



# **CASE STUDY: ESTES DESIGN AND MANUFACTURING**

BotX™ Cobot Welding System  
Improves Welding Cycle Time by 120%  
at Estes Design and Manufacturing

# THE CUSTOMER

## A manufacturer needing to stay on the cutting-edge.

Estes Design and Manufacturing prides itself as a state-of-the-art sheet metal job shop. With their cutting-edge technology, they've been able to offer high-quality parts, often at costs lower than traditional manufacturing. Not just confined to mass production, they have a prototype shop that continuously experiments and refines processes.



# THE BUSINESS CHALLENGE

## Older machines, a thin labor pool, and a need to innovate.

One of Estes' challenges was the recruitment of skilled labor. As the industry evolved, finding the right individuals with the specific skill set required became increasingly difficult. Their older machines, while state-of-the-art in the '90s, no longer served their needs efficiently, and they needed to look beyond traditional solutions.

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*The challenges we faced were hiring the right people that had the skills for the job. Those were getting harder and harder to come by.”*

**- Casey Gaudin,**

Laser Welding Supervisor of Estes Mfg.



# THE SOLUTION



## Estes embraces the future with the BotX™ Cobot Welding System.

To address the challenge, Estes decided to test out BotX, an automated welding solution from Red-D-Arc. The cobot's dual-zone setup allows operators to keep the machine in constant operation—a key consideration for the manufacturer. With proper fixturing, parts could be placed with pinpoint accuracy on both sides of the partition, allowing uninterrupted cycles.



*While one side is running, we have a partition that lets you load the other part and not lose downtime waiting for it to finish.”*

**- Casey Gaudin**

BotX™ also proved invaluable for specific jobs. **Its precise settings were ideal for welding thin-gauge material— a task that many welders find challenging.**

“A lot of welders struggle burning through the thinner gauge, but with the cobot, it prevents that,” Casey noted.



**Further enhancing its appeal, BotX came with a companion app.** This allowed for effective monitoring, from tracking wire usage to part count and even monitoring which operator was at the helm.

# THE RESULT

## Massive improvements in cycle times and defect rates.

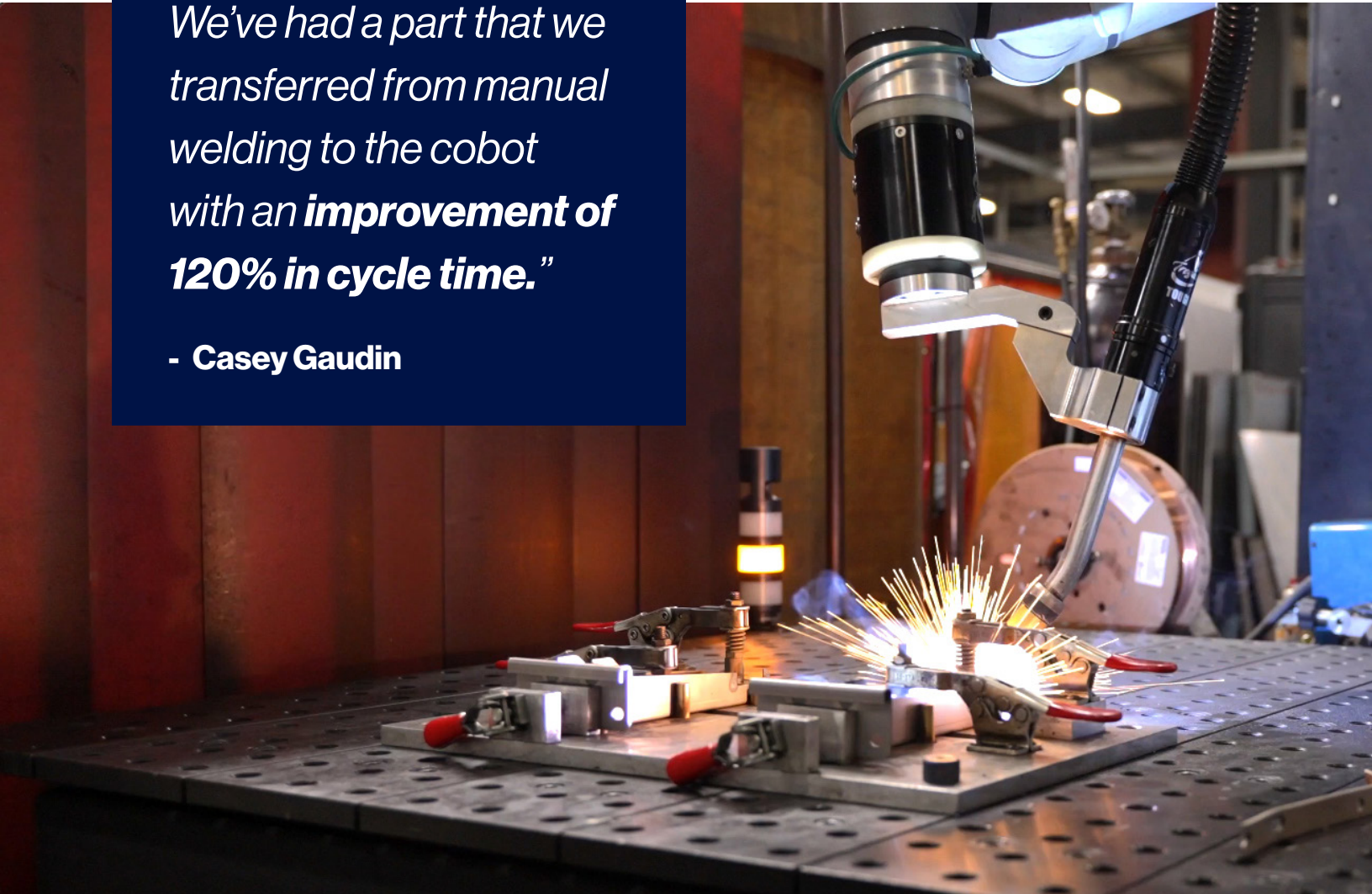
The introduction of BotX™ led to visible improvements at Estes. They noticed a significant increase in speed, enhanced repeatability of parts, and a notable decrease in rework.

The adaptability of the BotX was also a boom. Whether using its modular fixturing or creating custom fixtures, Estes found it offered the best of both worlds. *“If you can fit 2 or more of the same part into the working envelope, there is potential for great gains. Multiple part fixturing is key,”* said Casey.

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*We’ve had a part that we transferred from manual welding to the cobot with an **improvement of 120% in cycle time.**”*

**- Casey Gaudin**



Part rework costs can significantly impact a manufacturer's bottom line. Rework jobs are a frustrating inevitability of welding operations. However, Red-D-Arc's BotX™ system significantly reduced the amount of rework Estes had to do.

***“The cobot has given us a level of consistency with our heat input. Meaning we get the same weld every time versus slight differences we see from manual mig welding,”***  
said Casey.



Getting the team up and running on new equipment as fast as possible is critical for realizing returns on a manufacturer's investment. Thankfully, training on the BotX cobot was surprisingly simple. Even those unfamiliar with welding found BotX user-friendly.

***“We've been really impressed, we're able to take operators in as little as 15 mins and get them up programming parts and running the machine,”***  
said Casey.

The support provided by the Red-D-Arc team further cemented Estes' positive experience. Immediate assistance, onsite training, and responsive chat support ensured any issues or problems were swiftly addressed.

Casey relayed a strong message regarding his experience with the BotX™ cobot welding system:

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*If you're wondering about getting a BotX or not, I would highly recommend it. If your company has large volumes of parts and is having trouble finding qualified welders, then **the BotX is for you.***

- Casey Gaudin

## WATCH THE CASE STUDY VIDEO





**BotX™** addresses the skilled labor shortage by enabling companies to acquire easy-to-use automated welding through short or long-term rental, lease or purchase programs. The innovative on-demand model allows customers to quickly scale up - or down - their production capacity to align with current business needs, with no capital investment.



- ✓ **Zero up-front investment**
- ✓ **Flexible commercial options (rent, lease or purchase )**
- ✓ **On site set-up and training**
- ✓ **No long-term commitment required**
- ✓ **Online and offline system options**
- ✓ **Full implementation support**
- ✓ **24/7, personalized virtual support via app**



**BOTX**  
**PRODUCT PAGE**

[BotXWelder.com](http://BotXWelder.com)



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