

AITIK COPPER MINE, GÄLLIVARE, SWEDEN

**CASE STUDY** 

# Seven Alimak elevators for Boliden's Aitik mine expansion

Access anytime, anywhere

**ALIMAK** 

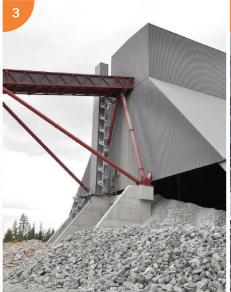




In-pit Crusher Elevator: ALIMAK SE 1000 Capacity: 1000 kg Lifting height: 24 m



Surface Crusher Elevator: ALIMAK SE 1000 Capacity: 1000 kg Lifting height: 24 m



Ore stockpile Elevator: ALIMAK SE 1000 Capacity: 1000 kg Lifting height: 48 m



Grinding
Elevator: ALIMAK S
Capacity: 1800 kg
Lifting height: 18 m





E 1800 FC



Flotation Elevator: ALIMAK SE 1000 FC Capacity: 1000 kg Lifting height: 20 m



Flotation Elevator: ALIMAK SE 400 FC Capacity: 400 kg Lifting height: 14 m



De-watering Elevator: ALIMAK SE 1000 FC Capacity: 1000 kg Lifting height: 18 m

### AITIK COPPER MINE, GÄLLIVARE, SWEDEN

## Seven Alimak elevators for Boliden's Aitik mine expansion

Seven Alimak rack and pinion elevators improve access at Boliden's Aitik mine expansion. The Aitik copper mine is Europe's largest open pit copper mine.

Alimak provided seven Alimak rack and pinion - driven elevators for Boliden's Aitik copper mine, located near Gällivare in northern Sweden. The elevators are a part of Boliden's total investment of SEK 6 billion (about \$940 million) in this open pit mine, which includes a new modern concentrating plant that will double the production capacity, from 18 million tons to 36 million tons of ore annually.

The Alimak elevators have been installed to facilitate the maintenance and inspection of different applications such as crushing, ore stockpile, grinding, flotation and de-watering. The working environment in the mine creates high demand on the elevators durability and reliability. The Alimak elevators accommodate lifting heights between 14 meters and 48 meters and payload capacities between 400 kg to 1,800 kg. They are equipped with the modern ALC-II microprocessor-based control system, emergency phone, and overload sensing device.

#### **REMOTE MONITORING**

All elevators are equipped with Alimaks' online A3 remote monitoring system, which means the elevators can operate 24 hours a day fully monitored with any faults being transmitted instantly for speedy correction and to minimize downtime.

#### **EXPERIENCE IN THE MINING INDUSTRY**

The Alimak rack and pinion elevator is the perfect solution for both underground and surface mining industry applications, such as pelletising plants, smelters, concentrators, and other ore processing plants. Hundreds of Alimak elevators have been delivered to a variety of mine applications around the world, including the Aitik copper mine. The deepest Alimak elevator goes 640 meters below ground at the Grasberg mine, Irian Jaya in Indonesia. It is also the highest situated Alimak elevator at an altitude of 4,100

meters. The deepest situated Alimak elevator is for the Sudbury Neutrino Observatory in Canada, about 2,000 meters below ground level.



One out of the seven Alimak rack and pinion elevators working at the Aitik copper mine.

Location:	Aitik copper mine, Gällivare, Sweder
Project:	Mine expansion project Aitik 36
Installation year:	2009
Application:	New concentrating plant
Elevator type:	Alimak SE
No. of elevators:	7
Capacity:	Varies between 400 kg and 1,800 kg
Lifting height:	Varies between 14 m and 48 m

### www.alimak.com

