AW NORTH CAROLINA, USA

Key Facts

Company: AW North Carolina, Inc.

Website: www.aw-nc.com

Description: AW North Carolina, Inc. is a leading manufacturer of automatic transmissions and their components.

AW North Carolina is a subsidiary of Aisin AW Co., Ltd., a major automatic transmission manufacturer located in Anjō, Japan.

Promoting a strong, team-based, multi-cultural environment, AW North Carolina produces fully assembled automatic transmissions as well as components including torque converters, oil pumps, clutch assemblies and stamped parts.

Industry: Automotive Manufacturing

Products Used:

j5 Operations Management Software

THE PROBLEM

AW North Carolina were using inadequate and time-consuming paper documents and spreadsheets for their Shift Handovers and logging of human entered information. Most of their data collection was recorded on paper, with some of that having to be also transferred into spreadsheets. This resulted in unnecessary double effort in entering data after the point of entry. It was also a nightmare looking for archive information, due to having to search through a warehouse of the stored paper documents. Any document that was older than 2 months had to be found in the archive boxes. It would often take days or weeks to find that information and AW North Carolina were also printing 6 boxes of paper a day.

The accuracy of the written information on paper was also inconsistent and it was often difficult to distinguish between letters and numbers. This made it very time consuming to digitize some of the information and it was often guesswork. As AW North Carolina's procedures were not fully digital, it was difficult to audit if supervisors were doing approvals at the correct times during the shift. It was also difficult to know fully what happened during the previous shift.

AW North Carolina use Wonderware by AVEVA MES Systems to collect real-time data. However, they had no efficient digital link between their non-automated human procedures and the MES real-time data. Personnel could not easily - or at all - view the real-time data that was relevant to the procedures they were recording on their paper forms.

HOW j5 OPERATIONS MANAGEMENT SOFTWARE PROVIDED THE SOLUTION

To solve their paper and spreadsheet efficiency problems, AW North Carolina augmented their production Human Machine Interface (HMI) with j5 Operations Management Software.

The j5 Operations Logbook enables the clear recording and management of manual and automated events across shifts. These events are visible in a consistent and efficient way on a web browser, which is easily trackable and searchable which was not possible before on paper. All events are recorded at the point of entry and there is no double entry into spreadsheets required.

j5 Shift Handover allows operators, supervisors, and plant leadership to thoroughly review relevant data, events and alarms at Shift Handover, ensuring a consistent, visible and accountable process. Important information from the previous shift is now readily available.

j5 Work Instructions enables the team at AW North Carolina to plan, record, manage and view daily instructions in a consistent and efficient way. Instantly knowing when tasks have been completed and signed off whilst being summarized in j5 Shift Handover.

j5 Standing Orders enables the controlled dissemination and acknowledgment of critical communications across the AW North Carolina operations team. As this is now digital, there is instant visibility on who and who has not acknowledged these critical communications.

j5 Event Manager ensures that the real-time events retrieved from the j5 OPC Interface – that relate to the procedures carried out by the operations team – are properly recorded and that the correct human workflows are put in place. This was impossible with paper.

j5 Mobile and j5 Inspection Rounds allow for the recording of plant data outside the control room. This allows production line workers to continuously record digital data and this information is automatically fed into the next Shift Handover Report. Therefore, information recorded using j5 Mobile is readily available for analysis and reports. Anomalies are also highlighted at the point of entry which enables quicker rectification or escalation.

j5 IndustraForm® Templates allow for consistent layouts, fields, categorization, hierarchies, reports and clean data.

This enables users to easily search for and understand important information, improving day-to-day performance and safety at the plant. For example, a j5 IndustraForm Template used in j5 Shift Handover allows the Shift Crew to follow a strict approval workflow to fully complete the Shift Handover process effectively.

AW North Carolina also use j5 Dashboards, Reports and Views to effectively visualize the data from the j5 Applications. The j5 OPC Interface is used to connect the relevant data from Wonderware by AVEVA MES Systems. j5 IndustraForm Designer allows AW North Carolina to easily create and modify their j5 Applications and j5 IndustraForm Templates without any assistance.

BENEFITS OF j5 OPERATIONS MANAGEMENT SOFTWARE

j5 Operations Management Software has allowed AW North Carolina to save around 1 to 1.5 hours per day. These hours were previously spent creating manual Shift Handover reports on paper and spreadsheets. This offline data entry was incredibly inefficient and now that all the data is being recorded at the point of entry online, there is no double work required during or at the end of a shift.

AW North Carolina have digitally transformed a 20-year-old process. Experienced operators had been using paper for two decades and there was at first a scepticism to change. However, it soon became clear that j5 Operations Management Software would improve their day-to-day process performance and they are now very happy with the solution. This has also allowed a better knowledge transfer to inexperienced colleagues, who are digital natives.

There is now a clear centralized platform for operations management procedures with consistent formatting, structure, workflows and a singular point of entry. Paper has been eliminated from the process and everything is available on one connected platform. This has also enabled an efficient digital link between Wonderware by AVEVA MES Systems to their Operations Management Human-Machine Interface (HMI). Enabling the powerful combination of human procedures with real-time data. Finding information in the paper archive used to take days or weeks. Now it is an almost instant process using the filters and search engine inside j5 Operations Management Software. This has really improved the efficiency of data collection and retrieval.

ABOUT HEXAGON

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build, and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.