

# PROJECT BRIEFING

## OPERATIONAL PROCESS IMPROVEMENTS



Quadrant manufactures specialty plastic items using extrusion, casting and compression molding methods. Their parts are a substitute for machined parts to provide an alternative that's less expensive, more durable, and lighter than metal.

### PROJECT OBJECTIVE

To improve throughput in Quadrant's compression molding unit by studying shop floor operations and proposing improvements to increase efficiency.

### PROJECT SUMMARY






Over the course of this project, ESPI focused on three main areas: the organization of Quadrant's workplace, tooling care and maintenance, and worker responsibility.

Based on an examination of the operation from an ergonomic safety and productivity perspective, ESPI developed a plan resulting in improved utilization of space that located more frequently used tools closer to the work area. Additionally, the project team updated policies and procedures to improve the maintenance of tooling.

Through direct study and analysis of employee practices on the shop floor, ESPI designed ergonomically sound workbenches and placed them at more central locations throughout the operation. The ESPI/Quadrant team developed and recommended a new layout of the compression molding area.

As a result of these improvements, Quadrant was able to significantly improve the throughput and profitability of their compression molding unit.

### RESULTS

-  Increased throughput, enabling Quadrant to meet production targets.
-  Improved yield by nearly 25%.
-  Significant improvement in production efficiency helped to reduce operating costs.
-  Helped to create an accident-free workplace.
-  Improved ergonomic and safety procedures to improve safety and worker comfort.

