

# Customer Success Story: Fab-Pak Robotic Welding Systems

EquipmentShare®, a growing construction equipment rental company in the US, manufactures small accessories and hardware in their new facility in Missouri with Lincoln Electric Automation™ Fab-Pak® robotic welding systems. The automation team at Lincoln Electric® interviewed Jason Magnett, Senior Manufacturing Engineer at EquipmentShare, to learn more about how the company works smarter, not harder with Fab-Pak systems:

## 1. *Introduce yourself, your role and responsibilities, and how long you've been with EquipmentShare.*

My name is Jason Magnett, and my title is Senior Manufacturing Engineer at EquipmentShare. Before this role, I worked for Caterpillar for over 20 years with a focus on robotic weld programming. I have been with EquipmentShare since March 2022. Due to my extensive robotic programming experience, I was recruited by EquipmentShare to work at our new manufacturing facility based in Moberly, Missouri. EquipmentShare is headquartered in Columbia, Missouri, with locations throughout the USA. Our primary industry is the construction space. Our products and offerings include tech-powered equipment rentals; equipment and parts sales; T3 web and hardware technologies that give contractors unparalleled visibility over their fleet and construction operations; and light manufacturing (on the horizon) of specific accessories and hardware. At our current manufacturing facility, we have six Lincoln Electric Automation welding cells. Two of the cells are the Fab-Pak XHS-RM robotic welding systems.



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## 2. *Give us a brief history about EquipmentShare, and what you have been the most proud of so far?*

Brothers Jabbok and Willy Schlacks have been building businesses together since they were teenagers. Over the years, the brothers have formed construction, technology and general contracting companies, gaining first-hand experience in the construction industry. In 2015, they founded yet another business

– this time, one that would make renting easier for contractors just like them. They called it EquipmentShare. In 2014, they won Startup Weekend Columbia after pitching the idea of a peer-to-peer marketplace where contractors could rent equipment from other contractors. Since then, they have built a nationwide equipment distribution network as well as a technology system that captures utilization and maintenance data from any and every machine. Today, EquipmentShare is an ecosystem of technology solutions that addresses all the verticals of construction – assets, people and materials. EquipmentShare operates more than 150 facilities as of year-end and employs approximately 4,000 team members. As a company, we are most proud of our team members and their drive and determination to solve problems for our customers. Personally, I am really excited about being part of the team that is in the process of setting up a facility from the ground floor when it comes to our manufacturing initiatives. I take a lot of pride and ownership in everything I work on. I treat it as if it were my own facility or piece of equipment. There is lots of excitement with what we have coming in the near future.



*“Our goal is to be as vertically integrated as possible with our internal product offerings.”*

**3. Can you give us an overview of your product offerings, customers, and main industries?**

Our manufacturing product focus is to support our various internal customers throughout our EquipmentShare business domains. Our goal is to be as vertically integrated as possible with our internal product offerings.

**4. How were you welding before the Fab-Pak system?**

Manual welding in a job-shop welding environment. Wire-feed welding, blacksmith processes.

**5. What are your thoughts on technology and its impact on the fabrication business?**

Technical processes have become easier and more user-friendly. Calibration used to be a complicated process, and now there is more emphasis on making the process easier and more user-friendly for the general operator. There are many different interfaces that are easy to understand and work with today. The Fab-Pak robotic welding systems, in particular, are good systems as an entry point into robotic welding before you start working with putting together custom robotic welding systems.

## 6. Why did you choose the Fab-Pak robotic welding system?

After conducting research, we felt ABB robots were the best solution for our needs. In addition to having a robotic cell with these robots, our team wanted an out-of-box system that could be assembled quickly and easily. Availability was one of the factors why we selected the Fab-Pak robotic welding systems.

## 7. Does the Fab-Pak system with Lincoln Electric allow you to do things you couldn't before?

The cell controller feature on the Fab-Pak is a great option that's new to me. HMI touch screen allows the systems to be operated from the load side of the cell without needing the teach pendant. There's also a wide range of information you can pull up from that screen. The cell controller is a feature that is a real game-changer. From the production and a velocity standpoint, there are a lot of helpful charts available that provide valuable information such as arc time, parts produced during a certain timeframe, downtime and many other helpful metrics.



*“Manual welding normally takes 8-10 hours, and with the Fab-Paks, we have found that we can easily gain a minimum of 50% reduction on our cycle time.”*

**8. What were your goals for integrating the Fab-Pak system into your production process?**

Velocity is the No. 1 goal. We want to be a high-velocity plant to meet the demand of our internal customers. When loading the parts into the Fab-Pak robotic welding system, there is no downtime due to the dual-sided positioner, which is very beneficial to reduce cycle times. Manual welding normally takes 8-10 hours, and with the Fab-Paks, we have found that we can easily gain a minimum of 50% reduction on our cycle time. In addition to improved cycle time, consistency and quality are both greatly improved as well. With increased production and minimized rework and quality checks overall, our experience using the Fab-Paks not only speeds up the welding process, but also the entire process.

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

Overall quality has been excellent. Usually with new robotic welding cells, there are new programming phases where parts do not come out right away. However, with the Fab-Pak robotic welding systems, we were able to start welding right away with great results and quality. The development stage, which could take weeks with other cells, was accelerated with the Fab-Paks.

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**10. How was the installation and training process?**

The installation went very smoothly. I worked with our in-house crew to do the installation. The startup and commissioning phase for the Fab-Paks went great. Everything worked right out of the box! Four people from my team went through basic robotic operator training for one week at Lincoln Electric in Fort Collins. Due to my experience with robotic welding, I was also able to help train the team on the Fab-Pak robotic welding systems at our facility. Since then, I conduct most of the training in-house, which has worked very well. I like working with operators on the real systems that they will be using in their normal day-to-day activities. On-the-job training works best for most of your new operators who have never seen systems like these before.

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

Fab-Pak systems offer quick lead time and a simple setup that don't require a lot of experience with automation. Another great aspect is of course the accelerated timeframe to get to a production level pace.

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

Absolutely. I have had nothing but a great experience with Lincoln Electric and the Fab-Pak robotic welding systems. Everyone I have interacted with at Lincoln Electric is helpful, and I am consistently impressed by the quality of the products and the overall company. EquipmentShare's mission is to enable the construction industry with tools that unlock substantial increases to productivity. We see Lincoln Electric as a partner in helping us achieve this mission as they help us work smarter, not harder.