



Reduced costs and increased output

By implementing Lean techniques Roplast Industries Inc. was able to:

- Reduce set up times by an average of 50%.
- Increase production capacity by 500,000 pounds with no increase in labor costs
- Enabled quicker response time to clients needs
- Reduce impact of inventory risks.
- Reduce scrap rates
- Empower line staff and improve moral.

“Initially we were skeptical that Lean could offer a continuous process industry like ours any real benefits. The Coaches from TEiM quickly showed us that any company can adopt the lean thinking and we made dramatic improvements in only five months.”

–Chris Mann, V P of Operations

Roplast Industries was founded in 1990 in the foothills of the Sierra Nevada Mountains to manufacture environmentally friendly, high quality, low density polyethylene bags. Roplast concentrates on fine, quality print and strong film. They print exclusively with environmentally friendly water based inks. They produce a wide range of bags used in numerous retail and industrial applications. They are suppliers to well known high end retailers such as Macy’s and Eddy Bauer and can provide many custom features such as draw string, loop handle and zipper bags. They also have many food packaging industry clients and make products such as re-seal bags used for tortillas and breathable bags used for produce.



Roplast Core team and Kaizen team members

The Dilemma

Increasing competition from low wage overseas business coupled with increasing costs of raw materials and the reduced activity in the market place during 2002 was beginning to have an adverse effect on Roplast.

The Company needed to find a competitive advantage to gain market share. The company had looked at traditional cost cutting methods and had been able to reduce scrap and down time by reducing the number of machine set up's and instigating a "long run" policy. However, this meant inventorying printed materials that could be converted into bags at a later stage and holding larger amounts of finished goods in the warehouse. This had the effect of increasing the amount of work in process (WIP) inventory and delaying the response time for new orders coming into the facility. It also added an element of business risk because clients sometimes wanted to make changes to the print design during part way through a contract. Roplast works on a make to order basis, but companies elect to call off quantities as they are needed. Using the Long run policy could sometimes create an adverse effect on cash flow and it also meant holding large amounts of "just in case finished goods"

The Solution

Having attended one of TEiM's Lean manufacturing workshops the decision was made to invite the coaches from TEiM to visit the site and make recommendations that would help Roplast improve its competitive edge and reduce operating costs

Having assessed the opportunities a proposal was made to train and mentor a core team of Roplast staff to implement lean techniques that would help them be more responsive to customer needs and reduce the amount of WIP. The goal of the project was to develop within Roplast a core of knowledge and practical experience that would be sustainable long after the initial project..

The project included training all Roplast employees in the concepts of Lean and Visual Controls. After the initial training a core team was selected, their role was to learn more in depth techniques such as Value Stream Mapping, Lean Supply Chain Management and team building skills etc., A second group of volunteers were also selected to be participants in Kaizen events (4). These events would not only teach new skills but would achieve real process improvements where they were most needed.

TEiM whenever possible use the "learn and then do" method which enables trainees to retain more of the knowledge and shows benefits to client companies faster. Whenever they can they also make use of the State of California Employment Training Panel (ETP) program which helps off-set training costs to California companies. The ETP's goal is to make California companies higher performing organizations with better paying jobs. Over 50% of this project cost was covered by the ETP program.

"The project cost much less than we had originally expected because TEiM works closely with the State of California ETP program. The return on our investment was paid back after the first Kaizen event."

–Chris Mann, V P of Operations