



Capital Markets Day

November 2008

Mine cost distribution

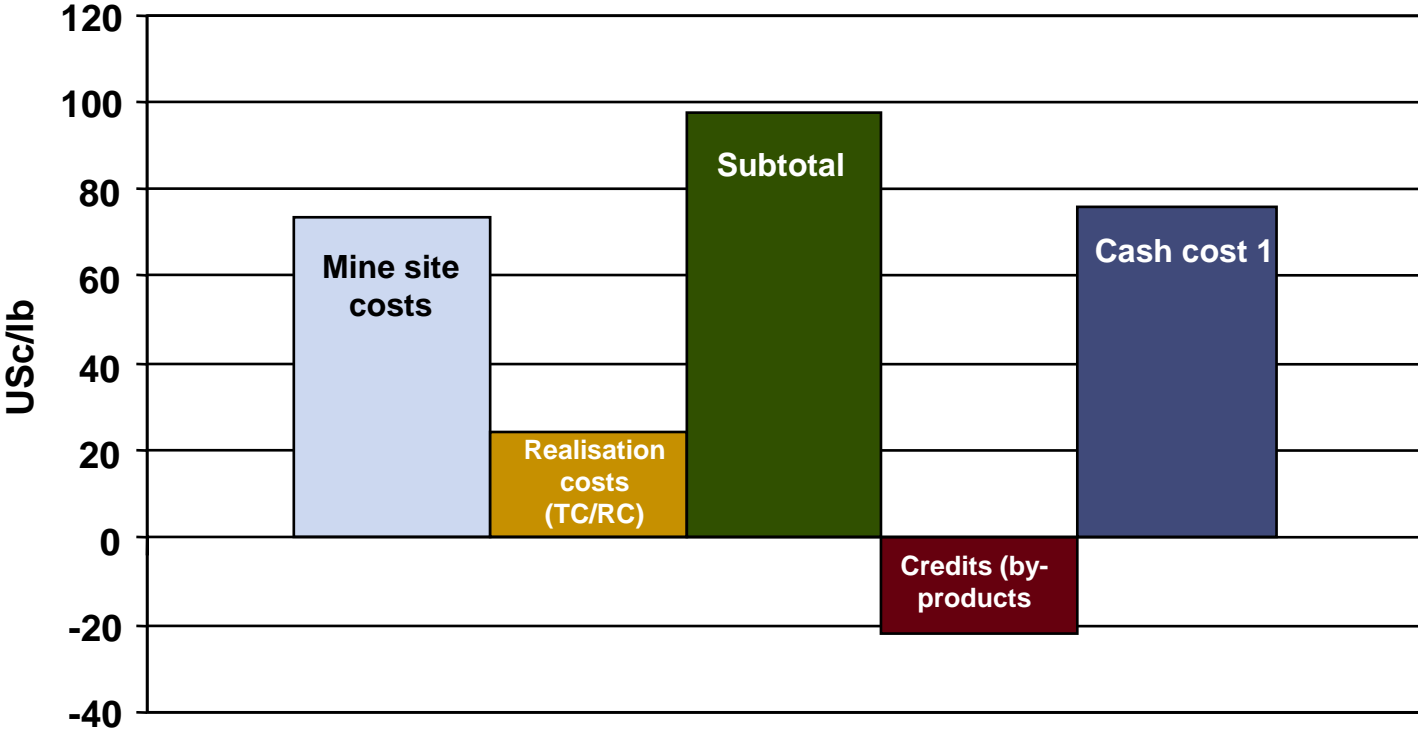
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Average copper mine cost distribution

Cash cost copper USc/lb (average)



Mine site costs etc. are calculated per lb copper payable metal.
Note: USD conversion effects.



Average mine cost distribution

- Realisation costs
 - Zinc – approx. 35% of cost volume
 - Copper – approx. 15% of cost volume

- Mine site costs
 - Cost per tonne metal (incl. currency effects)
 - Metal content (incl. mill efficiency)

- Credits, by-products
 - By-metal content (incl. mill efficiency)

Cost efficiency – realisation costs

To be ranked among the best third in the industry regarding cash cost 1.

- Realisation costs in the industry
 - Zinc – approx. 35% of cost volume
 - Copper – approx. 15% of cost volume

- Boliden mines Strategy
 - Through active cooperation with BA Market and BA Smelters

Cost efficiency – mine site costs

To be ranked among the best third in the industry regarding cash cost 1.

- Mine site costs
 - Cost per tonne metal (incl. currency effects)
 - Metal content (incl. mill efficiency)

- Boliden mines Strategy
 - Mine and concentrator design
 - Productivity – material consumption
 - Mill efficiency

Cost efficiency – mine site costs

To be ranked among the best third in the industry regarding cash cost 1.

- Credits, by-products
 - By-metal content (incl. mill efficiency)

- Boliden mines Strategy
 - Mill efficiency
 - Market development

Production in Focus – common production philosophy implemented

A combination of:

Theory of Constraints

- “Unlimited demand”
- Profit through increasing sales
- Protecting the throughput by adequate buffer capacity in front of the bottleneck
- Accepts that all processes has an inherent variability

■ Lean production

- Limited demand
- Profit through lowering costs
- Reduction of “waste” (including buffer capacity ahead of bottleneck!)
- Assumes stable conditions (grades, operation times, availability, mill throughput)

Production in Focus – continuous improvement and performance management

- Organisation and performance management
 - Multifunctional teams across shifts
 - Setting targets and visualising team performance
 - Defined roles and operating procedures for each person
 - Rewarding team performance (not individual skills or business area financial results)

- Improvements
 - At the source, involvement (team)
 - Scientific methods, coach
 - Adapted to “the mining environment”

Production in Focus – the goals

- Continuous improvement and performance management
 - Team organisation with defined roles and targets
 - Tracking and rewarding team performance not individual skills
 - Technical support available to team leader on demand
- Reduced unit costs
 - Fixed cost dilution from increased throughput
 - Increased total productivity (of labour, capital and energy)
 - Elimination of waste
- Stable, predictive production
 - Metal production
 - Tonnes and grades as forecasted