

CASE STUDY



Sargent Mexico – AS9100 Success Story for On-Time Delivery Improvement



Sargent Mexico has recently been awarded United Technology Corporation’s Supplier Gold award, recognizing they are among the highest-ranking UTC suppliers. The company contributes this significant achievement to the operational disciplines that enabled them to go from 23% on-time-delivery to 100% - and much of this discipline can be traced back to their AS9100 registration.

Sargent Aerospace & Defense designs and manufactures seals and alignment joints, hydraulics, bearing components and machined components for the aerospace and nuclear power industries. Their location in Guaymas, Sonora, Mexico is responsible for production of piston rings, steel rings and actuation systems; the site has more than 75 employees and first achieved AS9100 certification in 2006.

While Sargent Mexico has historically excelled at product quality, they struggled with on-time delivery, which was achieved only 23% of the time. If they could improve on-time delivery, there was potential to obtain additional business from UTC, one of their primary customers.

One of their first actions was to create an Operations Strategy Team, which met weekly to review all UTC requirements and whether Sargent Mexico was meeting them. This multi-functional team included representatives from quality, shipping, manufacturing, engineering and more. The team facilitated each department’s interaction with each other, to ensure that on-time delivery could be achieved.

“If one department had an issue, the issue was raised to the group so that we could all work together to fix the problem,” said Edgar Leon, Quality Manager, Sargent Mexico. “When problems were found, the whole team worked together to figure out the root cause, implement corrective actions, and improve our delivery metrics. All of these ideas are the foundation of AS9100, so we used the standard to start us on a path towards fixing the on-time delivery issues.”

Particular focus was placed on reducing defects and waste, as well as work planning. Lean and Kaizen events were conducted on a monthly basis. Kaizen helped Sargent Mexico organize their shop floor, and standardize tooling and equipment. They also moved their work stations from U-shaped to linear – this optimized space and reduced waste. This improved workflows within the plant to route products to the shipping department faster, and thus led to significant improvements in on-time delivery.

Another initiative that Sargent Mexico credits with their improved on-time delivery and in-process rejects: Quality Clinics. These Clinics were used to thoroughly analyze problem areas within the Sargent Mexico operations, so that effective and timely solutions could be administered. Objectives within the Clinics included definition of responsibility and containment, rapid communication, extensive root cause analysis and corrective action, as well as process control.

Employee involvement was also a critical component of the improvements. Metrics boards and performance reviews were posted throughout the shop floor, so that the progress was documented and employees could see results.

Through their relentless commitment to quality, Sargent Mexico was able to overcome on-time delivery obstacles and on June 2, 2011 they were awarded UTC's prestigious Supplier Gold status. According to the UTC web site, UTC Supplier Gold "is a program established to facilitate and accelerate superior supplier performance and to recognize suppliers for their exceptional performance." The Supplier Gold program includes four levels of performance, including the highest level of Gold that is defined as:

- Zero quality escapes for the past 12 months,
- 100% on-time delivery to requirements for the last 12 months,
- Customer satisfaction score of greater than 6 on a 7 point scale, and
- UTC lead assessment score of greater than 350 for manufacturing facilities.

"If we did not have our AS9100 system in place, we would not have been able to achieve this level of excellence," continued Leon. "The staff takes a proactive approach to quality, making the entire system energetic, dynamic and progressive. Our goal is to assure the delivery of the highest quality products to our customers every day."