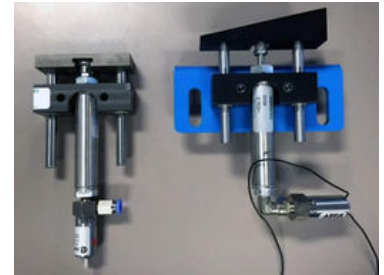


Application Note: Custom Subassembly for Conveyor Manufacturer



The Application

A manufacturer of conveyor equipment was using an electrical solenoid to sort products by activating a mechanism that opened the bottom of the conveyor to drop its contents into the appropriate bin. The electric solenoid didn't generate enough force or speed, which led to repeated errors and missed sorts on the conveyor. Every time there is a missed sort, the customer is charged by the end-user for the error. This led the customer to search for an alternative method to operate these actuators. The customer came to Cross looking for us to validate their idea of using a pneumatic cylinder and also for us to size and spec the cylinder. After helping the customer identify the correct cylinder for the application, our team asked them some additional questions about the application and found that we could take the solution a step further to create a plug and play subassembly that would arrive ready to place directly onto the equipment.

The Solution

By talking with the customer and learning more about their machine, we were able to make recommendations on what we could do before the product was shipped to help make their job easier. The final solution that our team put together included the cylinder, slide, custom fixture on the end of the slide, electrical connectors, valve, and necessary fittings in the ports. Cross was able to build all of these assemblies and mount them to the customer's custom mounting bracket. Because the customer could use as many as 1500 of these assemblies on a single project, this represented significant time savings. We were also able to ship the subassemblies directly to the worksites so the customer didn't have to deal with shipping them out of their facility. In addition, the customer's mounting bracket often changed with each project. We were able to change with the customer and accommodate each unique mounting bracket they used.

Application Note: Custom Subassembly for Conveyor Manufacturer

Tangible Value

This customer purchased thousands of these assemblies over several years. During that time, they found that in addition to the initial time savings on installation, their error rate, or how often the equipment incorrectly sorted products, was reduced more than tenfold from around 3% to 0.1%. This was valuable to the customer because when their equipment sorted products incorrectly, they would be charged back by their end users for the time they spent manually correcting sorting errors.

Cross was able to help this customer raise the quality of their equipment and improve efficiency by providing a completed subassembly delivered directly to the customer's installation site. This provided a drop-in solution for the customer faster and cheaper than they could have made themselves. If you'd like to see how Cross can help you with components for your equipment, contact us today!