

Success Story

Tool Manufacturer Improves Pick Efficiency Using Goods-to-Person Technology



When a renowned manufacturer of round shank cutting tools for the metalworking industry faced significant challenges with their pick and storage processes, they engaged Alpine Supply Chain Solutions. As a company with over a century of expertise in cutting tool manufacturing and a wide range of SKUs, they needed to find a solution that would optimize their pick efficiency and adapt to the projected growth in shipping and SKU volume over the next decade. Alpine stepped in to analyze their current system and implement innovative Goods-to-Person technology, leading to remarkable improvements in pick efficiency and cost savings.



The Challenge

With close to 30,000 SKUs, the majority of which were small parts stored in bins, the company's associates faced inefficient picking processes based on order sheets rather than location sequence. This resulted in extensive travel time and a declining pick efficiency as the company experienced a 4% year-on-year growth in shipping and SKU volume. Additionally, labor costs were projected to increase significantly due to labor market challenges.

The Solution



To address the challenges faced by our customer, Alpine began by conducting a comprehensive analysis of their outbound shipment records, item master, and inventory snapshots. A Storage Type Analysis (STA) and Engineering Study were performed to determine the optimal storage types for the client's Pick Locations, exploring two scenarios: Traditional Bin Shelving and Goods-to-Person Technology.

By carefully examining the data, Alpine was able to reduce the required number of storage bins from the initially proposed 380 to 296, resulting in a 22% reduction in material costs and shorter pick paths, ultimately enhancing pick efficiency.

Alpine further evaluated deploying Goods-to-Person technology using the STA and a Return on Investment (ROI) analysis. The ROI calculations revealed a 6-year return on investment and a cumulative cash flow of \$1.3 million after 10 years of installation. Alpine recommended a Goods-to-Person technology vendor that factored in labor cost savings for picking and putaway and space savings.

The Results



The implementation of the Goods-to-Person technology led to transformative outcomes for the customer:

Problem:

Current pick locations are not utilized properly.

Outcome:

Storage Type Analysis increases location utilization in both Goods-to-Person and static shelving solutions.

Problem:

Pick efficiency declining with an increase in travel pick path

Outcome:

Implementing Goods-to-Person technology reduces pick travel distance by bringing products to the pickers, resulting in a 400% increase in pick efficiency.

Problem:

Labor costs are increasing by a large margin due to labor market challenges

Outcome:

Increases in pick efficiency reduces overall labor required over the next 10 years, leading to substantial cost savings.

The Conclusion



By partnering with Alpine Supply Chain Solutions and embracing Goods-to-Person technology, our customer, a prominent tool manufacturer in Wisconsin, successfully improved their pick efficiency and addressed their storage challenges. The optimized pick processes and reduced labor costs position them for sustainable growth in the face of market fluctuations and evolving demands. With Alpine's innovative solutions and expertise, our customer now stands at the forefront of technical innovations in supply chain management.