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 to look for archive information, due to having to search through a warehouse of the stored paper documents. It would often take days or weeks to find that information, and AW North Carolina were also printing six 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. 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, or to know exactly what happened during the previous shift.

AW North Carolina use AVEVA® Historian to collect real-time data. However, they had no efficient digital link between their non-automated human procedures and 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.

To solve their paper and spreadsheet efficiency problems, AW North Carolina augmented their production Human Machine Interface (HMI) with j5 Operations Management Solutions. 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, with 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 Mobility and j5 Operator 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 Mobility 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 use j5 Dashboards, Reports and Views to effectively visualize data from the j5 applications. The j5 Connector for OPC is used to connect the relevant data from AVEVA Historian. 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 Solutions

j5 Operations Management Solutions have 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 Solutions 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 AVEVA Historian and 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 Solutions. This has drastically 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.

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.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.9bn EUR. Learn more at hexagon.com and follow us @HexagonAB.