

Driving Shift Excellence in Mining

The Problem

Mining companies operate in a complex environment of internal policies and procedures, external standards and local and national laws and regulations. A mix of paper, spreadsheets, scattered databases, blackboards and poor verbal communication have often been used to record events within the mining industry. Following the fatal incident that occurred at the Fortescue Metals Mine in 2013, the West Australian

Department of Mines and Petroleum issued a report advising managers and supervisors to conduct detailed risk assessments for work associated with or near suspended loads, identify stored energy hazards and put proper safety measures in place. The report also recommended that incoming workers be given enough information during shift handover to continue carrying out a job safely.



The Solution to Drive Shift Excellence

j5 Operations Management Solutions are used across the mining industry to improve communication and data collection at all levels of a mine operation. j5 applications enable operations, maintenance and process safety personnel within a mining company to manage their compliance duties efficiently and consistently.

j5 Operations Management Solutions can connect to external software such as the OSIsoft® PI System® to monitor real-time and historical data from equipment, sensors, instruments, the DCS and SCADA systems. This ensures that all the relevant data recorded at a mining asset can be shared with the correct people in real time.

AGL Energy Loy Yang Mine Case Study

AGL Energy is one of Australia's leading integrated energy companies and the largest ASX-listed owner, operator and developer of renewable energy generation in the country.

AGL Energy was aiming to streamline the provision of daily requirements and combine that data with actual achievements to evaluate the shift production levels at the Loy Yang open cut brown coal mine in Victoria's Latrobe Valley.

AGL Energy now utilizes the j5 Operations Logbook, j5 Shift Handover, j5 Work Instructions and j5 Event Manager throughout its operations, along with j5 IndustraForm® Templates functionality to meet its extensive requirements.

AGL Energy has also connected j5 Operations Management Solutions with the OSIsoft PI System, and current and future planning data is provided to j5 applications to build the requirement details and the resulting shift production levels.

j5 Operations Management Solutions make key shift information available to the entire operations team. This enables greater communication and direction within the group, which are crucial in processes like management of change and incident and near miss management.

Senior managers can also use j5 Dashboards, Reports and Views to analyze the performance of their mines. This allows them to compare and contrast mine performance to optimize costs and efficiency.

Visit www.hexagonppm.com for more information on j5 Operations Management Solutions.

This combined data generates four reports for each shift at the Loy Yang mine.

Shift Production Requirements Report provides the tonnage required and the rate per hour, major events on the dredgers, digging priority instructions, quality of the coal and the bunkering strategy.

Coal Draw Directive Report provides instructions to the dredger operators on the shift's drawing positions.

Shift Leaders Report compares planned and actual results, includes bunker levels, stocks at the start and end of shift, output and digging rates of individual dredgers and major events from the OSIsoft PI System.

Shift Handover Report contains additional shift information including hazards, safety and planning issues.

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.