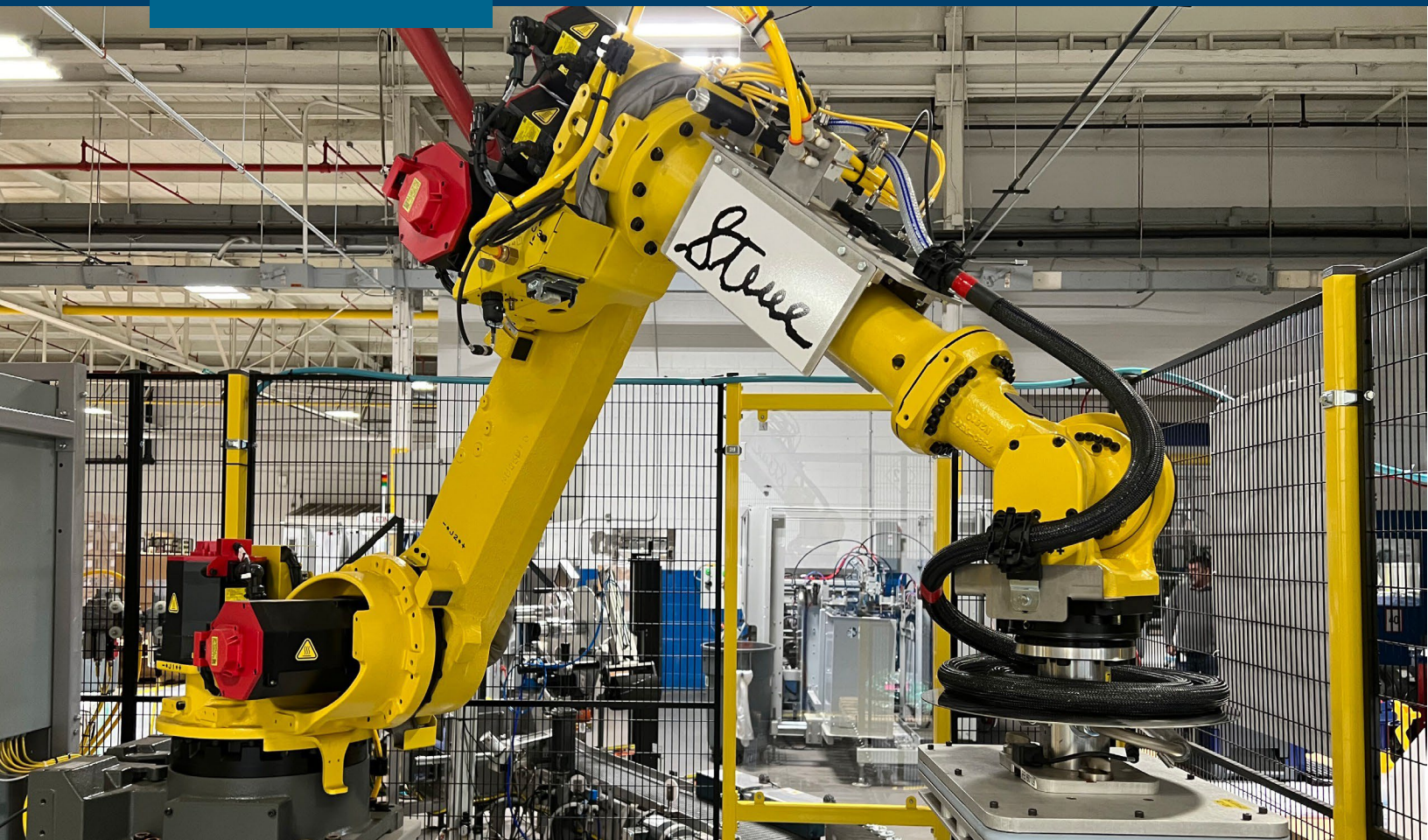


How Robotics is Helping Leonard's Syrups Thrive

CASE STUDY



Leonard's Syrups is a successful family-owned company in Detroit. Further growth required increased capacity. Adding more people wasn't an option. The solution: automation and robotics.

This case study describes Leonard's Syrup's history and challenges, why the company decided to automate, how they picked Schneider Packaging Equipment (A Pacteon Company), the solution Schneider provided, and results Leonard's has achieved.



Leonard's Syrups: Detroit Based. An American Success Story.

Founded in 1964 by Leonard Bugajewski Sr. and his son Leonard Jr., Leonard's Syrups is a leading supplier in Detroit, Saginaw, and Grand Rapids of craft soda, bulk CO2 beverage gas, draft beer and liquor equipment, soda machines, ice machines, slush, frozen carbonated beverages, and more. The company sells to bars, restaurants, and numerous other commercial locations.



Leonard's is well known in the Detroit area and throughout Michigan for its colorful vans, Detroit City Soda, assortment of soda syrups, juices, and other products, and unparalleled service.



Today, Leonard Jr. continues to serve as CEO. His son Leonard III is President and daughter Sherri Iskra is Vice President, where she is involved in project management, IT, operations, and finances. A son, Steve, who was the technologist in the

family, passed away about 10 years ago. Several members of the family's fourth generation now work at the company.

Leonard's has 120 employees at three locations, with all manufacturing at the company's Detroit facility.

Increasing Sales Required a Different Approach

Based on its assortment of great products, outstanding service, and entrepreneurial attitude, Leonard's has consistently grown. On a typical day, Leonard's would produce 700 boxes of soda concentrate syrup, packaged in a "bag-in-box."

But Leonard's bag-in-box business faced two problems:

1. **Speed.** The company needed to expand capacity and produce more boxes. "We had to increase our speed if we wanted to grow," said Iskra, who noted that the company would not be able to add more customers or distributors unless they increased their production throughput.

Leonard's already operated six days per week during busy periods to keep up with orders. The company could increase production volume by adding a second shift, but in Iskra's view, that would be impossible, because in the tight labor market, the company could barely find enough people to work one shift. Adding labor was not the answer.

2. **Weight.** Each box of the soda concentrate syrup weighs about 55 pounds. The current manufacturing process required the production crew to manually lift each box off the line and place it on a pallet. At 700 boxes per day, Leonard's aging workforce found this repetitive lifting physically strenuous.

Iskra concluded that the company could not continue to operate the same old way. To grow and ease the burden on employees, it was necessary to make a change. After asking, "What could solve both of these problems?" Iskra found the answer in **automation**.

Finding an Automation and Robotics Partner

While Iskra loves technology (though not as much as her techie brother Steve had) and taking on projects to advance the company, the idea of automating their manual process intimidated her. To proceed down this path, Iskra did three things:

1. **Get started with semi automation.** As an initial step, Leonard's purchased a vacuum lifter. This semi-automated solution removed the physical strain of lifting the 55-pound boxes from the workers.
2. **Develop criteria.** In thinking about automation and robotics, Iskra knew the footprint had to be compact to fit within Leonard's production facility. The solution had to meet the 55-pound payload requirement of the boxes, a challenge for smaller robotic arms. It also had to be reliable and fit within Leonard's budget.

Iskra was skeptical about finding a palletizing solution for her craft soda that would meet these criteria. She believed Leonard's would need a standard

solution since any custom solution would be too expensive.

3. **Research possible vendor partners.** Iskra Googled companies in this space, looking for a solution that was pre-assembled and mass produced. She went to a few packaging trade shows and spoke with about a dozen contacts in the industry, asking for references about possible automation vendor-partners. “Schneider just kept coming up, over and over,” Iskra said. In particular, Leonard’s bag-in-box vendor told her, “You’ve got to call Schneider.”

Schneider’s Solution

Based on multiple recommendations, Iskra looked into Schneider and learned about the company’s modular robotic palletizer—the Robox, shown below, which comes pre-assembled and pre-configured. She thought this might be an ideal solution.



However, upon contacting Schneider, Iskra was disappointed to learn that the Robox wouldn’t work for Leonard’s. The Robox’s footprint was too big for Leonard’s, and it didn’t lift 55 pounds.

Iskra was amazed by what happened next. “From the first moment I started talking to them, they said ‘let us work with you.’” She told Schneider that Leonard’s was too small to afford a custom robotic arm, but Schneider was undeterred. The team at Schneider repeatedly responded, “Let us take the Robox and modify it for you a little bit. We’re going to work with you and we’re going to make this happen.”

Iskra shared with Schneider Leonard’s situation and needs. She explained Leonard’s bag-in-box production process, provided Schneider with measurements, showed them the space and facility via Facetime, and provided bag-in-box samples. Schneider sent drawings and asked for Iskra’s input. “They held my hand the entire way,” Iskra said. “They acted like I was their biggest customer, even though I know darn well that was far from true. . . They treated me like I was special.”

Schneider engineers developed the perfect solution for Leonard’s and tested its performance at Schneider’s facility in Brewerton, New York. The system shipped to Leonard’s facility in Detroit, where it was commissioned in just a few days. Iskra commented, “The implementation process was the smoothest of any project I’ve been in charge of in my 35 years at Leonard’s.”

As an unexpected touch, Schneider named the robot “Steve” (see below)—in honor of Iskra’s deceased techie brother, who would have loved having a robot at Leonard’s.



Results: Steve Has Tripled Leonard’s Capacity — and More

Steve went live in May 2023. Almost immediately, Leonard’s began to produce and palletize over 2,000 boxes of craft soda per day, nearly triple the capacity before Steve. “It means we now have the opportunity to grow,” said Iskra.

While employees were initially nervous about the robot replacing them, they quickly saw that Leonard’s had no plan to remove their valuable human workers. Instead, having Steve allowed Leonard’s production crew to focus on quality control, improve the end product, and spend more time deep cleaning the facility and organizing the warehouse.

In addition, Steve the robot increased productivity, created a safer work environment, and reduced waste and damage to the product. Leonard’s overhead also benefited from the energy efficiency of the robotic arm.

Once employees realized that Steve was there to assist them, not replace them, they grew to see Steve another member of the Leonard’s team.

Lessons Learned

In reflecting on this experience, Iskra offered the following observations to other smaller business that might be considering automation and/or robotics:

- **Get started now.** In retrospect, Iskra wishes she hadn’t waited so long to pursue automation. She had feared the cost would be too high and the benefits would be too low. But the opposite has occurred: the benefits have been enormous in just the first six months, and the costs are less than she thought. “You won’t regret it if you just jump in,” she said.

- **Even smaller companies can do this.** Leonard's experience showed that robotics offer an affordable automation solution for smaller companies. It also showed Iskra, to her surprise and delight, that Schneider will devise custom solutions for smaller companies.
- **Success requires the right partner.** The advice Iskra received to contact Schneider proved to be great advice. Her expectations were exceeded every step of the way — in communicating her situation and challenges, in devising the right solution, during implementation, and more. "They made me feel part of the process every step of the way," she said.

Leonard's experience with automation and robotics has helped transform this family-owned business. With Steve the robot, Leonard's now has almost three times as much bag-in-box capacity and has increased employee productivity while easing the physical burden on workers. The work environment is safer, there is less damage to the end product, the company is using less energy, and it is well positioned for future growth.

"My experience was 100% positive, and I attribute that to Schneider," Iskra said.

Leonard's has embraced technology and robotics to improve the company's operations—and is thriving.