



OPTIMIZING

# **MANUFACTURING PROCESSES**

THROUGH VALUE-ADDED VALUE ENGINEERED DIE CUT PARTS

**A VAVE Casebook for Tier 1 Automotive Suppliers**

## JBC Improves Throughput and Reduces Waste Through New Part Presentation Product Delivery System

### THE **CHALLENGE**

*A tier 1 automotive supplier had the die cut materials it needed, but their engineers specified a part presentation that led to wasted time and materials during the assembly process.*

Each part was die cut into individual pieces and bulk packed for shipment. Once the customer received the parts, workers would neatly stack them in bins for use on the assembly line. The assembly team had to remove parts from the bin, orient them properly, and then peel the liner before installation. It was a very time-consuming, two-handed operation. To further complicate matters, the parts – which were cut out of acrylic foam tape – often stuck together. If the parts stuck to each other too aggressively, they were discarded, leading to high scrap rates and an even slower assembly process.

### THE **SOLUTION**

After visiting the customer's production facility to see how the parts were being used on their line, JBC developed a new way to cut and present the parts. Rather cutting individual parts, JBC re-engineered the process to introduce the same part kiss-cut on rolls. Taking that one step further, JBC designed and built an easy-to-use automatic dispenser that presented each part to the operator in the same location and orientation. This allowed the assembly workers to pick and place each part with one hand, significantly reducing assembly time.

### THE **RESULTS**

- Consistent and fast die cut part presentation
- A 65 percent savings in labor reduction
- The virtual elimination of material waste
- Significantly happier assembly operators



## **JBC Adapts Parts and Builds Automated Assembly System**



### THE **CHALLENGE**

A tier 1 automotive supplier had a long supply chain involving a tiny, die cut sealer (supplied by JBC) and a laborious assembly process that was making it difficult to keep up with increasing demand from their end customer. Our customer received, inspected, repacked, and shipped these parts to another vendor for manual assembly to a small mating part. Assembly workers manually placed the plastic part into a fixture, removed the paper backing of a foam washer to expose the adhesive, and stuck the washer to the plastic part. After this, they applied foam sealers over the plastic part, taking care to keep it from rolling. The assembly was then visually inspected, placed into a box, and sent back to our customer.

### THE **SOLUTION**

JBC engineers designed and built an automated assembly system to streamline the whole process. This system allowed JBC to automatically assemble die cut sealers and the customer's mating part in one location with one machine. In addition, automated assembly offered more consistency and higher quality than what was possible with the other vendor. The new system was significantly faster and was able to meet the customer's growing capacity requirements, it also improved the overall quality of the parts.

### THE **RESULTS**

- Eliminated assembly logistics and administrative costs
- Increased assembly capacity reduced response time for product demand surges
- Improved the overall quality of the assembled product

WORK TOWARDS

# CONTINUOUS IMPROVEMENT

WITH A PROACTIVE PARTNER

***Tier 1 automotive suppliers deserve engineering-forward solutions that look beyond standard expectations.*** The impact of JBC's parts extends far beyond our facility, so we partner with our customers to analyze their processes and uncover new, value-added part solutions. With our dedication to innovation, we actively search for new ways to streamline your manufacturing process and eliminate waste.

ARE YOU

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