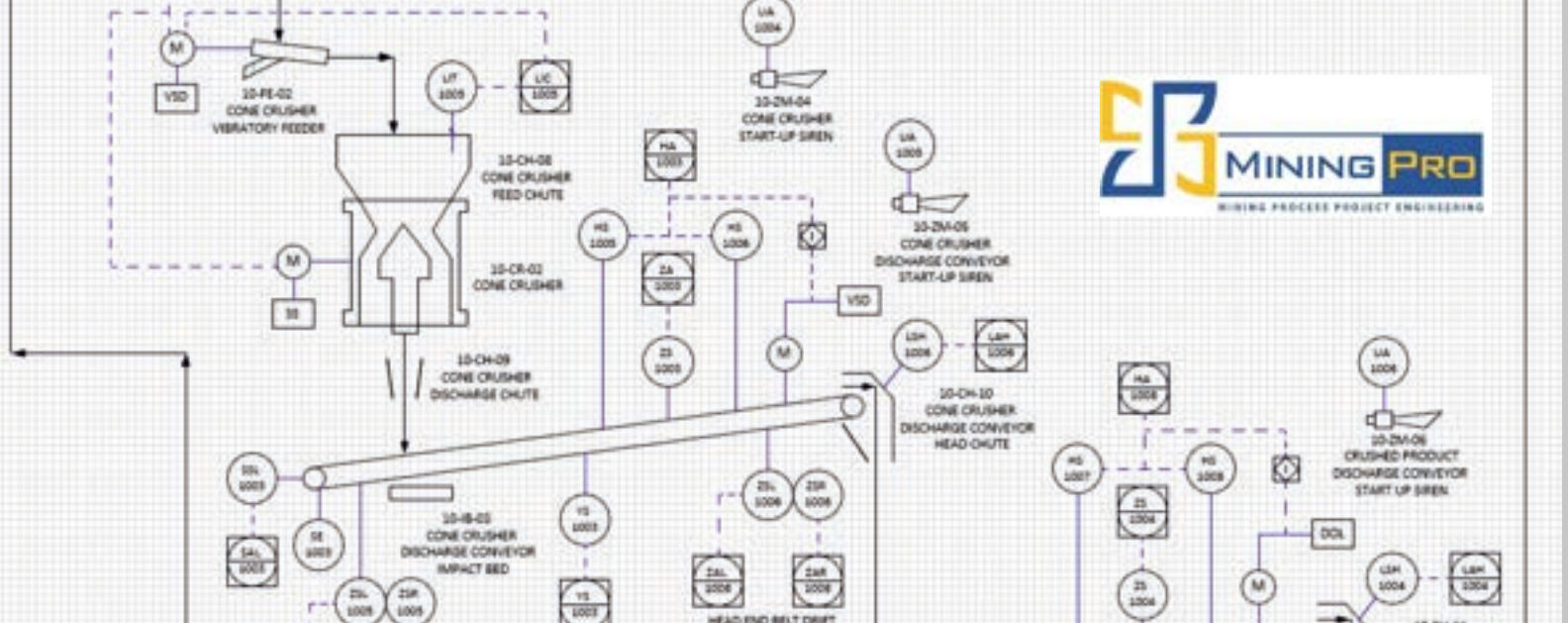


MiningPro Streamlines Engineering Data Management with Visio P&ID Process Designer





Mining Process and Project Engineering (MiningPro) headquartered in Ghana, is an engineering and project delivery company specializing in mineral processing and industrial plant projects. The company provides end-to-end engineering services, including process engineering, plant design, equipment specification, piping and instrumentation design, project documentation, and project delivery support. With a focus on practical, efficient, and reliable engineering solutions, MiningPro helps mining and processing operations optimize project execution from concept through commissioning.

The Business Need

As MiningPro handled increasingly complex engineering projects, managing engineering data across equipment, piping, instrumentation, and control systems became more challenging. Critical project information was being managed manually across multiple documents and systems, making it difficult to maintain consistency and accuracy throughout the project lifecycle and while integrating PLC and SCADA systems.

The company needed a solution that could:

- Centralize engineering information
- Improve data consistency across P&IDs and documentation
- Eliminate duplicate equipment, valve and instrument tags
- Simplify engineering report generation
- Reduce manual engineering effort and rework

The Solution

MiningPro implemented Visio P&ID Process Designer (VPID) to create a more connected and efficient engineering workflow.

The platform provided:

- A centralized engineering database
- Automated generation of equipment, valve, pipeline, motor, and instrument reports
- Intelligent tagging & validation for unique tag management
- Built-in pump and pipe sizing tools
- Flexible customization capabilities to match client & project requirements

By consolidating engineering data into a single environment, MiningPro improved visibility, standardization, and control across projects.

Implementation Impact

Improved Engineering Accuracy

VPID's intelligent tagging & validation ensured the uniqueness of equipment, valve, and instrument tags, reducing the risk of conflicts during PLC programming, SCADA development, and commissioning activities.



Faster Documentation

Automated report generation significantly reduced the time required to prepare engineering deliverables, allowing teams to focus more on design and execution activities rather than manual documentation tasks.



Better Project Coordination

With centralized and consistent engineering data, collaboration between process engineering, instrumentation, and automation teams became more efficient and reliable.



Increased Productivity

Integrated sizing tools improved engineering efficiency while helping maintain design accuracy across projects.



Results

After implementing Visio P&ID Process Designer, MiningPro achieved:

- Faster generation of engineering documentation
- Improved consistency across engineering deliverables
- Reduced risk of duplicate tag numbers
- Better coordination between engineering and automation teams
- Reduced manual effort and engineering rework
- Improved efficiency in project execution and commissioning support

Customer Experience

MiningPro's experience with Visio P&ID Process Designer has been highly positive. The solution has simplified engineering data management and accelerated report generation while improving consistency across project documentation and workflows. In addition, MiningPro highlighted the responsiveness and availability of the VPID support team, whose timely assistance helped ensure smooth implementation and reliable day-to-day operation of the solution.

One of the most valuable features of VPID is its ability to automatically verify the uniqueness of equipment, valve, and instrument tag numbers. This functionality is extremely beneficial in large projects where tag conflicts can create significant issues during PLC programming, SCADA development, commissioning, and plant operation. Combined with the reporting and sizing tools, VPID provides a robust and practical solution for engineering design and project execution.



Solomon Gyasi Amofa,
Process Engineer, MiningPro



Conclusion

Visio P&ID Process Designer enabled MiningPro to modernize its engineering data management processes and improve project execution efficiency. By automating documentation, centralizing engineering information, and strengthening data integrity, the solution helped MiningPro deliver engineering projects with greater accuracy, consistency, and operational efficiency.

