

# Advanced functionality tailored to the specialized demands of underground coal operations

Developed in direct response to the needs of our customers, Deswik.AdvUGC adds functionality across the Deswik software suite. Continually updated with the latest releases from our development pipeline, this module enables your mine planners to do more effective, more detailed and more value driven planning. Unlocking advanced design and scheduling features for both long and short term planning, the module includes:

- » Underground design toolbox for gridded roadway and longwalls
- » Auto Development Designer catering for non-standard design layouts
- » Easy reconciliation tools for compliance auditing
- » Margin calculator including static NVP analysis
- » Advanced scheduling functions including backwards pass resource leveling, objective targeting and resource path importing.

Deswik.AdvUGC can be used with either Deswik.CAD or Deswik. Sched or a combination of both.

#### UNDERGROUND COAL DESIGN TOOLBOX

- » Automates centreline creation for longwall panels and gridded roadways such as mains, gateroads and development panels.
- » Generates the metadata required to process design lines into 3D reserve solids via the Deswik.IS.

#### **AUTO DEVELOPMENT DESIGNER**

- » Uses rule-based processing to modify design lines for irregular and special development.
- » Automates standard polyline manipulation tools as well as formula based attribute assignment.

#### **PROCESS TUNNEL AS-BUILTS**

- » Generate as-built solids from any combination of floor, roof or rib line survey pickups.
- » Able to generate from a single rib pickup line using a nominated cut height and survey pickup height.

#### **PROCESS CMS**

- » Import CMS polylines or triangles and stich them together to create a closed solid.
- » Rapidly generate shells around CMS point cloud data.

#### **AS-BUILT RECONCILIATION**

- » Detailed reporting of reconciliation between as-built and design solids from a 3D perspective.
- » Calculate overbreak and underbreak incrementally against design centrelines.

#### ADVANCED RESOURCE LEVELING

- » Access to features such as backwards pass leveling, multi-field or sink rate targeting and time usage models.
- » Short-term manual scheduling via interactive resource paths or import resource paths from other packages.

#### MARGIN CALCULATOR

- » Wizard-based calculation of Net Present Value and incremental, cumulative and maximum cumulative margins from reserve solids.
- » Import, export and run multiple scenarios against defined costs and revenues as required.

### **CALCULATE STEREONETS**

- » Import strike azimuth and dip data to generate geotechnical stereonets directly in the Deswik.CAD design space.
- » Supports Schmidtt, Wulff, Rose and observation diagrams.

## INCLUDES DESWIK.SVIZ (SCHEDULER VISUALIZER)

- » Embedded 3D visualizer for Deswik.Sched.
- » Utilizing a dockable interface, it provides interactive viewing and animation of mine designs, sitting side-by-side with the schedule tasks.

