

Case Study: Efficient Solutions for Hydraulic Equipment

How Motion Repair & Services identified a unique service gap to fill

Finding New Ways to Upgrade an Existing Customer's Technology

When the Motion Repair & Services team can identify and address opportunities for improvement for a customer, it deepens their trust in our team and brings value to their process. This newfound trust often leads to long-term partnerships between the customer and Motion Repair & Services' Engineered Solutions Division.

One example is Motion's long-standing relationship with a food and beverage manufacturer. Originally, Motion was merely a component supplier providing parts to this customer. However, in working with this customer's maintenance and production management team, our team



Figure 1: Our team improved the customer's throughput with our hydraulic solution.

identified an area where we could further optimize the customer's operations—their fruit preserve processing system.

"The customer's existing system was beating itself up, resulting in constant repairs," said Jim Verona, Director of Engineering Programs for Motion Repair & Services. "We designed a new mechanical handling container and redesigned the hydraulic system, improving the preservative process to be more robust and repeatable."

Verona said that this phase is an interim step in the customer's overall production and supports the mixing of preservatives for the next production step. When this system was down, it created a bottleneck for other steps in the production process.

"With the benefits of hydraulics, we're able to tip over this large carriage to transfer product from one part of the process to the next," Verona said. "The magic is in the circuit design implementing hydraulic rotary actuators to support the tipping motion."

Getting the Customer Out of a Manufacturing Jam

Motion Repair & Services designed and fabricated the carriage. Our team then installed the plumbing required to support the system with stainless tubing and robust hydraulic rotary actuators. Finally, the system was tested mechanically and hydraulically before being sent to the customer's site for installation. As our team continues implementing these systems for the customer, we modify and perfect our design.

“Recently, we moved to some new technology, a different supplier component,” Verona said. “It has proven to extend the system’s life even further and eliminate downtime, saving hundreds of thousands of dollars. It’s a nice system; it is surely unique.”

Verona said that the customer was thrilled with how this new system improved the functionality and robustness of their manufacturing operations. Since the original system installation, Motion Repair & Services has continued implementing over a dozen carriage improvements for the customer.

“Our team, in collaboration with the customer’s experience, brought some efficiency and innovation to their process,” Verona said. “We made some mechanical design changes, and their throughput is better because of it. We didn’t put them in the preserve business by any means, but we made it easier and more efficient for them. The good news is they keep coming back for more.”

Contact the Motion Repair & Services Team

The Motion Repair & Services team is ready to optimize your hydraulic systems. To learn more about our capabilities, [head to our website](#) or [contact us today](#).