

The Advanced Design and Reserving for Open Cut Coal course builds on the core skills and knowledge gained from the Reserving for Open Cut Coal course. This course 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 high-wall access ramps, the course 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 course 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

ABOUT DESWIK

Deswik is a global consulting and technology company that delivers efficiency focused solutions to the mining industry across all sectors – Open Cut Coal, Underground Coal, Open Pit Metals and Underground Metals. Our dedicated team of mining engineers and software developers provide solutions that deliver measurable value to our clients through our software, consulting and training offerings.