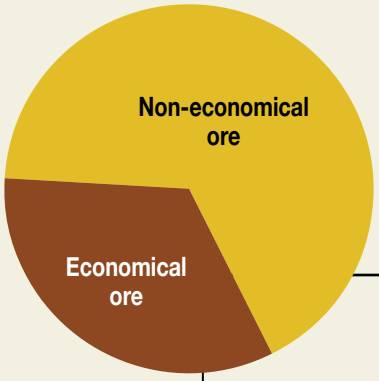
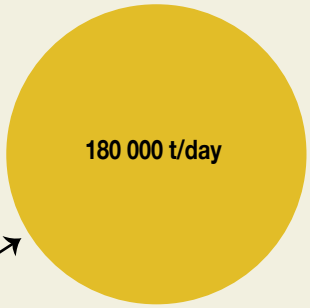
An average day in a large-sized copper mine



270 000 tonnes per day
About 270 000 tonnes of rock per day are dug out of the mine and sorted into economical and non-economical fractions.

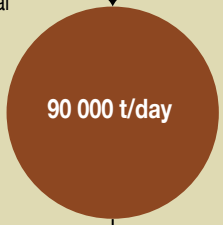
The non-economical fraction (about 180 000 tonnes are classified as waste rock) is disposed of on-site.

Waste rock



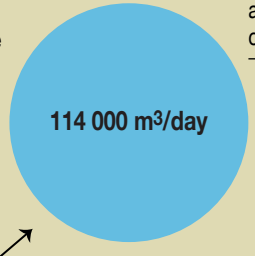
The processing of the economical fraction

The economical fraction of the ore is sent for processing.



The processing of 90 000 tonnes of ore requires around 114 000 m^3 of water.

Water use



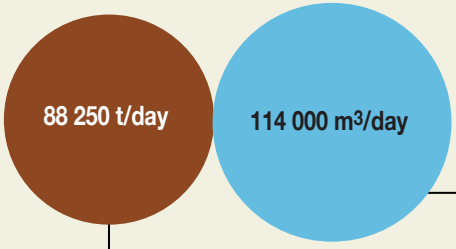
Mixing 90 000 tonnes of ore with 114 000 tonnes of water gives around 1 750 tonnes of concentrate

1 750 t/day
The concentrate is now ready for refining into **metal.** This produces a waste slag.

20 t/day
20 tonnes of liquid remains with the concentrate. Some of this is recycled after dewatering of concentrate.

After processing, the **tailings** remain as a mixture of solid and liquid

Solid and liquid parts of tailings



A portion of the water may be reused in the processing of new ore.

Slurry tailings



Approx. 200 000 tonnes of slurry tailings are pumped into large tailings dams everyday, year-round often for 20+ years and left in situ when the mine closes.

t = Metric tons or tonnes

GRID ARENDAL

Source: Numbers provided by Mudd, 2015