

Creating a Path to Efficiency



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Part I: Overview of Workplace

Rosenboom Machine and Tooling is a family owned company that builds custom crafted cylinders.

The company started in a garage in Sheldon, Iowa in 1974 by Lary Rosenboom and has grown to three plants (Sheldon, Spirit Lake, and Bowling Green, OH) and over 1,000 employees.

Part II: Workplace Focus:

In the continuous improvement department it is all about efficiency. Conducting time studies to maximize work time, to organizing work areas for maximum efficiency is the primary objectives. Creating a work environment that maximizes finished product with the fewest amount of labor is a driving factor in this department.

Part III: Introduce the Problem

Minimizing movement in a production area helps keep an operator energized and reduces the risk of wasted motion.

Students are to design a cell that maximizes the work area, allows for easy flow of parts through the cell, and minimizes movement of the operators.

Part IV: Background

This project involves some key content considerations in finding area, circuits and paths, and spatial reasoning.

Students will “track” operator flow throughout a cell to estimate the length of foot traffic in the cell and rearrange machines to minimize worker movement.

The workplace takes into consideration how to best help operators with their job. Looking at how work can be distributed among operators is a balancing act for the continuous improvement team.

Part V: Workplace Solution

Creating a standard worksheet for operators to list responsibilities, and possibly rearrange machines in the cell are strategies used by Rosenboom. It is constantly changing and evolving based on operators and room.

Part VI: Educational Pathways

A great take away from Rosenboom is that students need to be willing to learn! On the job training is a key component to manufacturing. College degrees are not necessary for many of the jobs, (exceptions in some management roles) just the willingness to learn.