

## Rapid Response and Top-Notch Design

Quality Tool Service (QTS), located in Shell Lake, Wisconsin, was started by a toolmaker in 1998 and has grown to over 30 employees. They specialize in designing and building weld fixtures for the onroad and off-road vehicle market. In addition, they design and build assembly fixtures, inspection fixtures, and robotic tooling.

Their customers come from all parts of North America because of the reliability, top notch design and the rapid response time. According to Jim Scheu the Operations Manager, "First time customers will check us out with a small project and they return because we respond quickly and often improve upon the tool in ways they had not considered."

The Challenge - In 2009, QTS gained a customer with many needs. The customer had been manufacturing their own fixtures but production had fallen behind and forced them to outsource. The need was for 30 manual weld fixtures to be designed, built and delivered in a short period of time. The tooling fixtures held exhaust tube systems of varied sizes in place for welding. The project was perfect for QTS. The only issue was Jim's engineering staff was already entrenched with current projects. Jim needed engineering support immediately and went with Applied Engineering. "At first we went to Applied because we needed a mechanical designer and fast. They were able to respond to our needs quickly. We continue to work with Applied because of the competent designers, accurate work produced and their creative approach to solve our customer's complex tooling issues", he said.

## **Critical Sucess Factors:**

- Top notch design
- Rapid response time
- Creative solutions

In the end, QTS's customer was thrilled with the response time. Very quickly the customer discovered a valuable asset. The fixtures, designed in a poka-yoke method required consistent placement of the exhaust tube within the fixture. In the past, the customer had experienced costly operator set-up errors, welding flaws and installation failures. Because of the consistent placement of the exhaust tubes those issues became almost non-existent. The savings for the customer were incredible. A long term relationship was formed.

When Jim was asked how he justifies the expense of an Applied project engineer, he stated, "Over the course of the project the engineer provided by Applied produced over 1200 fixtures at a cost that was 25% less than having a full time mechanical designer on staff. Our product design cycle is now within a day or two because of the engineers' expertise in utilizing the design features of our software. Without Applied we would be limited in the new customers we could seek out as well as the size of projects we can go after."

Applied provides project engineers and consulting services with a focus in mechanical, electrical design and manufacturing automation. With over 25 years of experience, Applied is viewed by their customers as an integral resource to expand their capabilities, gain productivity, get products to market faster and help impact profitability.

