
  ➢ Custom 3-axis B Series Program-A-Spenser™
    Cartesian-coordinate dispensing system with a split X-axis for maintaining a high level of precision; includes teach pendant
    ➢ Part programming for 27 dispense paths; auto part present sensing and identification
    ➢ Delta Tau PMAC motion controller
    ➢ Pneumatic part scuffer
    ➢ Two-part epoxy dispensing
    ➢ Flexible fixturing on a single tilt-table for all parts
    ➢ Material delivery system: Graco Accu-Cat™ two component fixed ratio shot proportioner
    ➢ Dual 55-gallon material supply pumps
Systems & Support
Robotics, Inc. has decades of experience designing and building automated dispensing systems. We provide complete system solutions, including start-up and installation assistance, training, field service support, and complete documentation. Dependent on your specific project considerations, Robotics Inc. staff will design and build a system that is right for you.

Information
Robotics, Inc. has designed and built hundreds of dispensing systems for a variety of industries. For more information on this application or other products and services, contact a Robotics Inc. Sales Representative:

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Since 1971, Robotics Inc. has designed, built, and supported automated dispensing around the world!

Accu-Cat™ is a trademark of Graco Inc.
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Process Specifications*

<table>
<thead>
<tr>
<th>Parts</th>
<th>Truck cab body panels and aluminum structural frames (twenty-seven unique parts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robot Cycle Time</td>
<td>2 minutes including scuff and dispense (avg.)</td>
</tr>
<tr>
<td>Production Rate</td>
<td>40+ parts per hour (approximate)</td>
</tr>
<tr>
<td>Material</td>
<td>Two-part epoxy structural adhesive</td>
</tr>
<tr>
<td>Mix Ratio</td>
<td>2:1</td>
</tr>
<tr>
<td>Bead Dimensions &amp; Tolerance</td>
<td>0.225&quot; dia. 0.025&quot;</td>
</tr>
</tbody>
</table>

* Values are based on customer’s specific requirements and do not necessarily indicate optimum values. Call for further information regarding system capabilities and product specifications.