MODERN productivity solution



Pick-to-light solution results in improved picking performance and more reliable sensing for automotive components supplier.

DRIVING EFFICIENCIES AND QUALITY

By Lorie King Rogers, Associate Editor

n today's competitive industrial manufacturing markets, success is about getting it right as soon as possible. This is especially true in automotive: Suppliers of automotive components require 100% accuracy, high quality, documentation, proper packaging and low cost.

Orscheln Products, located in Moberly, Mo., has built a reputation as a leading global supplier of motion control systems, which representatives say comes from a continual commitment to manufacturing quality, leading-edge products and exceptional service. The company's product line includes parking brake systems, control cables, fluid-level indicators, throttle controls and shifters.

Many of the assemblies are complex and change constantly, and the company understands that the basis for a competitive product is the ability to assemble it in the correct sequence and keep the labor and any rework to a minimum.

So, when the company went looking to improve

productivity and replace an older, unreliable and cumbersome system with a new one, it insisted on a solution that would simplify the process without putting additional constraints or hardships on its assemblers. Choosing a proven assembly method that provides answers to all of the industry's strict requirements, Orscheln installed a unique pick-tolight (Banner Engineering, www.bannerengineering.com) solution.

The pick-to-light system gives the operation total flexibility to control and adjust the pick sequence as requirements change. With a built-in sensor for a no-touch, simple and fast way to acknowledge the pick, the embedded photoelectric sensor allows the light to operate without touch.

The system's indicator lights are positioned over the bins. The sensor is triggered when the operator reaches into the bin for a part. When it's removed, the sensor registers the pick. It's the in/out action of the operator that triggers the sensor and acknowledges the completion of the task.

Orscheln has achieved improved productivity from enhanced picking performance and more reliable sensing. The pick-to-light solution has reduced errors and improved overall machine operations and flow. Orscheln also benefited from the ability to scale the system for different parts and bin sizes and number of parts at each station to allow each station to be unique to the application.

As a result of the significant improvement in productivity, Orscheln plans to implement additional pick-tolight systems in the future.

PICKING THE LIGHT SOLUTION

Light-directed put stations are designed to help an apparel retailer optimize split case fulfillment and account for a 300% improvement in pick rates.

> British apparel retailer, Next, markets home products, clothing, footwear and accessories in its 500 stores throughout the United Kingdom and Ireland, and in 50 franchise branches in Europe, Asia and the Middle East.

> To keep up with demand and its changing business requirements, Next installed a new goods-to-person order fulfillment solution that has enabled the company to achieve a dramatic increase in distribution productivity and capacity. The high-rate order fulfillment system (Dematic, www.dematic.com) delivered a threefold increase in order picking rates, along with far greater peak capacity.

> The fulfillment system, which is dedicated to the company's fast moving product lines, has 20 stations that fill orders for up to 24 stores each. At each high-rate put station, an operator is directed

by put-to-light displays to fulfill a series of orders, fed by a seamless, sequenced supply of products. The products are automatically delivered to the station's central picking point from the automated storage and retrieval system.

Each station holds up to 24 order totes destined for one of the retail outlets. The light displays at each location indicate how many items must be put into each of the totes, allowing a single operator to work on up to 24 store orders at the same time. When an order tote is full, the display instructs the operator to push it onto a takeaway conveyor for transfer to shipping.



The high-rate put stations minimize the time an employee must travel in the warehouse to access each pick face. Instead, they are fed with a continual supply of products, and the ergonomic design of the stations ensures that high productivity is combined with minimal physical demands. The innovative design enables operators to achieve pick rates up to 1,000 items per hour depending on the order profile. An additional benefit of supplying stock to pickers is that errors are substantially reduced, improving accuracy and customer service levels.