

Case Study



DESWIK RACE Planner

Synchronize train, terminal and vessel operations with industrial mathematics.



Throughput

Maximize terminal throughput.



Precision

Time and build parcels to maximize coal velocity.



Scenarios

Answer business critical questions.

Maximizing coal velocity through complex mining value chains.

THE CUSTOMER

The customer is a major coal terminal operator on Australia's east coast. Each year, it receives tens of millions of tons of coal by train, which it exports to customers around the world.

THE CHALLENGES

Every week, the customer issues parcel build windows for coal delivery to numerous haulage providers, who in turn service multiple producers. Once the train unloads at dump stations, coal is stacked onto pads, then later reclaimed and loaded onto vessels.

While the customer had planning and scheduling support for activities within the terminal, there was limited support for synchronizing these activities with coal deliveries. The challenge was to implement a solution that would enable the customer to coordinate complex inbound and outbound activities in order to maximize terminal throughput.

THE SOLUTION

The RACE planning module was deployed to the customer, configured specifically for terminal operations, and readily integrated with their existing data systems. The customer already knew about RACE by reputation; Deswik's purpose-built tool plays an active part in eastern Australia's coal mining value chains. Many of the customer's stakeholders—haulage providers, track owners, and producers—use RACE for their own planning and scheduling.

THE BENEFITS

Greater throughput

RACE enables the customer to increase throughput through the terminal by simultaneously modeling inbound and outbound operations.

Increased precision

More sophisticated planning ensures the right parcels are built at the right time for maximum coal velocity through the value chain.

Faster, more accurate schedule generation

Schedules that used to take hours to create are now produced in minutes, are of higher quality, and have a greater level of detail.

An optimized planning department

As a web-based tool, RACE can be accessed by any authorized user with an internet connection and a computer and can be readily integrated with customer data feeds.

Minimal impact to stakeholders

All improvements occur “behind the scenes”; schedules are presented in a format familiar to both the customer and their stakeholders.

DECISION SUPPORT

RACE produces globally optimal solutions to help answer business-critical questions such as:

- Which parcels should be built with what delivery windows to ensure inbound assets and terminal assets are used as efficiently as possible?
- What is the optimal vessel berthing sequence to minimize aggregate vessel turnaround?
- How can we minimize the amount of time between loading one parcel onto a vessel and being able to utilize the vacated stockyard space again?
- What happens if one or more dump stations, stackers, reclaimers, or ship-loaders is down for maintenance for a period of time?
- How can we minimize the impact to our terminal when there is major maintenance work on parts of the track network?



DESWIK
RACE Planner

Learn how to maximize
operational throughput and
asset utilization today.

SCHEDULE A DEMO