
Northern Cape Iron Ore site exceeds life of mine planning KPI's with OPMS

“Following implementation of the solution, we realised the true value of OPMS in finding the sweet spot in our life of mine schedule through effective analysis of multiple scenarios.”

*Senior Mining Engineer,
Tier one Iron Ore Mine*

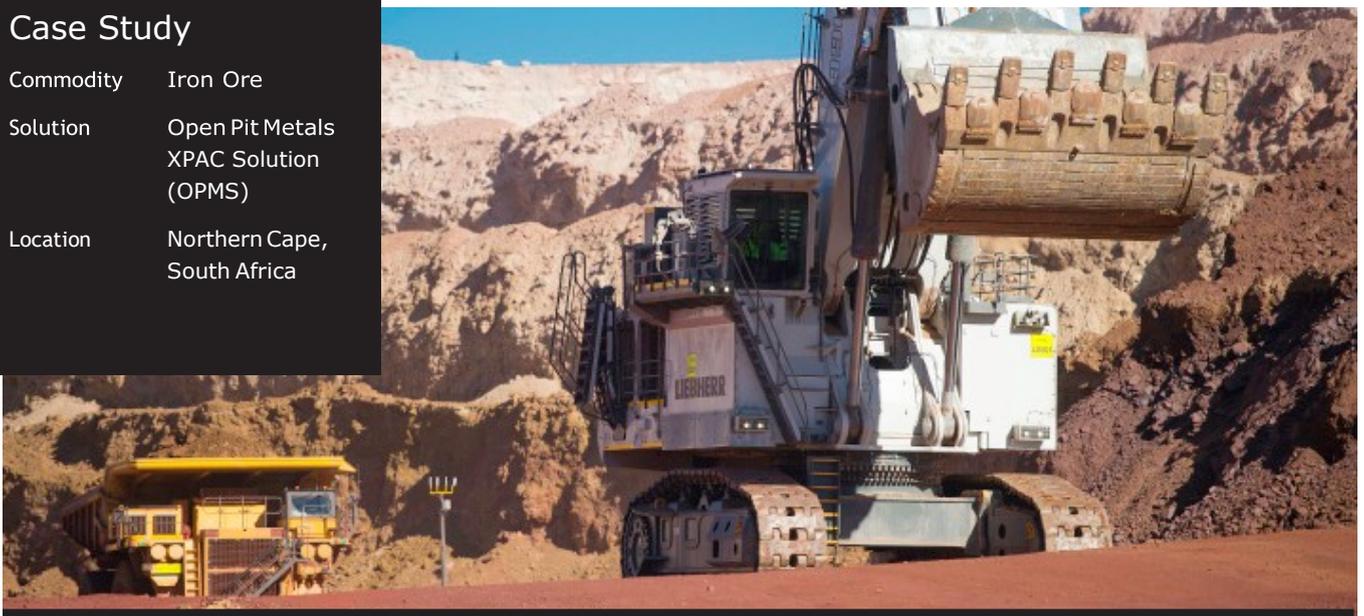
Overview

With an ever increasing need to optimise technology following a wave of cost-cutting initiatives, mining companies across the globe are looking to leverage software solutions to optimise mine planning practices. With the opening of an iron ore mine in South Africa's Northern Cape Province, an initiative to implement a complete mine planning solution was launched.

The site is managed by one of the world's leading mining giants and is among some of the leading miners in terms of operational excellence. The mine has a life of mine of 25 years and is in high demand because of its physical strength and high iron ore content.

Case Study

Commodity	Iron Ore
Solution	Open Pit Metals XPAC Solution (OPMS)
Location	Northern Cape, South Africa



Challenge

Following a stellar opening track record with mine development delivered under budget and ahead of schedule, the iron ore mine launched an initiative focusing on superior mine planning practices. The site's mine planning team required a software solution that was specifically suited to open pit iron ore mining and did not require costly specialist consultants to drive the setup and running of life of mine schedules.

“It is rewarding to have full control of your own business without being dependent on external specialists.”

*Senior Mining Engineer,
Tier one Iron Ore Mine*

The objectives of the initiative were straightforward:

- A solution that could be owned and run internally without the requirement for specialist consultants
- Script-free
- A solution that would maintain and improve productivity and efficiency in the workflow requirements of life of mine planning
- Sustained confidence in life of mine planning results
- Increased control of planning outcomes
- Increased visibility and transparency across life of mine planning
- Increased revenue through optimised iron ore production
- A solution that, in the future, could be transferable across multiple sites

To meet these objectives, a variety of vendors were evaluated. Key criteria included the objectives listed above. The criteria also sought a solution that could interact with other enterprise-enabled IT systems with the potential to transfer across multiple sites. XPAC OPMS was identified as the best solution.

Solutions

RPMGlobal's XPAC Open Pit Metals Solution (OPMS), built using XPAC's scheduling core – provided a solution that enabled mining engineers to hit the ground running, adding value over and above expectations.

Impact

OPMS has delivered incredible value having a direct impact on the iron ore mine's bottom line:

- Outstanding performance with increased production. Following the first 12 months of OPMS' implementation, the mine reported an increase in production volumes by 8%
- Significant reduction in specialist consulting fees. OPMS offered a solution that does not require specialised consultants to set up and run life of mine schedules. Following OPMS' implementation, it is estimated that consultant fees were reduced by approximately 50%
- No false economy with increased accuracy. OPMS has dramatically increased trust in schedule results and increased accuracy in life of mine plans
- Integration of previously disparate systems. OPMS seamlessly integrates all elements of mine scheduling into the one application
- Dramatic increase in overall equipment effectiveness. Equipment is one of the main drivers of cost at the mine site and so effective equipment interactions on the ground was imperative
- Introduced OPMS to neighbouring site. Following such successful results at the original mine site, it was decided that OPMS would be implemented at the company's flagship operation.

