Meggitt Gains Needed Visibility With Cloud Sensors

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About Meggitt
Meggitt developed the world’s first altimeter 160 years ago. Ever since, they’ve been solving some of the world’s toughest engineering challenges, bringing convenience, safety and security to millions of lives. Today, Meggitt is a global engineering group specializing in extreme environment components and smart sub-systems for aerospace, defense and energy markets. They lead the world in their specialist areas, developing cutting-edge technologies for the biggest names in aerospace, defense and energy.

Meggitt’s Mission
Meggitt was looking to gain insight into the performance characteristics of its highly complex aerospace manufacturing processes. Increasing demand with limited resources required out-of-the-box thinking in order to solve the problem derived from their success. With breakthroughs in semiconductors making sensors smaller, cheaper, and readily available, Meggitt knew they wanted a modern solution, which would give them 24/7 visibility into their operation.

The Challenge
Meggitt was busy... really busy. Given their limited resources, Meggitt needed to find a way to gain the most out of their factory floor and their employees. Finding a monitoring solution that would survive the harsh environment of a fabrication facility, while being flexible enough to change and grow with Meggitt’s continued success while being cloud-based and easy to maintain was challenging. Meggitt also needed to determine the overall effectiveness of their individual workstations as part of their Continuous Improvement Initiative. Their new system needed to be flexible but also resilient as changes on the factory floor could cause intermittent communication challenges.

Finally, an alarm capability was needed to predict and forecast equipment failure before outages actually occurred.

“*We now have real insight into the utilization of our advanced machines and critical processes.*”

~ Jackson Minear
Plant Engineering Manager at Meggitt
The Solution
The answer was a complete end-to-end solution utilizing Swift Sensors Cloud Wireless Sensors. The factory floor was equipped with the Swift Sensor Bridge SS-BRG-1010 WiFi, SS-BRG-1020 Cellular enabled and Swift Sensors Wireless Sensors. Creative use of sensors, such as the SS-SEN-201 Vibration sensor, the SS-SEN-301 Door Sensor and the SS-SEN-607 4-20mA Sensor, provided a digital picture of the workstations state and activity. Wireless Sensors allowed for quick install and provided flexibility as dynamic conditions evolved.

Swift Sensors for Industrial Manufacturing provides more than just measurements and notifications when thresholds are breached. Swift Sensors also provides complex analytics such as machine utilization, compliance and multi-measurement graphing. The analytical dashboard and metrics allow operators to compare machine vs machine output, overall compliance across complete facility for given machines and shifts, employee performance, relationship analysis of multiple measurement types.

The Swift Sensors Wireless Network provides a site-specific customizable solution that is customer-tunable and intuitive for on-the-fly changes.

The Results
The Meggitt solution has now been operational for over 12 months. The initial deployment success resulted in a further adoption in other Meggitt factory facilities world-wide. As a result of this successful deployment, Meggitt can now determine the actual Utilization of each workstation on a shift by shift basis yielding a ROI of 100x. Additionally, with Swift Sensors Analytics, Meggitt can compare and contrast workstations and shifts by day, week or month.

About Swift Sensors
Founded in 2015, Swift Sensors Cloud Wireless Sensor System offers businesses a low-cost, unified solution to proactively protect and monitor equipment and processes, comply with regulations, and enhance business performance. The system can be fully deployed in minutes at one-tenth the cost of traditional solutions. The Swift Sensors cloud-based system incorporates sophisticated analytics to deliver business intelligence and a rapid return on investment.