

Customer Success Story: Fab-Pak Robotic Welding Systems

Hickey Metal Fabrication's one-stop-shop customer experience implements over 75 of the industry's top-notch machines for part fabrication. Their experienced team of welders, machine operators, and engineers deliver the highest quality product with quick turnaround. They trust Lincoln Electric Automation™'s Fab-Pak® robotic welding systems to assist in their welding fabrication.

1. Introduce yourself, your role and responsibilities at Hickey Metal Fabrication?

My name is Leo Hickey, and I am the President of [Hickey Metal Fabrication](#). Our company is a fourth-generation family business, established in 1942. In my role as company President, I am involved in just about everything.

2. Give us a brief history about Hickey Metal, and what you have been the most proud of so far.

At Hickey Metal Fabrication, weld automation is a large part of our business. Our vertically integrated automation aligns our lasers, robotic bending, and machining to feed our welding robots. We have thirteen welding robots handling various-sized parts up to 17 feet long: two aluminum robots and eleven steel robots. We stand out because we invest our money into automation and robotics. We have always stayed on top of technology.



Left to right: Nick Peters, Ben Peters, Suzanne Hickey, Leo Hickey, and Adam Hickey

3. How many locations does Hickey Metal have? Where are they located?

We have 7 plants, all located in Salem, Ohio.

4. Give us an overview of your product offerings, customers, and main industries.

Our main industries include transportation, construction, military, and fitness equipment. We also conduct aluminum fabrication. Wreckers, conveyors, and carrier recovery are our main customers. 70% of the work is OEM (original equipment manufacturer) work and 30% is job-shop work (high volume, low mix). In addition, we also have a complete machine shop with 38 CNC (computer numerical control) systems.

“With the Fab-Pak XHS-RM system, the weldment only takes 6 minutes instead of 30-45 minutes - a huge difference that has greatly increased our production.”



5. How were you welding before the Lincoln Electric Automation Fab-Pak systems?

Strictly manual welding with parts that range from small, lightweight parts to large, thousand-pound parts.

6. Why did you choose the Lincoln Electric Automation Fab-Pak robotic welding systems? Which Fab-Pak models do you currently own and why?

We own 1 Fab-Pak FHS-B2B Drop Center system, 3 FHS-SS systems, 1 Fab-Pak FHS-SS system with an aluminum robot, 1 Fab-Pak XHS-RM system, a Fab-Pak XFT system, and a Fab-Pak XHS-CM-RM system. With the Fab-Pak XHS-CM-RM system, we are able to perform multiple jobs on the system at the same time, which greatly increases production. With the Fab-Pak XFT system, we were able to make over 50,000 pieces. With the Fab-Pak XHS-RM system, the weldment only takes 6 minutes instead of 30-45 minutes - a huge difference that has greatly increased our production.



Fab-Pak FHS-SS robotic welding system welds parts at Hickey Metal Fabrication

7. Do the Fab-Pak systems allow you to do things you could not do before?

Definitely! Our daily production has increased significantly thanks to the Fab-Pak robotic welding systems. For example, we have increased production of one of our parts from 80 units per week to 150 per week. With the Fab-Pak robotic welding systems, we have increased our production tenfold!

8. What were your goals for integrating the Lincoln Electric Automation Fab-Pak system in your production process?

More production, more throughput - simple as that.

“With the Fab-Pak robotic welding systems, we have increased our production tenfold!”

9. Did you meet and exceed your goals? In what way?

We definitely exceeded those goals. We also received great consistency with the welds. Manual welding is only as good as the human being performing the manual weld; however, with robotic welding, we receive consistency. Lincoln Electric Automation has done a great job with their Precision Pulse™ weld process and Surface Tension Transfer® waveform control technology, in particular. We have been able to fix huge welding problems using Surface Tension Transfer. It does a great job.

10. How was the installation and training process?

We attended the on-site robotic welding training program provided by Lincoln Electric Automation. Our experience proved that the programming was not very complicated, and we were up and running, welding in less than two weeks.

11. What do you like most about your Fab-Pak system with Lincoln Electric Automation?

One of the biggest benefits for us with the Fab-Pak robotic welding systems is flexibility. I can weld 10 little pieces or a part that is 120 inches long. The flexibility is great.

12. Would you recommend the Fab-Pak systems from Lincoln Electric Automation to other potential customers?

Yes, definitely. I am proud to be using Lincoln Electric Automation systems.

