### 8.6 Carrier Assembly Line

**Facts**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Automotive Tier One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part</td>
<td>3rd Member Assembly</td>
</tr>
<tr>
<td>Installation Date</td>
<td>1997</td>
</tr>
</tbody>
</table>

**Description**

Assembly line for 8.6 Carrier Assembly for light trucks. The system is a palletized assembly line. Two complete independent assembly lines capable of producing 4,800 carriers per day in a 2 shift operation.

**Equipment**

- 10 ABB IRB-6400 robots
- 60 automatic stations
- 20 manual stations
- 2,600 feet of MS-7 conveyor

**Customer Benefits**

- "Birth History" data coded on a RF tag, collected at end of the operation
- FIS System collects detailed information on overall production characteristics
- Data collected on individual stations
## Facts

<table>
<thead>
<tr>
<th>Technical Data</th>
<th>Cycle Time: 19.3 seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Floor space: 15,000 sq. ft.</td>
</tr>
<tr>
<td></td>
<td>Cpk: 2.0</td>
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<tr>
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<td>Uptime: 92% minimum, 98% typical</td>
</tr>
<tr>
<td>Unique Elements:</td>
<td>Integrated balance line</td>
</tr>
<tr>
<td>Customer Provided Equipment</td>
<td>Balancing equipment – retool</td>
</tr>
</tbody>
</table>

### Unique Elements:
- Integrated balance line
- Customer Provided Equipment Balancing equipment – retool

### Project/Steps to Implementation
- Concept
- Specification
- Prototype
- Engineering
- Project management
- Manufacturing
- Installation supervision
- Installation
- Training

### Project Responsibility:
- Powertrain

### Video/Photos/Reference:
- Yes