

**CASE STUDY**

# Barmenco saves days and dollars, Barmenco's clients benefit

Underground drilling contractor, Barmenco, realised that there were significant efficiencies to be gained from removing the potential for human error from their processes. This was the starting point for the implementation of a solution which not only negated the risk of human error, but provided significant efficiencies for the company, and for their clients too.

---

Where it was once acceptable for drill reports to pass through four points where manual handling of data could potentially compromise their integrity, the industry wide focus on productivity improvements highlighted the need for accuracy and time efficiencies. Barmenco recognised the need for improvement and change, so they looked to the utilisation of new technologies and processes to achieve this.

Barmenco's willingness to change and improve its processes has resulted in a solution which ensures data integrity while saving hours and in some cases, days.

At a time when lean processes are critical to survival in the industry, these improvements have been welcomed by the company together with their clients.

"Barmenco's insights and participation in the development of their solution," said Peter Scherp, Project Manager - Implementations at REFLEX, "has enabled us to make the significant adaptations required to our REFLEX HUB Drilling solution to ensure it created the right efficiencies for Barmenco. We delivered quantifiable value right from the start."

## THE SOLUTION

The initial solution requested by Barmenco was for the online submission of PLODS in order to reduce the risk of human error during data transfer.

"Difficulties in deciphering handwriting and keyboard errors all increase the risk of inaccurate data being included in drill reports and sent on to the client," said Natalie Freestone, Mining Services Administrator at Barminco. "The time spent on manually inputting this data together with the potential for error, was a key motivator for the change."

This, in addition to the unreliable communications on site which often prevented reports being scanned and sent to the head office, the lack of data backup and the inefficiencies inherent in the three points of data entry, highlighted the real risk of losing or corrupting their data and the urgent need for change.

With the easy access to near real-time information and automated data entry of the initial REFLEX solution, Barminco could be confident that the data they provided to their clients was without error, while also available when required.

The initial narrow requirement brief of just a single Daily Drill Report (DDR) included in REFLEX HUB was soon broadened as the underground mining contractor realised the extended gains available through the cloud based data platform. The addition of reports including vehicle, rig and equipment pre-starts and maintenance reports provided significant efficiencies to Barminco, while their clients enjoyed project-wide visibility to support management improvements.

"On rolling the solution out to our clients", said Freestone "suggestions of more development and inclusions were received from them to expand the transparency they were enjoying across their operation."

"Clients were excited," she said. "We [Barminco and REFLEX] worked hard to ensure there would be minimal issues. The rollout was staged, with each site completed independently. Site supervisors who immediately saw the efficiencies helped to generate anticipation on the other sites."

"We tested data entry and validation along the way to ensure that

system A matched system B," said James Belin-Shaw, Safety and Training supervisor at Barminco. "In that way, we all gained more confidence in the solution."

---

**"We all gained more confidence in the solution" - James Belin-Shaw, Safety and Training Supervisor, Barminco.**

---

"For me it was one of the cleanest and largest rollouts we've done to date," said Scherp. "The close working relationship we have with Barminco was invaluable in both developing and implementing a solution which provides immediate value for both the company and their clients."

## **OUTCOMES**

With a focus on productivity across the industry, Barminco soon saw the value in their REFLEX solution. Increases in drilling per rig per shift were realised which quickly amounted to significantly more metres drilled per month. This translated to savings of 8.6% which were gained through less time spent in the office by the drillers filling out hand written plods and documentation which translates to more time at the rig providing more drill time.

Integration with the Reflex Gyrocompass for rig alignment also alleviates issues with operators reading and interpreting the data provided. The client provides us with a CSV file which is uploaded to the Hub and all relevant information is directly uploaded to the Gyrocompass and the handheld tablets. Eliminating the reading and handling of data reduces the amount of errors due to the operator reading the information incorrectly. [27 drill rigs x 54 shifts in a 24 hour period x increased revenue of \$17 650 on average per 24 hours] While Barminco enjoyed the productivity gained across their projects, their clients were pleased to be able to report the same efficiencies in their drilling programmes.

The time saved with the immediate visibility of the drill reports and the ability to correct any errors on site has reduced the end of month billing and reconciliation time requirement from five days to literally hours. As the client has been able to monitor activity throughout

the month in near real-time, any issues could be resolved on a shift by shift basis. This means that end of month invoices are generally not queried and payments made on time.

The amount of time spent each week on inputting the PLODS was reduced from 12 hrs to just 2.5. This allowed more time for drilling.

Similarly, the electronic format now allows for online searching of specific holes (for example, searching for records of holes that have been grouted. The manual searching through files of PLODS (some that are archived) for the same outcome comes with considerable time costs.

Cost savings were substantial with no requirement for the printed PLOD, survey, pre-start and service record books, these usually totalling up to \$36,000 per year, per site. Added to this, the costs and delays usually associated with the deciphering and triple entry of records were also negated.

The reports available through REFLEXHUB-IQ enabled Barmenco to draw daily revenue figure for budgeting and reporting purposes quickly and easily. This also supported efficient management of operations on site with the ability to forecast metres and trends.

## IMPLEMENTATION

“The success of the uptake of our REFLEX solution was largely due to the change management plan which was put in place,” said Freestone. “When introduced, the concept received a negative response, however, after working with our drillers and testing the solution, they then had the proof that it could be trusted. We then

rolled it out to our clients.”

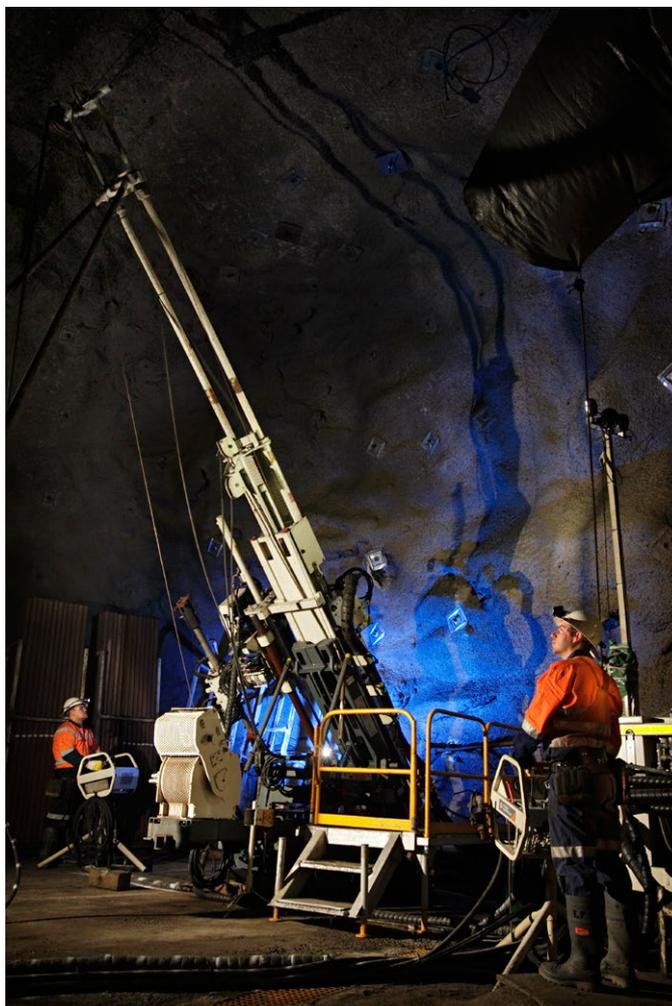
“Our drillers now depend on it, and our clients love it.”

Further functionality has been planned for the Barmenco solution to enhance safety throughout their business, this will include site induction forms, further performance monitoring reports and training.

## CONCLUSION

Barmenco see their use of REFLEX HUB as a key differentiator in a competitive industry. “We see REFLEX HUB as a foundation from which we can build further efficiencies for both our business and our clients”, said Freestone.

At a time when immediate access to on-site data is a prerequisite for optimal efficiencies across any exploration or mining project, the connectivity available through REFLEX HUB provides the platform to position drilling and resource companies firmly in the new and connected world.



*Image: A Barmenco rig*

## ABOUT REFLEX

REFLEX is the leader real-time sub-surface intelligence solutions for the global minerals industry.

The company's solution range includes downhole survey and core orientation instrumentation, together with data collection and management software, which enable the seamless integration of field operational data to a cloud-based platform which is readily accessed from any location.

REFLEX's technologies are acknowledged for their reliability, ease of use and accuracy. Complementing these advanced technologies is REFLEX's unrivalled expertise in the analysis and interpretation of geo-scientific data. REFLEX has a network of strategically located offices and support centres, globally.

[www.reflexnow.com](http://www.reflexnow.com)

### AUSTRALIA

Perth - Head Office

+61 8 9445 4020

Brisbane

+61 7 3723 3633

### EUROPE

United Kingdom

+44 1273 405 975

### MIDDLE EAST

United Arab Emirates (UAE)

+971 4 449 6800

### AFRICA

South Africa

+27 11 908 5595

### NORTH AMERICA

Timmins, Canada

+1 705 235 2169

Vancouver, Canada

+1 604 681 6765

Mexico

+52 662 215 4317

### SOUTH AMERICA

Brazil

+55 31 3317 1398

Chile

+56 2 2589 9300