An integrated solution for improved performance

Company: Anglo American's Dawson Mine | Mining Method: Open Cut Coal | Country: Australia

OVERVIEW

For greater oversight and medium-term planning, Anglo American had identified a need for a software package that would allow them to effectively design and schedule the mine operation in the one software package. Deswik worked with Anglo American to provide the solution.

SOLUTION

Using Deswik's software and consulting assistance, Anglo American's Dawson mine has managed to achieve significant haulage and engineering productivity improvements, directly reducing their cost per tonne of coal. The full Deswik Software Suite for Open Cut Coal has been successfully implemented at Anglo American's Dawson mine and is now in

- Anglo American's Dawson mine is running a combined Short Term and Medium Term plan in a single schedule.
- Detailed reserves are generated beyond the required time period and are then sequenced and scheduled to deliver the required outcomes.
- Multiple users are pulling together the short term schedules (processbased planning department) and then feeding these schedule outcomes to the medium term planning engineer.
- This integrated process allows for better planning outcomes and less confusion between the planning horizons



OVER \$10 MILLION
PER ANNUM SAVED FOR
\$0.5 MILLION INVESTMENT



MINE PACKAGES REDUCED FROM 7 TO 3



SCHEDULING DATA INTERFACES REDUCED FROM 3 TO 0



IMPACT

To date, more than \$10 million has been achieved for less than \$0.5 million initial investment. Other achievements include:

- Simplified planning and operations through integration: Mine packages reduced from 7 to 3. Scheduling data interfaces reduced from 3 to 0. Engineering Workload reduction with software helping increased output and quality of deliverables.
- Planning performance delivered cost savings: Through improved planning performance, and having greater confidence in the ability to deliver the plan, Anglo American's Dawson mine has managed to successfully park 3 trucks. 3 trucks is equivalent to over \$10m per annum in ownership, maintenance and operating labour as well as fuel savings.
- Improved performance versus plan: Improved planning accuracy has enabled alternative scenarios to be run and tested, delivering incremental improvements versus the original plan. For FY 14 Anglo American Dawson's

Mine achieved 100% of waste stripping 103% ROM coal mining budget.

- More productive tools = more productive engineers: Anglo American's Dawson mine has improved their engineers' productivity through the streamlining of their mine planning process. Reduction in mine planning systems and tools has minimized data transfer and transformation workload (zero value add activity). Medium Term Planning engineering workload has reduced. Redeployed Medium Term Planning Engineers to enable them to run alternate scenarios, which has then improved the schedule quality.
- Plan compliance: Increased plan compliance is delivered through use of Deswik.Sched Baseline feature. Anglo American's Dawson mine is utilizing the ability to track planned performance against the previous month's forecast through the use of the Baseline tool. This assists with driving accountability and compliance through providing the required data to make informed decisions.