Mine planning involves the creation of a plan to exploit a mineral resource. Like other economic activities, the mine plan searches to exploit the resource in such a way that the alternative selected creates the highest possible value.

The main strategic and technical decisions include the selection of: the mining method, the processing route, the scale of the operation, the mining sequence and the selective cut offs.

In the mining business, mine planning is the activity that plans the exploitation of a mineral resource with the aim of maximising its intrinsic value. The amount of variables to carry out this activity and the complexity of dealing with a finite, non-renewable resource make it difficult to find an optimum solution.

One of the assumptions of this process, deeply ingrained in people’s mind, is that the mine equipment should be utilised so that mine operation cost are kept down.

The thesis and main contribution of this work is that low mine operation cost does not always lead to value creation.

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