j5 Operator Rounds: Mining

Improving Safety for Mining Operations

Digitalize Your Field Inspections

Collecting field information is a critical process for the safe running of mining operations. Often, the amount of data that is manually collected by operators can include thousands of points and represents a sizeable part of the information used in managing the process.

Manual operator rounds must be conducted efficiently and ideally linked to real-time data historians (like the OSIsoft™ PI System™) and the CMMS (like IBM Maximo® and SAP® PM). With j5 Operator Rounds, digitally transforming your paper forms is simple and straightforward – bringing you the immediate safety and productivity benefits of digital data collection.

The Problems with Paper Operator Rounds

Many mine owners still rely on operators who move around the mine with paper checklists and clipboards collecting information.

When the operator returns to the control room, the results are usually manually entered in a spreadsheet, database or disconnected application. This costs valuable time and can create problems, including:

- Difficulty getting the data to decision-makers, including maintenance, safety and operations personnel

- Obscuring abnormal or alarm data that needs to be immediately evident

- Inability for abnormal data to trigger work requests from SAP PM or IBM Maximo

- Labor-intensive and error-prone transferring of data into spreadsheets that are seldom looked at

- Poor error checking procedures undermine data integrity, leading to compromised decision-making

- Inability to transfer information to the data historian to get a true picture of real-time and measured data

- Lack of trending capabilities can hide dangerous anomalies from being identified

- Difficulties in finding information needed for technical studies

- Minimal photographic and video recording support

- Lack of procedural control to assist operators when they discover anomalies

> **Every operator must take all measures necessary to prevent major accidents and limit their consequences for human health and the environment. Where reliance is placed on people as part of those necessary measures, human factors and human reliability should be addressed with the same rigour as technical and engineering measures."**
>
> **Control of Major Accident Hazards (COMAH) Regulations General Duty**
> Health and Safety Executive (HSE)

j5 Operator Rounds

Digitalize Manual Data Collection Across Your Mining Operations

Save Time, Optimize Efficiency and Improve Mine Safety

Digitally transforming your paper forms to the modern j5 Operator Rounds solution is simple and straightforward, meaning the benefits of going digital can be immediately achieved.

Inspection rounds that exist in spreadsheets can be easily imported and converted using the j5 IndustraForm® Designer and scheduled for each operational area of the process. High, low and alarm levels, color changes, trends and suggestions are also configured using this patented spreadsheet-like configuration tool. The same spreadsheet-like management of the tasks in j5 Operator Rounds can maintain and advance the process over time.

To further reduce any startup risk, our cloud-based proof of concept pilot enables an evaluation without the need for additional server hardware. j5 Operator Rounds also functions with or without an internet connection, meaning no requirement for Wi-Fi connectivity in hazardous areas.

> **We rely on j5 Operations Management Solutions for logbooks, shift handover, work instructions, standing orders, near misses and mobile inspection rounds. We would like to extend our use of j5 Operations Management Solutions to other applications in the future."**

Nobuyuki Takahashi
Executive Director, Kainan Plant Manager
Wakayama Petroleum

Get the Benefits of j5 Operator Rounds

Integrated Operations

Once recorded using j5 Operator Rounds, the information, including historical data, is available in its intuitive form. This data is accessible to everyone on-site, including maintenance personnel, operations supervisors, technical personnel, engineers, safety personnel and managers.
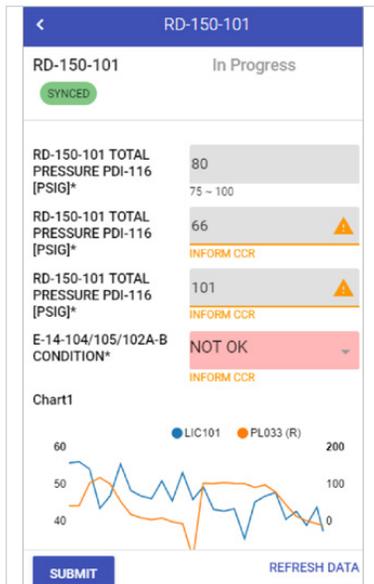
Simple User Interface

The j5 Mobility user interface is intuitive and easy to use. Rich contextual information such as trends, user prompts, error warnings and color changes guide the operator when entering the information.

Once the data has been entered, managers, supervisors, maintenance and technical personnel can view the information in various ways using j5 Dashboards, Reports and Views (including a Gantt timeline view).

Easy Configuration of User Interface and Workflows

The user interface and workflows can be easily changed to meet specific requirements using the patented spreadsheet-like j5 IndustraForm Designer, without the need for programming or complex configuration skills.

Intelligent (Dynamic) Measurement Points Allocation

j5 Operator Rounds can be designed to meet the required frequency of measurements of each individual reading (for example, it will not ask the operator to make a reading that would be of no use). This saves the operations staff significant time.

> **Without j5 Operations Management Solutions, we would still be using inefficient paper documents for our human procedures."**
>
> **Josh Humphrey**
> Chief Information Technology Architect
> AW North Carolina, Inc.

Mobile-optimized Industrial Architecture

The j5 Operator Rounds application runs on Android, iOS and Windows devices, and is also compatible with a range of explosion proof intrinsically safe mobile devices specifically developed for use in difficult and potentially dangerous environments.

j5 Operator Rounds requires no Wi-Fi connection to operate. If a Wi-Fi connection is available, the data will sync to the control room as it is entered on the mobile device.

j5 Operator Rounds supports barcode and QR code identification of equipment and records the GPS location for every reading.

Connected Digital Operations Management Platform

The data from j5 Operator Rounds can be easily interfaced with third-party applications like the OSIsoft PI System, IBM Maximo and SAP PM, and integrated with j5 applications like j5 Shift Handover, j5 Control of Work and j5 Work Instructions. j5 Operator Rounds can also add value to HxGN SDx® and other complimentary Hexagon solutions.

This connected data removes the barriers created by information silos, and improves operational performance by:

- Eliminating data entry errors
- Ensuring information accuracy
- Standardizing procedures
- Improving response times

"With j5 Operations Management Solutions, I've finally found the solution I needed to take my business to the next level.

There's no other company in my niche doing what we do, the way we do it, and a huge part of that is because of j5 Operations Management Solutions.

Our goal is to implement as much of our daily activities as we can into this system. From our inspection records to manufacture alerts and bulletins, we see j5 Operations Management Solutions as the ultimate solution for tracking our day-to-day activities."

Michael Fry
President and CEO
Deepwater Subsea LLC

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 21,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at hexagon.com and follow us @HexagonAB.