



Pit Optimiser Module

When exploration and mining companies need to evaluate the economic viability of a stratified deposit and maximise NPV, they turn to Gemcom Minex™ Pit Optimiser module.

Integrated within Minex, the Pit Optimiser module is designed to meet the unique challenges of mining stratified deposits such as coal, phosphate, bauxite, and lignite. Using this module will help you uncover the economic viability and optimisation possibilities locked within your deposit.

Features:

- **Algorithm.** Applies the industry-standard Lerch-Grossman algorithm.
- **Optimisation Parameters.** Wide set of input parameters including variable wall slopes, waste, and

mining costs along with a range of revenue assumptions.

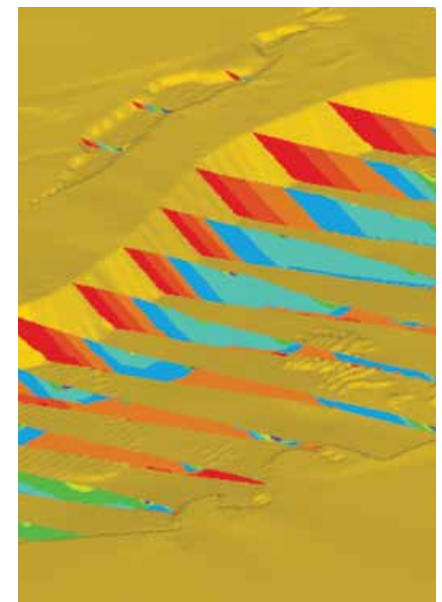
- **Reports.** Predefined and custom reports.

Additional Benefits:

- **Visualisation.** 3D images of optimal mining sequences ensure stakeholders, investors, and mining personnel understand deposit economics at a glance.
- **Reliability.** Leverages gridded seam model data already stored in Minex, eliminating errors arising from data migration while ensuring investment decisions are based on auditable geological data.
- **Agility.** Supports an unlimited number of what-if scenarios to get the most from your deposit.

Gemcom Minex provides the best geology and mine planning tools for coal and other stratified deposits, ensuring resources are evaluated accurately and mined efficiently.

PHASE	BENEFITS
Exploration	<ul style="list-style-type: none"> → Identifies initial value of deposits based on cost and revenue assumptions. → Provides data for planning targeted drilling campaigns. → Uses optimum pit shells to report initial reserves.
Scoping	<ul style="list-style-type: none"> → Identifies economic viability of deposits given target ROI, investment criteria, and market conditions.
Pre-feasibility study	<ul style="list-style-type: none"> → Improves optimal mine progression sequence based on more rigorous cost assumptions. → Enables deposit NPV calculation.
Feasibility study	<ul style="list-style-type: none"> → Depicts most viable starting position and incremental pit shells to mine.
Production	<ul style="list-style-type: none"> → Supports plan re-evaluation in response to changing conditions. → Enables impact analysis against fluctuating costs, constraints, and commodity pricing. → Provides data to meet reporting requirements tied to securities regulation.



Final optimised pit shell, with progressive increasing sale price pits shown on cross sections.

For more information email minex@gemcomsoftware.com or visit www.gemcomsoftware.com/minex.

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