

HAULAGE PROFILE

Haulage Profile in Vulcan calculates the cycle time for a digitised haul route using your site fleet specifications.

HOW DOES IT WORK?

Haulage Profile uses stored fleet information to calculate the haulage time between two digitised points. Information is stored in the block model for accurate planning. Predefined routes can be used to reduce the need for manual selection. Distances based on actual bench geometry at the time of mine haulage give a better estimation. Nodes and segments can be digitised for sharing with different routes and an external program runs multiple scenarios in the background for easy comparison.

INPUT

Create an equipment library to store information about the fleet:

- > Truck capacity, according to different materials
- > Shovel loading times
- > Spot times
- > Speed curves or rimpull/retard curves
- > Route delays such as traffic signals

Haulage cycle calculations take the following into account:

- > Weight of the material
- > Terrain of the route
- > Loading and dumping times
- > Traffic delays
- > Rimpull/retard curves

OUTPUT

Haulage profile information can be stored in the block model or exported to a report:

- > Haul truck travel time calculated by bench
- > Haul truck cycle time
- > Fuel consumption
- > Fleet productivity estimation for long & short term planning
- > Graphical representation (layer) of final routes

YOUR QUESTIONS ANSWERED

Does Haulage Profile apply to all types of operations?

Yes. Haulage Profile can be used for every mining type.

Can it be used for underground applications?

Yes. Haulage Profile can be used in both open pit and underground applications.

How much setup is needed to determine the cycle time?

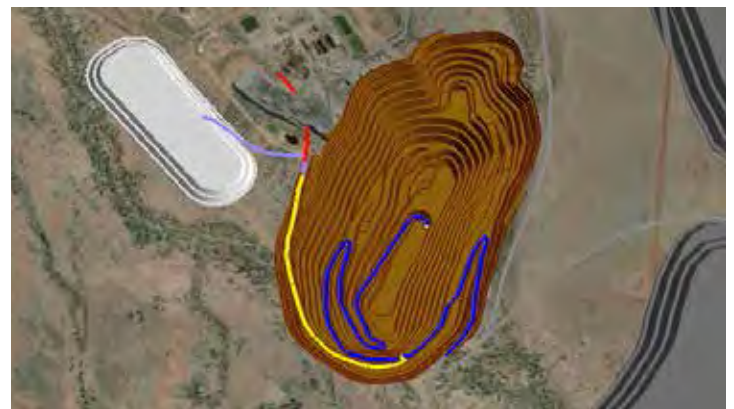
Once the equipment library has been developed, the only requirement is a line that can be digitised in Envisage to calculate the cycle time.

Does Haulage Profile take the topography into account?

Yes. Haulage Profile works on routes designed on actual topography. It works to capture the best slopes to ensure accurate calculations.

Can I use Haulage Profile if I don't have a block model?

Yes. The Route Cycle Estimation option allows users to calculate distance and cycle times without a block model. You can quickly compare different routes for suitability.



BENEFITS

1. Quickly determine if a haul route will meet requirements.
2. Run multiple scenarios to find the most efficient route.
3. Easily export information to the mine schedule for faster decision making.