Open Cut Coal

Advanced Design & Reserving

TRAINING MODULE PROFILE







2.07MODULE ID

The Advanced Design and Reserving for Open Cut Coal module builds on the core skills and knowledge gained from the Reserving for Open Cut Coal training. This module introduces functionality to design detailed mining and dumping reserves for short-term and medium-term planning. Focusing on creating mining solids using the Shells projection method with highwall access ramps, the training also includes processes to:

- generate dragline spoil piles
- perform a spoil balance
- create prestrip horizons
- generate prestrip dumps with the pit design tool

The second part of the training focuses on margin ranking in Deswik.CAD. You will generate a strip mine scenario and a terrace mine scenario, to compare the costs and advantages of reducing truck cycle times with in-pit dumping.

Mine Design and Reserves Generation

- · Create a dragline spoil pile
- Compare solids with the bulk spoil balance function

Shells Method

- · Audit the structure grids
- Create the projection rules
- Process a strip of reserves with the Shells method
- Process all reserves with the Bulk Shells method
- Aggregate the solids with the Conglomeration function

Open Pit Design Tool

- · Create dump pit solids
- · Create the ramp
- Create the pit face
- · Create the berm
- Create dump solids

Road Design

· Design a center bridge road

Margin Ranking

- · Generate quantitative attributes
- Set up a strip mine margin calculator scenario
- Calculate the strip mine mineable reserves
- Set up a terrace mine margin calculator scenario
- · Calculate the terrace mine mineable reserves
- · Produce staged pit results

Advanced Design & Reserving for Open Cut Coal

Training Pathway



3 month skills consolidation period following 2.03