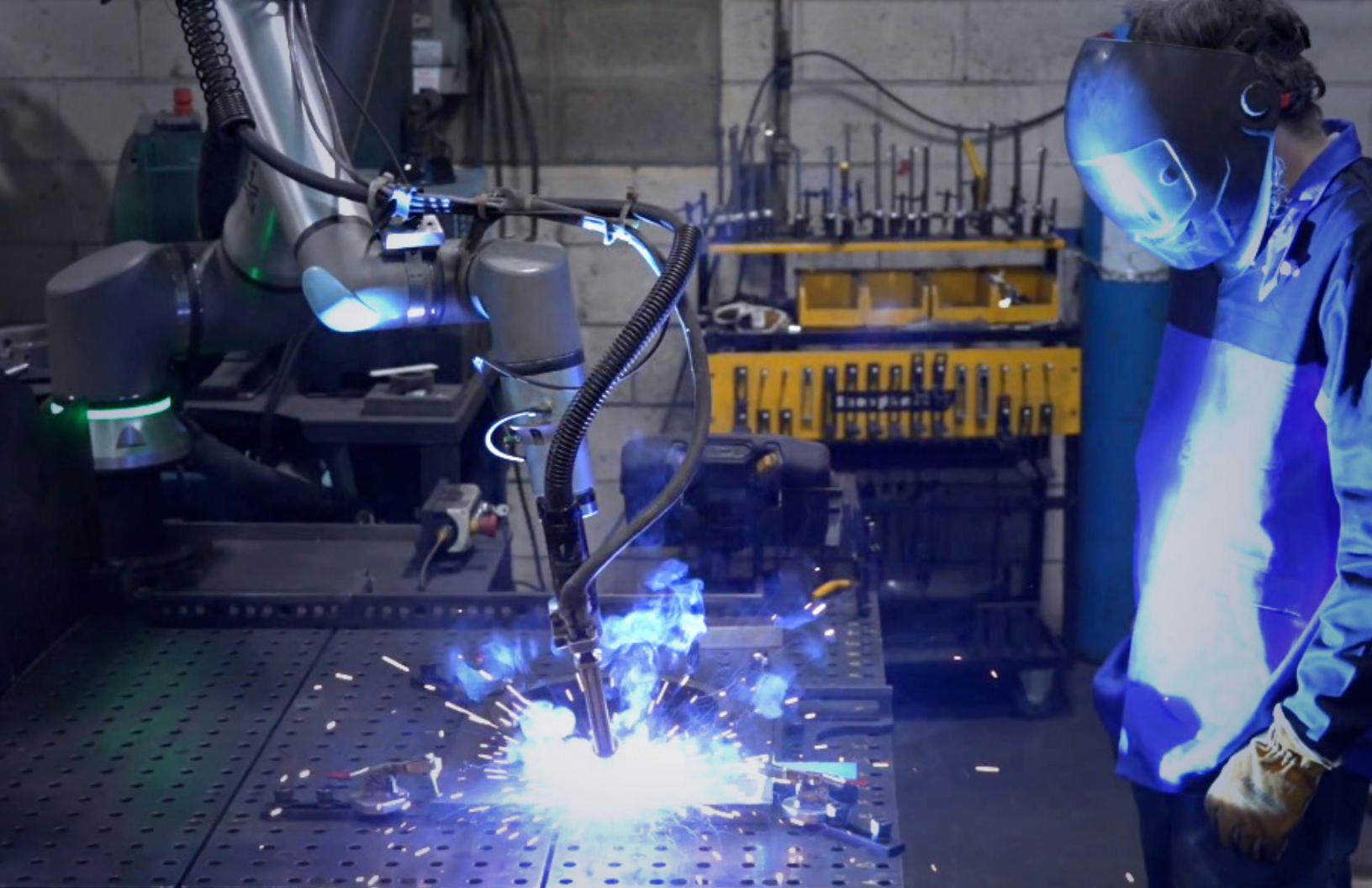




CASE STUDY: **PRECISE MANUFACTURING**

BotX™ helps Precise Manufacturing Cut Rework
by 80% and Acquire New Customers

THE CUSTOMER

Precise Manufacturing is a Vancouver, Washington-based job shop that serves the Pacific Northwest with tight-tolerance machining, welding, and fabrication. With advanced welding and cutting technology, the shop serves customers in aerospace, marine, energy, construction, transportation, and equipment manufacturing.

As a one-stop shop, Precise Manufacturing provides everything from material procurement to forming, heat treatment, welding, and coating. And as such, they seek only the highest-quality technologies to provide their customers with scalable, reliable production.



THE BUSINESS CHALLENGE

As a fabrication shop offering a wide range of services, **Precise was struggling with welding capacity due to a limited qualified workforce.** The question was how to increase welding capacity without adding headcount. The answer was simple—BotX, a collaborative welding robot jointly developed by Airgas, Air Liquide and Red-D-Arc. They needed greater productivity, welding precision, and reliability in their welding procedures to pursue higher-value welding jobs.

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I've looked at BotX multiple times in my career before. And I just knew what we needed was something that's quick and efficient to set up, is repetitive, and that's really going to fit into that niche of 50 to 100 pieces.”

- **Jeff Geertz,**
President at Precise Manufacturing





Before implementing BotX, **the shop couldn't pursue production jobs with more than 30 parts, as those volumes were beyond their manual welding capacity.** To solve this bottleneck, leadership knew they needed more than just the right automation equipment—they needed a highly supportive, responsive supplier.

Quality control and post-weld rework were another set of issues prior to automation with BotX. The industries Precise serves often have tight tolerances. Manually producing uniform welds under strict tolerances at scale is a meticulous, multi-day workload—requiring hours under the hood doing monotonous work. Over the course of a 50-to-100-piece run, sustaining that level of precision becomes increasingly difficult for welders, requiring additional quality control, indirectly inflating turnaround times.



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Before we got the robot, I would say that we did a lot of QC. A lot of our product lines we manufacture have really tight tolerances from weld size to weld length. And getting a human to do that day in and day out, hour after hour, is pretty difficult. And we had to check almost every part if not every other one coming off the line because humans have room for error.”

- Jim Feters,
Manager at Precise Manufacturing

THE SOLUTION

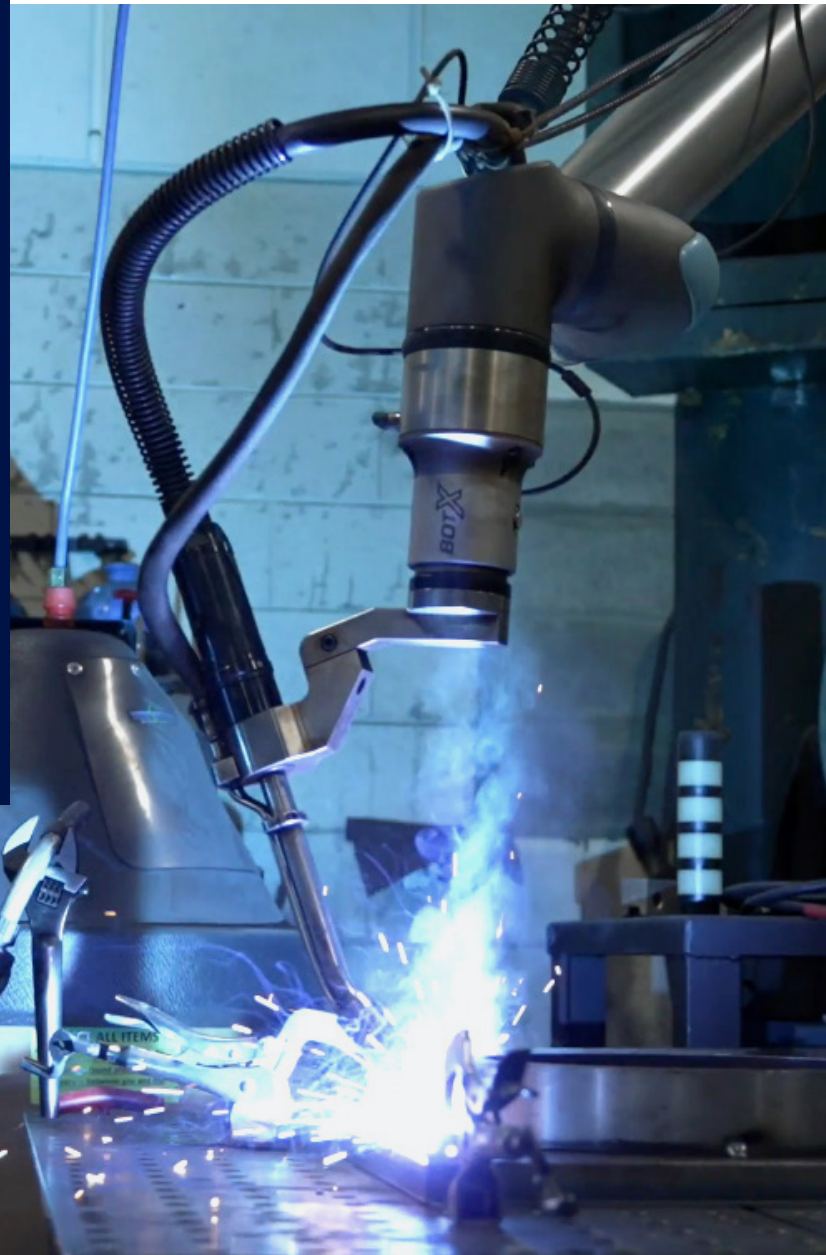


The Red-D-Arc BotX collaborative welding robot was the solution Precise Manufacturing needed. It provided the missing link between maintaining their existing headcount and rapidly scaling up their welding capacity, quality consistency, and reliability—no robotic technicians required.

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*We got up to speed in about 3 months, and we are running very efficiently now. **Now the question is when is the second one coming and where is the third one going? Not is the robotic welding the way to do it.***

- Jeff Geertz



BotX gave Precise the high-mix, low-volume capacity needed to pursue 50–100-piece jobs across industries ranging from aerospace to equipment manufacturing. Previously, the throughput and consistency constraints of manual welding put these orders out of reach. Today, they actively pursue and win them.



Airgas also supplied ARCAL™ shielding gas and EXELTOP™ cylinder technology to the shop. The powerful combination of robotic welding from Red-D-Arc, paired with advanced shielding gas and premium cylinder valve technology from Airgas, helped Precise tackle productivity and weld quality from multiple angles.



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*On the robot, we are starting to weld more of our high-production parts. When I took over the company a year and a half ago, we weren't going after that because we couldn't do parts in more than 20-30 at a time. So we decided not to chase that work. **Well, now that we've chased that work, we've actually brought on 3 new customers where we are welding anywhere from 20 to 60 hours a week on that robot.***”

- Jeff Geertz

Intuitive Teach Pendant Control

The intuitive teach pendant was particularly appealing. Since no one on the team had robotics experience, they were concerned about implementation and whether they would be able to use the system independently.

The simplified, intuitive interface allowed the Precise Manufacturing team to begin welding with the robot independently within just 4 days of delivery.

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*You didn't have to know any coding. It wasn't like the CNC, lathe, or mill, where you got to have years of schooling to really come in and be able to just do your job. **I was amazed how fast it got online. It was less than a half a day and we were welding with it.***

- Jeff Geertz



THE RESULT

The impact of the BotX system was immediate and measurable across Precise's shop floor.

80% Less Post-Weld Processing

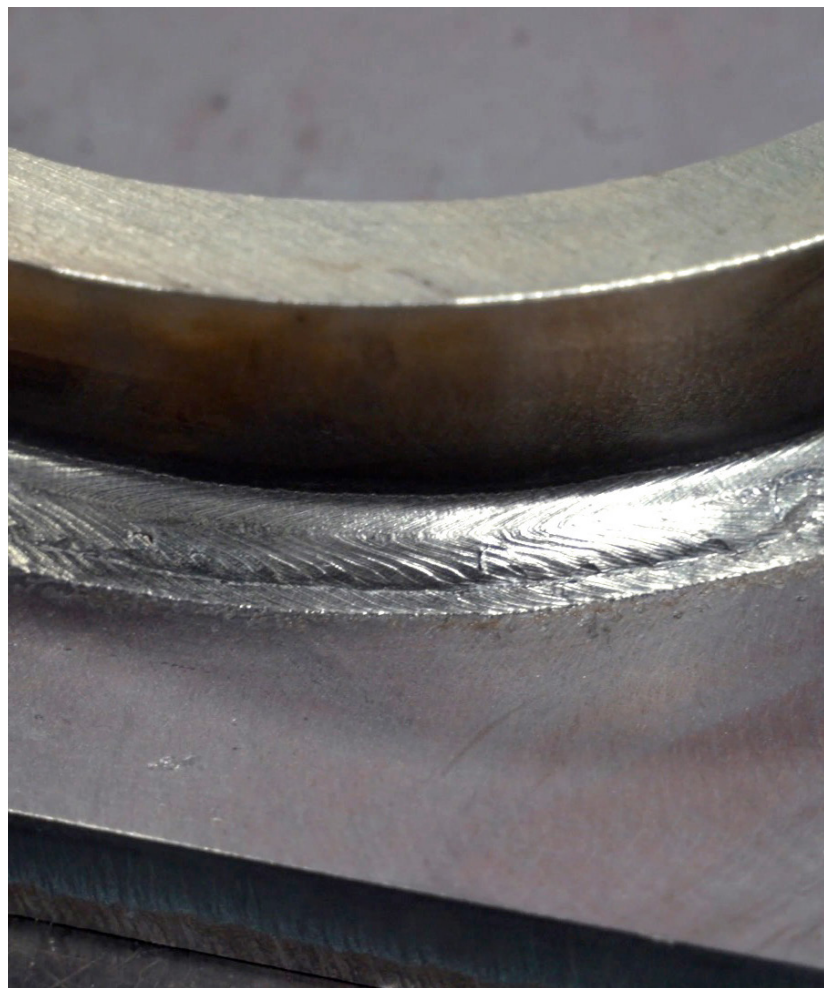
They achieved a dramatic 80% reduction in grinding, sanding, and cleaning. Because the robot delivers exceptionally clean, uniform welds, parts move downstream significantly faster.

Rapid Customer Acquisition

Within 3 months of implementation, they completely adapted to the system and successfully acquired three new customers with production runs dedicated entirely to BotX fabrication. They now run the system 16 hours a day.

Unmatched Predictability

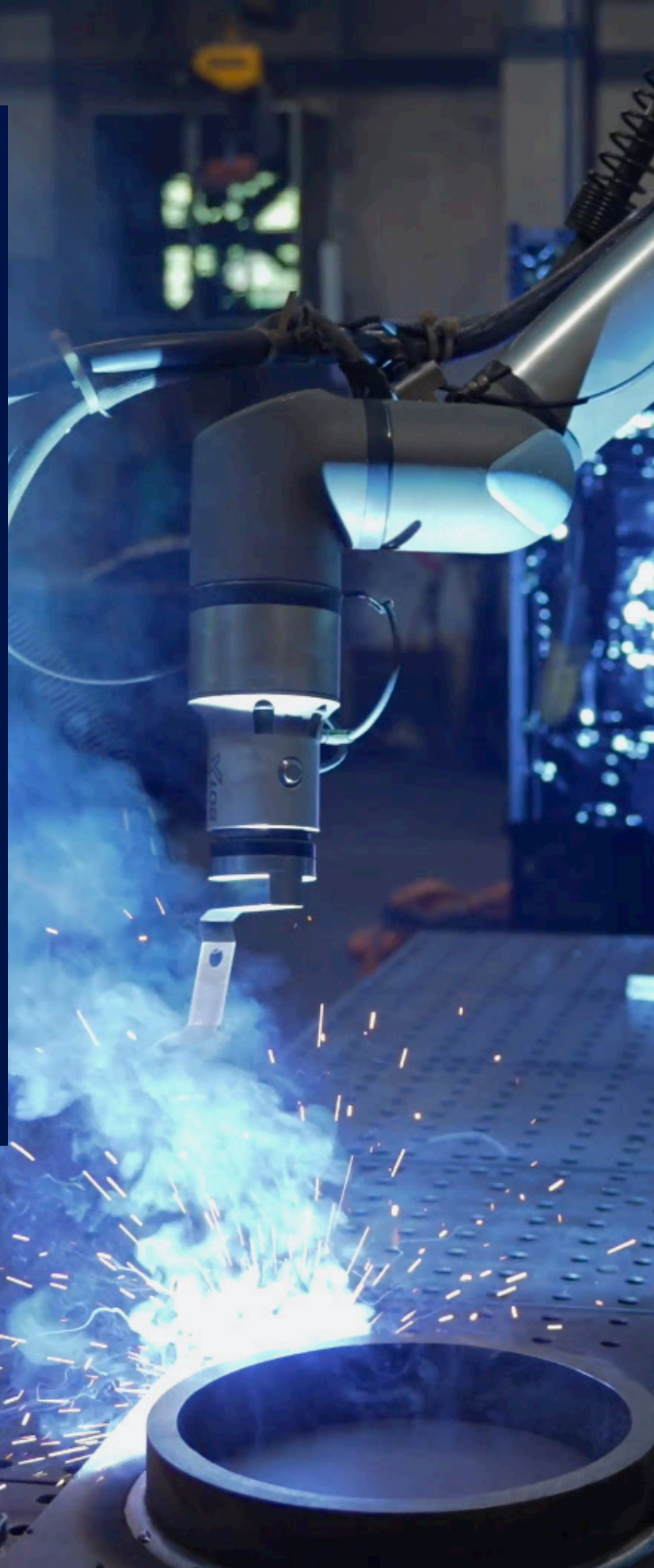
Beyond sheer speed, BotX introduced predictability to the shop's operations. They can now forecast exactly how long a job will take, eliminating unexpected bottlenecks.



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*We pride ourselves on having perfect work every day. But we all know there's no way you're going to do perfect work every day. But with the BotX, yeah, if the setup's right. You can get the right part, or all wrong parts. There's no in between. **So we know we aren't getting a call or recall. We know we are sending out good parts with the BotX.***

- Jim Fetterz



Elevating the Existing Workforce

While BotX dramatically amplified the shop's capacity, headcount remained completely stable and their welders didn't need to worry about their jobs. By embracing the new tool, Precise offloaded the monotonous, unergonomic jobs to the robot, allowing their skilled welders to focus on using their skills for projects that require more craftsmanship.

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Nobody lost their job because of us bringing in a robot. We took the monotonous work they really didn't want to do over and over again, and we moved that over to the robot. So they can do more of the craftsmanship versus the production.”

- Jeff Geertz





Supplier Support Matters After Installation

Even intuitive robotic welding systems can experience minor hurdles after installation. Welders and metalworkers aren't trained robotic technicians, so a supplier's continuous support is critical to ensuring smooth integration.

The hiccups along the way aren't an issue if the supplier resolves them promptly—and that was exactly the case for Precise.

Red-D-Arc and Airgas technical representatives provided hands-on, on-site onboarding during the first few days and remained readily available to resolve subsequent questions. That combination of on-site presence and rapid-response remote troubleshooting reassured the Precise team that any technical queries would be handled quickly, ensuring maximum uptime for the shop.

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Three weeks ago, we had an error code come up for the first time ever. Nobody in our shop knew what to do. I got hold of [Red-D-Arc] people in the East, and they had us up and running in five minutes. If you just bought a robot from a random company that doesn't have that, you could've been down for weeks. So that rapid response is key when you are spending as much money as the robot costs. You want that thing running.”

- Jeff Geertz



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.

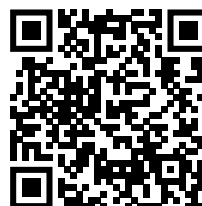


- ✓ **Zero up-front investment**
- ✓ **Flexible commercial options (rent, lease or purchase)**
- ✓ **On site set-up and training**
- ✓ **No long-term commitment required**
- ✓ **Online and offline system options**
- ✓ **Full implementation support**
- ✓ **Rapid virtual support**



BOTX
PRODUCT PAGE

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