

Increasing Throughput for a Workforce Management Company

1 Introduction

A workforce management company with a commitment to making life more fun and less stressful for its clients and employees was experiencing tension. One of their flagship facilities in Aurora, Georgia, was processing large volumes of units daily and struggling to keep up. With growing pressure to meet customer expectations and maintain operational efficiency, they needed a solution.

2 The Challenge

The company was experiencing operational bottlenecks, particularly within its work cells. These bottlenecks were causing delays, reducing the overall efficiency of the facility, and impacting the company's ability to meet demand. The root of the problem was traced back to layout design, particularly within its work cells. The existing layout resulted in excessive Work in Progress (WIP) and inefficient material flow, leading to longer processing times and reduced throughput. This inefficiency became a significant concern for the workforce management company as it struggled to keep up with increasing customer demand. The company reached out to Alpine Supply Chain Solutions to help with facility layout design and process optimization.

3 The Process

Alpine's team of experts began by thoroughly analyzing the existing layout and processes within the facility. This included mapping out the flow of materials, identifying bottlenecks, and assessing the overall efficiency of the work cells. Alpine developed a comprehensive facility layout design.

To increase throughput, Alpine implemented a one-piece flow structure into the work cells. One-piece flow is a lean manufacturing principle that focuses on moving one unit through the production process at a time, rather than processing batches of units. This approach significantly reduces WIP, minimizes delays, and improves overall efficiency.

Alpine also redesigned the layout of the shipping area to increase the number of work cells and improve the ergonomics of the workstations. The goal was to create a more efficient and worker-friendly environment, where materials could be processed and shipped with minimal delays.

4 The Outcome

Two key work cells were completely redesigned to incorporate one-piece flow. This resulted in a 16% increase in throughput, allowing the company to receive more units per day. By doubling the number of work cells within the shipping area's physical space, the facility's capacity was maximized without the need for expansion. Each shipping work cell was equipped with point-of-use items, particularly those that were most frequently used. This strategic placement of materials reduced travel distance for workers, further improving efficiency and ergonomics.

The improvements in the work cells and shipping area had a ripple effect throughout the entire facility. With faster processing times and reduced delays, the company was able to meet its demand more effectively, resulting in improved customer satisfaction and a stronger competitive position in the market.

