

# PotashCorp New Brunswick Reduces Troubleshooting Time, Increases Technician Efficiency

## RESULTS

- 50% reduction in number of manhours spent on proactive maintenance.
- Saved thousands of hours in commissioning time using Wireless Mobile Worker application.
- Decreased downtime due to valve failures.



## APPLICATION

Key devices used in mill operations at PotashCorp's New Brunswick division are monitored to ensure potential problems are identified early and unexpected shutdowns are avoided.

## CUSTOMER

PotashCorp is the world's largest fertilizer company by capacity. The New Brunswick facility is one of the company's six potash mines in Canada.

## CHALLENGE

The nine person instrumentation team at PotashCorp's New Brunswick (NB) division had responsibility for managing 2000 input/output (I/O) points in 2012. In preparation for a 4400 I/O point expansion, they had to find ways to save time and manage the workload.

## SOLUTION

The Potash team's first step was to ensure they were monitoring the right devices. They rated plant areas based on business criteria and prioritized loops and devices according to how critical the asset is and how often it fails. The resulting maintenance priority index gave them insight into which areas to target for process changes and which alerts should be configured and channeled to the maintenance planning department. Now, their technicians regularly monitor and process these alerts as part of a proactive maintenance approach. They use AMS Suite: Intelligent Device Manager's Alert Monitor to identify potential bad actors, investigate, and make the modifications to correct deficiencies before they become failures.

***“AMS ValveLink has helped us improve valve signature management—historically, our biggest and most expensive area of failure.”***

**Matthew Fenwick**  
Instrumentation Technician  
PotashCorp, NB

By calculating a Valve Maintenance Action Plan (VMAP), the team at Potash establishes rules to dictate how frequently they perform signatures. The VMAP is used to set a schedule for the AMS ValveLink® performance diagnostic sweep which provides a snapshot of the integrity of the valve. Using this approach has helped them manage signatures more effectively and decrease downtime and production loss due to valve failures.

One of Potash's instrument technicians created an embedded database in the AMS Device Manager to provide access to all maintenance documentation with the click of a mouse. Similar to a personalized search engine, the technicians use the tool, called the Instrumentation Information Web, to access best practices, DeltaV CHARM loop sheets, narratives, device documentation, help files and manuals. Implementing the new tool, Potash saw a 50% reduction in proactive maintenance tasks, estimated versus actual. Using the Wireless Mobile Worker application with their own configuration manual installed, Potash also saw substantial saving in commissioning and alerts.



***“When I joined the company, AMS Suite software was only used as a storage facility for configurations and device checks during start-ups. After I spent time exploring the tool, I saw the potential to use it as a way to instantly bring information to technicians.”***

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