

Reducing Cycle Times and Speed of Batch Processing in Automotive Coatings Process

An SBTI White Paper

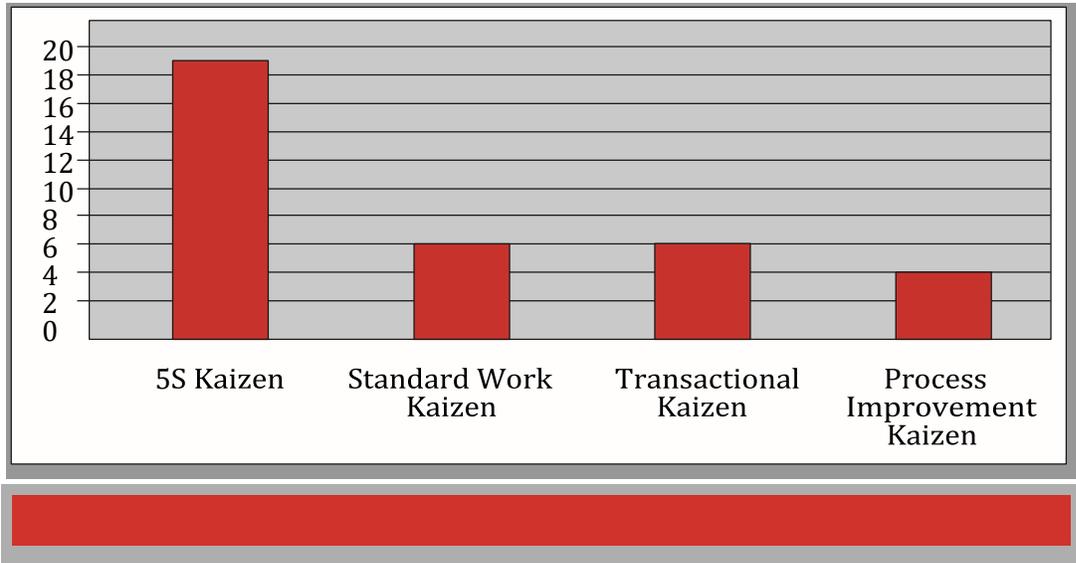
BASF is a global corporation with a very diversified portfolio that ranges from chemicals, plastics, performance products, agricultural products, fine chemicals, crude oil and natural gas. Approximately 95,000 employees on five continents are the key to their success. BASF Automotive Coatings is a \$1.2 billion (2004) chemical division focused on developing and manufacturing innovative coatings for the automotive industry including manufacturers such as Ford, GM and Daimler Chrysler. The Automotive Coatings Division provides a full range of thermal spray coating services to meet the coating needs of customers in the automotive market. Their coatings impart essential material characteristics for critical components.

Background

The cycle time between batch strike-up needed to be reduced in order to enhance total productivity. The original goal was to cut this time by 50 percent. The key tools used were Lean Assessment, Lead Leader Training, Site Steering Team deployment, Kaizen Interventions and specific Lean tools such as Standard Work, 5S and Visual Management.

Actions

Initially through a series of Kaizen Events, opportunities were outlined to include reducing batch strike-up time, reducing the order process time, improving Tote, Fill and Ship Process while shortening the distance traveled during lab operations. The team identified 13 key employees within BASF production who were trained in Lean Leader. An additional 11 employees in processing roles were also identified. A series of 36 Kaizen Events took place with over 174 BASF employees participating.



Results

The chart below identifies the measured results in both time and efficiencies as well as annualized savings.

Opportunity	Results	Savings (annualized)
Reduced Batch Strike-up Cycle Time by 53%		\$74,000
Reduced No. of Screens Required for Order Entry by 30%		\$282,000
Improved Tote, Fill and Ship Process Efficiency by 27%		\$100,000
Reduced Distance Traveled for Lab Operations		
From 963 to 327 feet		\$85,000

Lessons Learned

- Time management: allowing the right amount of time to focus on improving the areas was key to making it successful
- Waste disposal: implementing a Lean inventory management system
- Organizational: visual controls, parking spots, etc.

- Appreciation: for all the steps in process
- Equipment efficiency: update equipment as needed