

Case Study

PIONEER[®]

Accelerate your welding processes by creating jigs & fixtures, **faster.**

About: Pioneer Corp
Established: 1978
pioneerfarmequipment.com

Benefits Achieved:

- Created more fixtures, 60% faster than other methods
- Nucleo software was up and running, quickly creating fixtures with minimal training
- Software paid for itself in a short time, allowing for "quick" return on investment (ROI)
- 30-minutes from start of fixture design to finish, a 96% time savings
- "The software was easy-to-understand, easy-to-use, and dare I say... fun, to use."

Pioneer Corp. is headquartered in Dalton, OH. The Wengerd family began building horse drawn plows, and spring and spike tooth harrows to meet the needs of their customers in the summer of 1976.



Wayne Wengerd officially opened the business under the name of Wengerd's Machine Shop in 1978 and in March of 1983 they produced their first steel wheel and added wagon gears and forecarts to their inventory in the mid to late 1980's. They are a family owned and

operated manufacturer of horse drawn equipment and parts and have been a leader in providing farm machinery and equipment to the plain community. In 1986 they formed a corporation, and changed the company name to Pioneer Equipment Inc. and now more recently to Pioneer Corp.

Like any business, the passing of time brings change and new challenges. Pioneer has introduced several new product lines, Pioneer Carriage, Flextur, and Custom Fabrication. The Flextur portion of their business is growing and offers a variety of new products, including welding tables, workbenches, and mobile tool boards.

Pioneer first became aware of Camtek OPTISOLUTIONS at the FABTECH Expo. Building fixtures had always been a tedious process for them and when they saw the software, they were immediately interested in learning more.



Challenges

Pioneer wanted to better utilize their robotic weld cells and needed a new fixturing solution. Their previous process of producing weld fixtures was always tedious and very labor intensive. They also didn't have an effective way to replicate damaged jigs.

Larry explained, "Usually when we built a new product, making the fixtures was always a very time-consuming process. When we had fixtures that we wanted to make changes to, we always had to determine if it even made sense, with the time it would take to make the upgrade. Now with Nucleo, making a fixture is so easy there is no longer a need for discussion. When we need an upgrade, we just build another one."

Solution

Camtek OPTISOLUTIONS designed a sample weldment to demonstrate how the software worked and the time savings became obvious and benefits very clear. Pioneer purchased the Nucleo Software shortly after the 2021 FABTECH Expo.

Before purchasing the Nucleo Software, Pioneer determined it would take 70 fixtures and approximately one - year to receive their ROI in the software. Just five - months later they had produced more than 70 - fixtures, creating them 60% faster than previous methods. The Nucleo Software solved their weld fixture design issues.

Using the Nucleo software, Pioneer can design a fixture from design start to finish in less than 30 - minutes, the same effort would have taken four - to six - hours in the past. A 96% time - savings!

Comments

Brian explained, "The biggest change we've experienced is the time that we spend designing a fixture. We use a lot less clamps than we used to... and that saves on the loading time of the part." "Nucleo has been a great asset to Pioneer. Thank You for providing this great software and customer service!"

"In short, Nucleo has changed the way we think about fixturing, it is easy to use, and worth every penny we spent on our purchase."

"Customer support at Camtek has been great, as we have always been able to talk to a... live person and when we send an email, we've always gotten a very quick and helpful response."

- Larry Weaver Product Engineer

"Camtek Technicians have been great to work with and our questions have always been answered and problems fixed in a timely manner."

"I would agree with...Larry, Nucleo has changed the way we look at fixturing..."

"...Nucleo has been a great asset to Pioneer."

- Brian Wengerd IT & Automation Engineer

"The software was easy to understand, easy-to-use, and dare I say... fun to use."

