SCYTEC

DATAXCHANGE

Case Study

Utilization Increase and Improved Processes with Machine Monitoring

AMT senior
Aerospace

Client: Senior Aerospace AMT
Industry: Aerospace
Specific Products: Commercial and
Military Aerospace Parts

Interviewee: Tom Anderson
Role: Process Engineer
Equipment: Modern and Legacy

A solution was needed for Senior Aerospace AMT's business problems. Those solutions were provided by

DATA X CHANGE

About Senior Aerospace AMT

Senior Aerospace AMT is a leading manufacturer of structural parts for large commercial, military aerospace and space manufacturers. AMT specializes in the machining and assembly of components and structures, with the ability to machine large parts. AMT's success is based on utilizing high-speed machining methods and proprietary manufacturing techniques to manufacture high quality complex parts.

What Were the Problems?

AMT needed to gather more accurate information on their shop floor equipment's downtime. In addition to taking up a lot of time and being inaccurate, data gathering at AMT was done manually. Data for decision-making was difficult to come by and AMT needed to implement a machine monitoring system in their production facility.

What Were the Requirements?

AMT's initial goals were to collect accurate data to help in three different areas across their production environment. **Downtime**, repairs on shop floor equipment and random interruptions caused a loss in production, and AMT needed a way to quantify their machine's downtime. **Efficiency**, in order to identify potential improvement opportunities, AMT needed to understand if their actual part run times matched their quoted times. **Capacity**, having a clear grasp of how much time each machine was operating was crucial for AMT for being able to determine if there was any spare time for taking on additional projects.
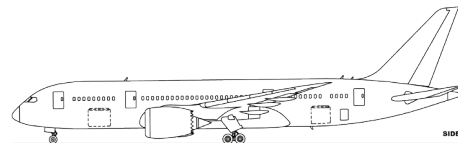
Success Summary

- Increased utilization by 15-20%
- Increased awareness of downtime reasons
- Increased capacity
- Improved process information by gathering tool usage and probing data

Business Requirements

Areas for Improvement

- Machine Downtime
- Machine Efficiency
- Machine Capacity

AMT has secured substantial content on the aviation industry's most popular aircraft.

What Was the Solution?

The answer to AMT's business pains was the **Scytec DataXchange** machine monitoring platform. AMT found that the robust feature set of DataXchange including the Real Time Viewer dashboard (RTV), the Operator Data Interface (ODI) and configurable data collection rules to be the reasons to select DataXchange over competitors.

The Outcome

Since AMT began to monitor their machining process more closely, they have yielded sizeable improvements in equipment utilization of about 15 -20%. AMT states this is due to an increased awareness of the reasons for machine stoppages and how much available time had been lost due to the machine stoppages. AMT then evaluated processes to eliminate those stoppages. Tom Anderson says...

> ## "It was pretty eye opening to be able to measure how quickly little interruptions add up to large amounts of downtime."

Tom Anderson is adamant that without Scytec DataXchange AMT would still be struggling to manually collect information, and would not be receiving accurate or reliable information pulled from equipment. The Scytec DataXchange machine monitoring system has allowed AMT to automatically collect all kinds of information from their machines and manually input supplemental information within seconds for transparency across all shop floor levels. Tom Anderson reiterates the importance of Scytec DataXchange by saying that without the ability to monitor their equipment...

The Results

⬆ 15-20% Increase In Utilization

⬇ Fewer Machine Stoppages

> ## "We would definitely not have as clear a picture of machine downtime, efficiency or capacity."

After implementing the Scytec DataXchange machine monitoring platform, AMT has also seen improvements in communications by facilitating awareness to problems in real-time. Full data visibility has also helped AMT by limiting the impact of problems using real-time information. Across their production environment, AMT also saw improvements concerning **downtime and downtime reasons, less wasted resources, visibility into historical trends and performance, scheduling, and processes.**

The Results

⬇ Less Downtime

⬇ Less Waste

⬆ Improved Processes

⬆ Improved Performance

The Daily Routine

AMT's daily routine has been enhanced by the Scytec DataXchange machine monitoring platform. Production leaders administer daily use reports to get a snapshot of how things are transpiring across the AMT production sites. By utilizing the DataXchange notifications feature set, these daily reports are scheduled to be automatically emailed, ensuring that all necessary staff is aware of the shop floor happenings. Scytec DataXchange's Real Time Viewer (RTV) screens are displayed on televisions in the shop floor and within production offices for monitoring equipment in real-time with a built-in rotation of manufacturing dashboards suited for AMT. The Operator Data Interface (ODI) has also secured its place in the daily routine at AMT as well, according to Tom Anderson...

"the ODI interface makes it really easy for operators to report on machine downtime status and add detailed comments."

After experiencing improvements on their shop floor, AMT grew with Scytec DataXchange and increased their DataXchange licensing level to utilize additional functionality. Scytec advocates that when initially implementing DataXchange that shop floors start simple and then grow and evolve with the DataXchange monitoring system and continue discovering additional value of DataXchange.

"We weren't able to really understand the advantages of the advanced data collection until we had licenses to start exploring the options in more detail."

What Would Have Happened?

Without implementing the Scytec DataXchange machine monitoring system, AMT has deemed it impossible to track what is going on with thirty-three machines across their production environment. AMT would still be struggling to manually collect information off their machines and would likely not receive serviceable information. Utilizing Scytec DataXchange machine monitoring, AMT automatically collects a vast array of machine information directly from the equipment, in addition to manually entered data from Operator Data Interface (ODI) in seconds and this has proven to be indespensable for the AMT manufacturing process.

Scytec DataXchange is a Cloud and On-Premise OEE manufacturing machine monitoring system, and so much more. For more information as well as a free demonstration of the capabilities of Scytec DataXchange, please visit **https://scytec.com**

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