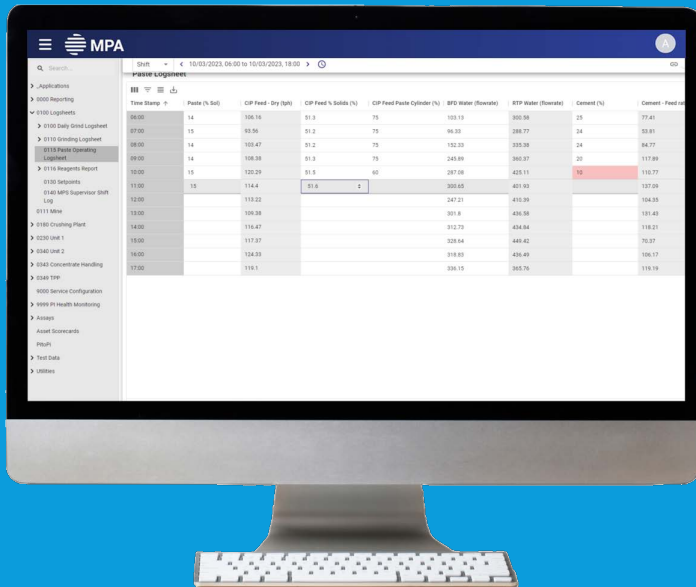


MPA suite

A case study with
Newmont Mining
Corporation
Suriname, South America



Time Stamp	Pulse (Hz)	CIP Feed - Dry (tph)	CIP Feed % Solids (%)	CIP Feed Pulse Cylinder (%)	MTP Water (t/minute)	MTP Water (t/minute)	Concent (%)	Concent - Feed (%)
06:00	14	106.16	81.3	75	103.13	900.56	25	77.41
07:00	15	95.56	81.2	75	96.33	108.77	34	53.81
08:00	14	105.47	81.2	75	132.23	335.39	24	84.77
09:00	14	108.38	81.3	75	243.89	992.37	20	117.89
10:00	15	102.29	81.3	60	287.06	989.11	10	110.79
11:00	15	114.6	81.3	60	305.65	451.55	10	107.59
12:00		119.22			247.21	410.99		104.55
13:00		109.38			301.8	436.56		131.43
14:00		116.47			312.73	426.64		118.21
15:00		117.87			328.64	446.42		70.37
16:00		124.33			318.93	439.49		106.17
17:00		116.1			356.15	365.76		119.16



Case Study



In 2019, a senior metallurgist at Merian Mine noticed that production reporting was a daily burden. The metallurgy team required two to three hours each shift to manually enter data into Excel, manipulate it, and then transfer it between systems. This wasn't just labour-intensive, it was also prone to manual errors.

Their Excel-based system lacked security options for sensitive data and didn't allow them to process data in real-time. So, they couldn't spot production problems and inefficiencies as they occurred. This meant that production deviations could take days to resolve after combing through historical data to find the cause.

There weren't any real-time production parameter displays, so other than the control operators most team members had limited access to operational information and this slowed down decision-making.

Secondly, there was a large amount of manual data entry. This causes a large amount of time sync for the metrics, and using different systems for data entry tends to introduce errors.

Lastly, production reporting using Excel was limited. There were limited security options for sensitive data and data manipulation in Excel was non-compliant with numerous meta accounting standards.

"Sometimes a high level of Excel literacy was required to troubleshoot the problems in Excel," explains Senior Metallurgist Yuanbin Qin in a presentation at AVEVA PI World.

Newmont wanted a system that could:

- Visualise production KPIs to key stakeholders (beyond the control room)
- Automate metal accounting, shift and process reports
- Digitise and optimise the existing Excel/paper logsheets
- Integrate and consolidate data sources into a single repository
- Work seamlessly with the AVEVA PI Asset framework design
- Pass user acceptance testing
- Support remote training

An aerial photograph of an industrial facility, likely a water treatment plant, featuring large circular tanks and complex piping. A large blue circle is overlaid on the center of the image, containing white text. The background shows a clear sky with scattered clouds and a distant treeline.

The solution

We recommended they migrate from their outdated Excel reporting system to a modern web-based platform that could leverage the AVEVA PI asset framework.

They chose to use the MPA suite because it fully integrates with their plant's AVEVA PI software.

“It means that any other manual data entry, where there are no instruments available, can be entered using an iPad on a logsheet which uses MPA to visualise data in the PI system,” explains Daniel Qiao, Lead Systems Specialist at Mipac.



Results

After implementing the MPA software suite, the Merian team can now visualise their data across multiple systems, which has opened up a whole new world of production insights.

Today, their data is more accurate and visible so they can use it to make short-term operational decisions and accurately account for how much income they're generating.

They can now report and monitor results in real-time, so their processes are more reliable. And they no longer spend several hours per day manually entering and managing data.

That wasted time can now be spent optimising and improving production in the process plant. It's a big win for the Merian production team.

"Working with Mipac was a real pleasure.

We worked as a team and were able to achieve great results for our daily production reporting.

We saw significant benefits with our reporting, data visualisation and data security.

I would recommend Mipac to anyone."

Yuanbin Qin/ Senior
Metallurgist, Newmont
Merian

Why Mipac

Global leaders in operational technology, control systems and engineering services, Mipac is the perfect partner in driving operational performance.

Our team of trusted advisers includes knowledgeable senior engineers and creative, skilful innovators in technology.

We partner to provide early-stage consultation and continuous optimisation strategies to whole-of operations. From the solid foundations of control systems, software, and engineering, to the latest digital technology advancements, we're committed to pushing boundaries to

create innovative, flexible solutions that consistently fulfill our clients' commitment.

We embrace complex challenges and solve problems in the areas of performance, productivity, and safety by enhancing existing infrastructure systems and technology and providing reporting and decision-making solutions.

We do this by drawing on our extensive onsite experience and unparalleled knowledge of comparative solutions on the market to bring real value and insights to maximise the potential for success.

Solutions and Services

We work across various industries to realise the total value of your operation and recommend solutions and services that produce optimal outcomes and increased performance.

- Advanced Process Control
- Industrial Automation
- Data Analytics and Visualisation
- Cybersecurity
- Process Optimisation
- Industrial Software
- Electrical and Instrumentation
- Operations Support
- Mining 4.0 Consulting

Transforming the mining value chain

Over the
past

3

decades

our team of

180

engineering
professionals

have delivered
over

730

projects

across

55

countries
globally

for more
than

110

customers



We believe in working together
with our clients and partners
to achieve their goals.

At Mipac, we go
beyond the solution.