System reference
Axles

Lean IRS Axle Assembly
- 200,000 - 250,000 axles p.a.
- Cycle Time: 47 seconds
- 3 ABB Test/Gage machines
- 15 Auto and semi-automatic stations
- 2 Manual stations
- 45 Meters of ABB MS-7 conveyor
- 2 to 13 Operators depending upon production volumes

Independent Front Axle

ABB provided a complete system solution
- Build of 3 products with no manual changeover
- Multi-phased expedited implementation schedule
- Installation on weekends, holiday, and 3rd shift
- 30 second cycle time
- Three new, 9 retooled, and 3 relocated auto stations
- One new and 1 retooled semi-automatic stations
- Two new and 1 retooled manual stations
- Components
- ABB assembly machines
- 15 new and 100 reworked pallets
- Andon Board and integrator
- ABB MS7 conveyor for new product feature and repair area
IRS Axle Assembly
• 200,000 -250,000 axles p.a.
• Cycle Time: 50 seconds
• 5 ABB Test/Gage machines
• 20 Auto and semi-automatic stations
• Integrated MTE test machine
• 5 Manual stations
• 5 Robots
• 100 Meters of ABB MS-7 conveyor

Front Axle Assembly
• 300,000 to 400,000 independent front axles p.a.
• Cycle Time: 30 seconds
• 13 Robots
• 25 Auto and semi-automatic stations
• 4 Manual stations
• 220 Meters of ABB MS-7 conveyor
Front and Rear Axle Assembly
- 300,000 independent front and rear axles p.a.
- Cycle Time: 54 seconds
- 3 Robots
- 22 Auto and semi-automatic stations
- 7 Manual stations
- 150 Meters of ABB MS-4 conveyor
- Floorspace: 900 sq. meters
- 6 Axle variants

High Volume Front Axle Ass’y
- 300,000 rear carriers p.a.
- Cycle Time: 33 seconds
- 6 Robots
- 29 Auto and semi-automatic stations
- 8 Manual stations
- 3 ABB Dynamic backlash machines
- E-locker differential test machine
- 160 Meters of ABB MS-7 conveyor
- 100 Axle assembly pallets