



## Smart Solutions

# Case study: Increasing cost savings using constant monitoring

Application: *Surface coal mine*

Location: *South America*

Products featured: *P&H 2800XPC shovels*

## Challenge: Increase cost savings

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Customer was experiencing rising maintenance costs and an increase in unplanned downtime.

The customer suspected that operating practices had a significant influence on both cost and downtime and wanted a solution to mitigate both.

### *Contributing factors:*

- Recurrent alarms that could indicate a major issue
- Improper machine operation and machine abuse
- Machine consumption of lubricants are not easily monitored, hard to implement strategies based on maintenance plans
- Payload target on each machine is not easily monitored by supervisors



# Engagement process: Working toward a solution

Integrating Smart Solutions – including remote health monitoring, expert analysts and on-site service engineers – to the maintenance process at site.

A plan was designed to implement a maintenance process based on our Smart Solutions.

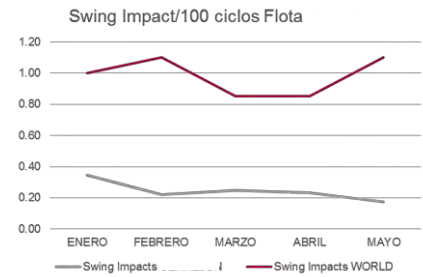
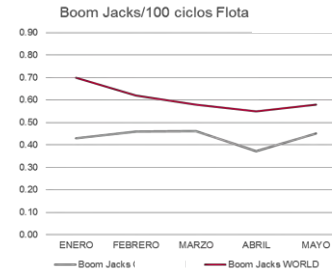


# Solution: Continuous monitoring and work order generation

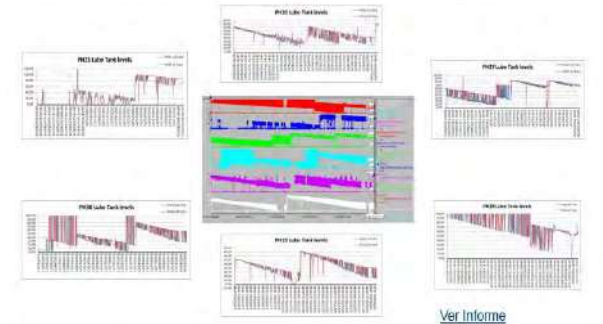
Prevail daily reports were used to identify fleet wide issues, which were discussed by the service engineering teams.

Upon identification of root cause the **teams tracked all efforts in the site's own work order system.**

A shared set of monthly scorecards were created in order to track opportunities in production, operating practices and maintenance.



## Caso de estudio – Tiempos de ciclos de lubricación



## Results:

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Realized \$736,634 in overall benefits in just 6 months

Avoided 218 hours of downtime for seven machines, a cost benefit of \$22/Op hour



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