

Corporation

With headquarters in Stockholm, Sweden, Autoliv Inc. is a Fortune 500 company and the world's largest automotive safety supplier with sales to the entire leading car manufactures in the world. Autoliv develops, markets, and manufactures, integrated safety systems including airbags, seat belts, safety electronics, steering wheels, anti-whiplash systems, seat components and child seats.

Facility

The Module Facility consists of several buildings totaling 437,869 sq. ft which sits on 50 acres of land. We currently have over 111 manufacturing lines and ship to 100 locations worldwide. Included within the Module Facility is a Metrology Lab, an on site Machine Build group and Molding department.

At the time of our Shingo certification in 2003, the Molding department had 7 presses and shipped 975,317 covers. They currently have 14 presses and ship 4,516,587 covers annually. Since 2003 by continuing to apply APS principals, we have increased the number of modules produced per person by 18%.

Due to our improvements in line design and productivity we have been able to free-up additional floor space. With our additional available floor space we have the opportunity for future growth.

Product

Autoliv has been the pioneer in the field of airbag safety devices since 1980 and today is the world's largest producer of airbag modules. We are widely recognized for our innovation. Our products are proven to meet the most stringent governmental and customer specifications worldwide, and our manufacturing practices ensure that our products satisfy the most demanding requirements for reliability and performance.

Achievements

In the five years since receiving the Shingo Prize we have continued to make improvements in all aspects of our business. We have implemented five missions of the work site, which are: Safety, Quality, Employee Morale, Delivery and Cost. By empowering and developing our people and focusing on these five key areas has lead to the following significant achievements:

Safety & Environmental

- Reduced Workers Health Cost by 39 % and total lost days by 97 %
- Reduced OSHA Recordable 55 %
- Lot Testing Cost Reduction 34 %
- ISO 14001 Certification
- Created and implemented a Behavior Based Safety Program

Quality

- Less than 12 Customer PPM.
- TS 16949 certified
- Created and Implemented a monthly First Time Quality system which engages our team members in problem solving activities.

Employee Morale

- Implemented over 63,135 kaizens in 2008 which is over 64 per person.
- Completed 1,567 Team Problem Solving Projects in 2008
- APS Fun Day Activities
- Community Involvement Activities
- On-site Health Clinic (FirstChoice)
- On site fitness center
- Actively participate in the APS (Autoliv Production System) University
- Implemented the Module Fun Committee

Delivery

- Improved customer on time delivery to 99.95%
- Improved Supplier On time delivery to 98.90%
- Reduce conveyance lead time between Module and Brigham by 50%

Cost

- Reduced overall material cost per unit by 20%
- Increased plant Productivity by 31% which equated to a \$0.49 per part savings.
- Reduced production scrap by 75%
- Reduction of 3.5 days month end closing
- Reduced capital cost per line by 68% since

2004.

- Implemented an equipment redesign/reuse policy which allowed us to realize a 26.9% cost per part reduction for depreciation.

People

The 987 employees working at the Module facility are our greatest asset. Through their Kaizen ideas we have been able to make continuous improvements in all aspects of our business.

Since receiving the Shingo Prize award we have continued to improve our kaizen program. We have gone from an individual based kaizen system to a team based system. This has provided greater acceptance from the teams and better utilized the finder/fixer skills within each team. The kaizen process has been greatly simplified and has facilitated a more rapid turn around time for implementing improvements to our worksite and processes.

We have continued to build upon our work-fit program by adding an in-house fitness center. This allows our physical therapist to work closely with individuals who may be experiencing ergonomic issues at work. It is also a proactive approach to improving employee's health. Additionally we have added a health clinic which operates using lean principles to provide easier access to health care for employees and their dependents which has provided a lower co-payment as well as lower costs.

Process

The Module Facility continues to provide a broad offering of lifesaving airbag modules. Our customers depend on us to build high performance products that are 100% reliable. By applying the principals of the Autoliv Production System (APS) we have been able to satisfy the needs of our internal and external customers.

At the Module Facility, APS is our way of life! We provide each Team Member with the opportunity to learn and use these tools through monthly training covering various APS topics. Each months APS training is cascaded through all levels of the organization. A

gemba activity is conducted and every team member is certified to the monthly topic by the plant leadership. At the end of the month we celebrate the monthly APS training and all team members who are certified participate in a fun activity and a drawing. Team members have the opportunity to apply their APS knowledge in various improvement workshops. The plant leadership team identifies improvement needs in specific areas of the plant. Teams are formed and workshops are conducted to address the improvement need. Quarterly plant workshop reviews are held to celebrate the success of the teams.

In addition to applying the tools of APS to improve our processes, we have taken the opportunity to share our philosophy with our suppliers. Through these efforts we have been able to spread our culture to these key business partners. These efforts have helped them reduce cost through eliminating waste in their processes.

We have provided these tools to strategic business partners and assisted local businesses in helping them start on their own lean manufacturing journey. We do this by providing tours of our facility and sharing key APS concepts with them.

Launch

The Autoliv Production Development System (APDS), which supports production launch at the Module facility, has been significantly improved by the support of our team members. Visual status boards, management escalation and departmental systemic connections have increased customer satisfaction, improved quality and has enable us to better meet cost objectives.

For more information contact:

Scott Saxton
Manager, APS Department
Office: (801)629-9938
Fax: (801)629-9488