



**Forging Quality: NC State University Industry Expansion Solutions Provides Mechanical Specialty, Inc. with ISO 9001 Implementation Services**

How important is quality control? The answer depends on who you ask. For some companies, quality control is a top priority. Others don't even consider it until they lose customers. The quality of your product or service has a direct impact on business success. In other words, if your product isn't good enough, then no amount of marketing will save a business.

In today's competitive environment, companies are under pressure to reduce costs and improve productivity. This has resulted in the increased emphasis placed on improving quality and seeking out Quality Management Systems (QMS) certifications like ISO 9001.

Mechanical Specialty Inc. is a family-owned and operated precision fabrication manufacturer located in Greensboro, North Carolina, offering custom-designed, precision machining and metal fabricating for a variety of industries. The organization provides computer numerical control (CNC) machining, laser cutting, water-jet cutting, welding, finishing and assembly for turn-key solutions. Mechanical Specialty manufactured the housings for special security devices that were used in the 2018 World Cup in Russia and around the world.

As an organization whose target clients are companies that outsource their manufacturing, Mechanical Specialty's reputation and ability to attract new clients depend mostly on the quality of operations and products. "We saw a trend happening in manufacturing that to work with larger corporations you had to have some credentials and ISO 9001 was one of those," said Andrew Egbert, the business development manager for Mechanical Specialty. "We had the talent and skill but we were lacking ISO 9001 certification so we reached out to NC State University Industry Expansion Solutions (IES) to help us get started on our ISO journey."

Egbert says he first made contact with the North Carolina Manufacturing Extension Partnership (NCMEP) network partner IES years ago while he was participating on the Piedmont/Triad Workforce Development Board. "Working on the board exposed me to a lot of the great workforce development programs and IES was one of them. I reached out to IES and they connected me with one of their regional managers Kami Baggett; we've been working together ever since."

Mechanical Specialty collaborated with Baggett to complete the ISO 9001 certification. From January to August 2021, IES implemented 15 sessions which included three days for the pre-assessment audit; two days for the internal auditor training and two days for internal audit assistance.

“There is an ease to working with IES. I’ve done ISO while working at other companies and it was always complicated. Everyone we worked with from IES was nice and understanding to a fault, they helped us realize we were creating unnecessary work for ourselves and guided us in the right direction.” Andrew shared. “An organization may have an idea of something they think they need but IES’ institutional knowledge helps businesses figure out what they genuinely need and tailor it to your specific company. IES should be the first people you call if you are a small company and you’re having a problem. They’ll set you in the right direction.” Egbert joked, “They also have the gift and not making you feel dumb while they’re explaining what your company actually requires.”

When asked what difference he saw after the ISO 9001 Egbert said, “With the ISO certification, we have an edge as well as a better order and flow in our facility. We’ve reduced wasted time, in manufacturing wasted time is the only thing you get charged for.” Egbert continued, “If you waste an hour, you can’t get it back and you’ve lost that money. Because of the quality training we received, the first batch of products is much less likely to have a defect. The product process we just went through with IES has landed us one of the largest client contracts we’ve ever had. The return on investment is tangible.”

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—Andrew Egbert, Business Development Manager  
Mechanical Specialty, Inc.

Mechanical Specialty realized \$50,000 in increased sales, \$10,000 increased investment in new processes, \$140,000 increased investment in plant equipment and a \$10,000 investment in workforce practices and employee skills as a result of IES on-site training.

“The service and technical help were priceless. IES takes into account the size of the companies they work with and works to keep the complexity of the project at the right level,” said Egbert. “We would not have achieved our ISO 9001 certification without their help.”



## We Can Help.

NC State University Industry Expansion Solutions (IES) is the extension and outreach team for the NC State University College of Engineering and administers the National Institute of Standards and Technology Manufacturing Extension Partnership (NIST MEP) for North Carolina (NCMEP).

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