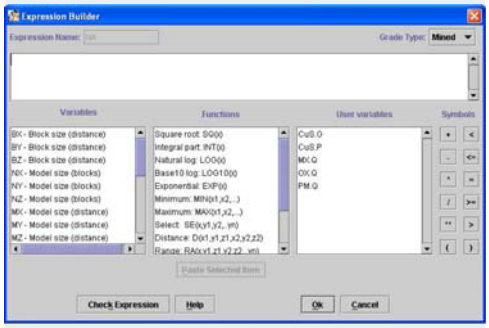
GEMCOM
Mine Production Management Solutions

WHITTLE: VALUE EXPRESSIONS

ADVANCED TECHNIQUES FOR BUILDING BETTER MINES

OVERVIEW: The Value Expressions module supports a range of advanced techniques for the creation of custom value models for pit optimisation, analysis and scheduling. You will gain more control of how value models are constructed and calculated by adding value expression functionality to your Whittle system.

Specific support for the modelling of bulk materials, such as iron ore and mineral sands, where normal parcel evaluation is difficult to perform, has also been included in the system.



To find out more about how your operation can benefit from Whittle Stock-pile and Cut-off, contact us at info@gemcomsoftware.com, or visit our web site at www.gemcomsoftware.com.

INCREASED FLEXIBILITY

Value Expressions provides Whittle users with increased flexibility on how block values are calculated. Specifically, the module permits block values to be either user defined, or based directly on values in the model file for pit optimisation, analysis and scheduling. User-defined block evaluation allows users to build expressions for costs and prices, and allows summation to be applied over parcels.

User defined block values allow the Transfer Pricing Model for combined pit and blend optimisation to be implemented, which improves project value by eliminating ore and waste discrimination problems.

ADVANCED TECHNIQUES AND BENEFITS

- Users can mirror calculation techniques that are used in other systems to rapidly validate existing, or old models and methodologies.
- Users can apply value calculation models, which are directly linked to company objectives.
- Increase project value by: implementing bulk product pricing heuristics, improving the modelling of bulk products for pit optimisation and by reducing incidents of ore/waste misclassification.

BUILDING EXPRESSIONS

Value Expressions allows the user to define an expression, or a set of expressions, in order to calculate block values for the purposes of pit optimisation.

Whittle's Expression Builder organises standard and user-defined variables and functions in a convenient and easy to use GUI that allows formulas to be quickly developed and checked. Further capabilities include the ability to nest expressions within one another, by allowing an expression to be named as a variable within another.

The Value Expressions interface provides users with the ability to simplify complex problems by breaking them down into logical subsets. Simplified problems are easier to communicate and check for errors, which saves time and adds confidence to your calculations.

ADDITIONAL FEATURES

- All processes are auditable
- Ability to repeat processes saves time
- Support for complex modelling, including support for multiple rock types, elements, difficult recoveries, element processing costs, conditional costs, selling costs, conditional prices
- Block values can be submitted with, or without mining cost
- Improves parcel evaluation for Bulk Minerals, Iron Ore and Mineral Sands

MODULAR AND SCALABLE

Value Expressions is just one of a growing range of advanced modules that can be added to the *Foundation* architecture of Whittle. This scalable approach allows users to seamlessly extend the strategic mine planning capabilities of their Whittle systems. A whole new range of mine planning possibilities is now available to mine planning professionals.

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