



Deswik.DO

DIG OPTIMIZER

Design of optimum dig lines for open pit grade control

Deswik.DO can produce results 2% to 7% higher in profit than manual ore control interpretations. It maximizes profit at the time of mining by optimizing dig line locations that are constrained by a minimum mining width of the equipment. The dig lines are optimal from the point of view of maximizing the amount of valuable ore and minimizing the amount of waste material. The system can replace or enhance manual ore control interpretation with a precise, reproducible mathematical algorithm.

CONSTRAINED OPTIMIZATION

- » Deswik.DO designs dig lines that minimize the dollar loss associated with the dig line misclassification of ore types for a given minimum mining width.

MINIMUM MINING WIDTH

- » Deswik.DO lets you quickly evaluate various minimum mining widths and cutoff grades. This allows the selection of a dig line set that best satisfies current short-term mine plan targets while taking into account mineral continuity as mining progresses through the deposit. This is not possible with manually designed dig lines. The volume of calculations required within a few seconds are too complex for manual design.

DEPOSIT CUSTOMIZATION

- » Deswik.DO can be customized to work with any deposit without the need for writing scripts. The system has been used on sites which use cutoff grades, net smelter return, grades, contaminants and many other metrics for deciding which blocks to mine.

DIGGING DIRECTION

- » The benefits of various digging directions are also easily determined in a few minutes. The digging direction does not need to be orthogonal to the direction of the block model. Also, it is possible to have the system automatically calculate the digging direction based on the blasts location relative to the ramp.

IMMEDIATE SUMMARIES

- » Deswik.DO provides immediate reports for each dig line design as an aid to evaluate various design options. Graphical feedback is also provided with the automatically designed dig line polygons are overlaid on top of the block model.
- » Reports are also immediately generated so that options can easily be compared.