

Quality + Performance + Compatibility

CASE STUDY HALEY MANUFACTURING

Robotic Evolution in Packaging Automation Delivers Greater Efficiency

An industry that's ripe for the benefits of robotics

The need for more and more automation in produce packaging has grown, as people are becoming scarce and packaging types and materials are changing constantly. Haley Manufacturing is at the forefront of innovation with high-tech automated packaging machines for everything from bagging to boxing produce. Their automated packing systems will help produce packagers lower their costs and increase volumes, while reducing reliance on hard-to-find labor.

Predominantly known for their automatic bagging equipment, Haley recently introduced the industry's first-known robotic pad inserter. The six-axis robot places cardboard top pads in different-sized produce boxes. As boxes move down a conveyor, the robotic system determines the box size and picks the appropriate pad for each box.

Adding robotics to the automation mix

Working with the pad manufacturer and Mitsubishi Electric Automation, Haley engineered the robotic pad inserter. When asked why robotics and why now, Brandon Haley, Co-owner and President of Haley Manufacturing, said, "This was our first use of a robotic arm. There was definitely some concern,





Haley Manufacturing's latest packaging automation innovation is a robotic pad inserter. but it just made sense for the application and for our future. We didn't want to do what others in the industry had done. We wanted to create our own foothold on the market."

According to Jeremy Briskey, Service Manager at Haley, "A pretty good percentage of the market still handles pad insertion manually. Some OEMs offer mechanicallyautomated pad insertion systems for foam pads and other materials. These systems require a larger footprint, have reliability and accuracy issues, and are limited to one pad size. Also, the industry as a whole is getting away from foam pads because they can't be recycled."

Gil Ansart, Senior Sales Engineer at Mitsubishi Electric Automation, said Haley's primary goal in designing the robotic pad inserter was keeping the labor rate down. That meant the pad dispenser had to have the capacity to hold a large volume of pads, so operators could load it and forget it. Haley also wanted the robotic pad inserter to be able to accommodate different sizes and types of pads.

Built for business agility

One of the biggest benefits of Haley's robotic pad inserter is the flexibility to run different sizes and types of pads. According to Brandon, "Robotics really changes the status quo. Instead of having two different machines and conveyors for different pad sizes and types, our robotic pad inserter runs two different-sized pads on the same machine over the same line." That means:

- Less CAPEX up front
- Better throughput and ROI
- · Increased reliability and accuracy
- Built-in business agility



The vertically-articulated, six-axis robot increases uptime and enables predictive maintenance with integrated software.

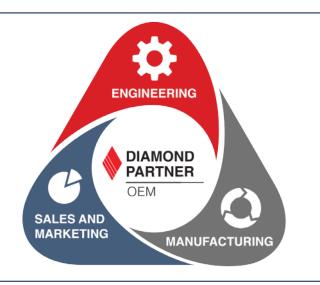
Brandon says, "It's not just flexible for today. It's adaptable for tomorrow too. The system currently supports two different pads. If and when it becomes necessary to run even more pad sizes, all you have to do is add another pad magazine."

Murpack provides the robotic pad inserter to end customers who purchase their pads. They say it's significantly more reliable than mechanical inserters because robotics are driving the system.

A lot of perks working with Mitsubishi Electric Automation

Haley is an automation-centric company, so it's no surprise they've worked with Mitsubishi Electric since they introduced their first automated system.

As a Diamond Partner OEM, Haley Manufacturing receives valuable engineering, manufacturing and marketing assistance from Mitsubishi Electric Automation.





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When asked about the six-year relationship, Jeremy says, "Our relationship has always been great. The technical staff and training has definitely helped us in a lot of ways and not just with robotics, but with PLC programming and HMI as well. And Gil is a great rep."

Haley Manufacturing is a Diamond Partner OEM, so they were able to try out the robot before purchasing it. They also received software and marketing assistance — all for being a member of the program. Haley plans on taking advantage of in-class training. Jeremy says, "There are definitely a lot of perks to it. We never missed a ship date all through COVID. Mitsubishi Electric Automation always got components to us on time or darned close. They're also a great knowledge source for us."

When asked about future plans, Brandon says, "We plan on continuing to grow, so the more automated equipment we can bring to market, the better. We really think the future is with robotics."

AUTOMATION SOLUTION INGREDIENTS

• RV-8CRLD, 8Kg six-axis robot

NEXT STEPS

For more information or a free consultation with an automation engineer, please

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Learn more about Haley Manufacturing: www.haleymfg.com

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