

SHAREATE



Salobo - Brazil

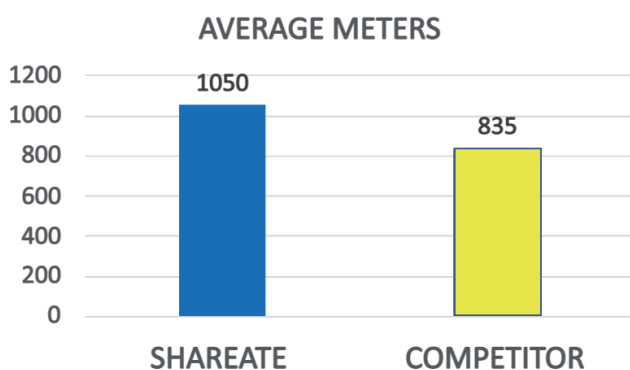


Mine Description

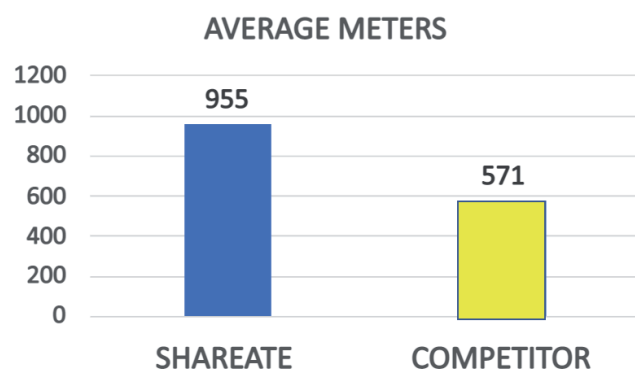
The Salobo mine is located in Marabá, in the southeast of Pará, Brazil, and went into operation in November 2012. The venture has an estimated nominal capacity of 100,000 tons of concentrated copper per year. With the Salobo II mine expanding this operation, the enterprise's production capacity will double to 200,000 tons. Salobo involves the integrated operation of open-pit mining, processing, transportation and shipment.

Rotary Drill Bit Performance (Controlled Bit Trials - 12.1/4" & 13.3/4")

Average performances from rotary bit trials at Vale's Salobo Mine, are presented, comparing Shareate's 12.1/4" and 13.3/4" sealed bearing bits with a leading brand of air bits:



Shareate: 13.3/4" SGA635R IADC 635
Competitor: 13.3/4" Air Bit



Shareate: 12.1/4" SGA645R IADC 645
Competitor : 12.1/4" Air Bit

**Shareate's sealed bearing bits outperform standard air bits.
More meters per bit and the lowest TDC.
40% share at Vale's Sossego/Salobo mines.**