

Tracey Gear & Precision Shaft Customer Spotlight

The Customer's Story

Tracey Gear & Precision Shaft is a third-generation precision manufacturing operation focusing on gear and precision shaft production processes for the food processing, canning, aftermarket automotive, and defense industries. Founded in 1945 in Pawtucket, Rhode Island, in a single-car garage, Tracey Gear celebrated their 75-year anniversary in 2020. The enterprise is now a 32-person manufacturer offering a suite of services including CNC thread grinding, CNC gear cutting, CNC turning and milling, CNC grinding, and broaching.

The Situation: A Search for Better Cycle Times and Surface Finishes

As demand increased and customer part requirements evolved in sophistication, Tracey Gear needed to explore grinding technologies that would deliver parts in shorter cycle times while achieving higher quality surface finish. With this objective in mind, Doug Tracey attended IMTS 2016 to identify technologies that could position Tracey Gear for competitiveness well into the future. While at IMTS, Doug Tracey visited several CNC cylindrical grinding OEMs to evaluate the operator interface, service and support departments, parts inventory, rigidity, and general build quality of each offering.

The Solution: Real Time Process Optimization

Tracey's analysis led him, with parts in hand, to visit the UNITED GRINDING North America headquarters in Miamisburg, Ohio, for a test grind. "Within no time, the program was in place, and we were running my parts," Tracey said of his first visit. "I was sold on that initial visit. The staff was incredibly knowledgeable, and the corporate headquarters were very impressive."

Tracey Gear purchased a STUDER favorit CNC cylindrical grinding machine in the spring of 2017 and hasn't looked back since. The universal grinding machine is quick to program with StuderPictogramming. Operators are able to apply process optimizations in real time, resulting in the pristine finishes and accuracy STUDER is known for. Other grinding tasks can be incorporated using accessory kits such as in-process gauging, balancing system, contact detection, and length positioning.

The Outcome: Higher Productivity and Profitability

Since its installation, the STUDER favorit CNC has run five days a week from 5am – 5:30pm, and on weekends as needed. "With one particular application, we were running three batches of 98 pieces per batch per month. Before the STUDER, the cycle time for this application was 16 minutes per part, and after the installation of the STUDER, we were able to reduce that cycle time to five-and-a-half minutes," Tracey said.

Aside from the 66% reduction in cycle times, Tracey Gear has been able to open up new service offerings and win more business with the STUDER favorit CNC. The machine delivers not only greater efficiency to boost shop productivity but also higher surface finish quality, eliminating the need for time-consuming polishing processes.

Tracey Gear maintains contact with the UNITED GRINDING North America customer care and applications engineering team as well. "When the machine's window was due for replacement, we were pleasantly surprised with how quickly the part arrived and how quickly it was installed," Tracey said. "If we want to do a job and it's a stretch, we call the application engineering team, and they help us define the process. But the real beauty of this machine is, it's allowed us to go after work we couldn't touch before by allowing us to increase quality while improving productivity."

