Independent Rear Axle Assembly Line

**Facts**
- **Industry**: Automotive OEM
- **Product**: Independent Rear Axle
- **Installation Date**: 2003

**Description**
- Independent rear axle assembly line for a high performance automobile. Non-synchronous power roll MS-7 transport system. Assembly of the dual snap-ring style axle housing in pinion nose up and nose down positions. Currently assembles (94) different axle types with weekly production reaching 4,500 units with two-shift operation.

**Equipment**
- 10 automatic stations
- 5 manual stations
- 10 semi-auto stations
- 5 robots
- ABB pinion shim gage and bearing drag torque machines
- ABB collapsible spacer preload machine
- ABB pinion head height and flange runout machine
- 2 ABB case shim gage machines
- ABB robotic pallet wash cell
- Integrated motion transmission error (MTE) machine - audit

**Customer Benefits**
- High-quality gauge and assembly processes assure product quality and throughput
- Lean assembly approach adjusts manpower to production volume and minimizes direct labor costs
- Small system footprint – fits easily into customer plant
## Facts

<table>
<thead>
<tr>
<th>Technical Data</th>
<th>Capacity: 215,000/year (2-shift production)</th>
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<tbody>
<tr>
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<td>Cycle time: 47 seconds</td>
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<td>Unique Elements:</td>
<td>Low lash-selectable shim differential case build</td>
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<td></td>
<td>Integrated bearing drag torque philosophy</td>
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<tr>
<td>Customer Provided Equipment</td>
<td>MTE tester</td>
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<tr>
<th>Project/Steps to Implementation</th>
<th>Training</th>
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<tr>
<td>Project Responsibility:</td>
<td>Powertrain</td>
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| Video/Photos/Reference:         | Yes                                         |

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