

CASE STUDY

World's highest situated and deepest Alimak elevators at the world's largest gold mine

The elevators at the Grasberg mine, Indonesia beats several records. They are both the highest situated and the deepest Alimak elevators ever installed. The Grasberg mine is the world's largest gold mine and the highest situated mine in the world.

The Freeport-owned Grasberg mine in Papua province, Indonesia, is the world's largest gold mine, the third largest copper mine and the highest mine in the world. The workings include a very large open pit mine, an underground mine and four concentrators. The open pit mine – which forms a mile-wide crater at the surface – is a high-volume, low-cost operation, producing more than 67 million tons of ore. When they needed to install an inspection shaft down to a level of 640 meters below the surface, the best solution they could find was the Alimak rack and pinion elevator. Installed in 1997, the elevators has operated faultless despite the extreme conditions.

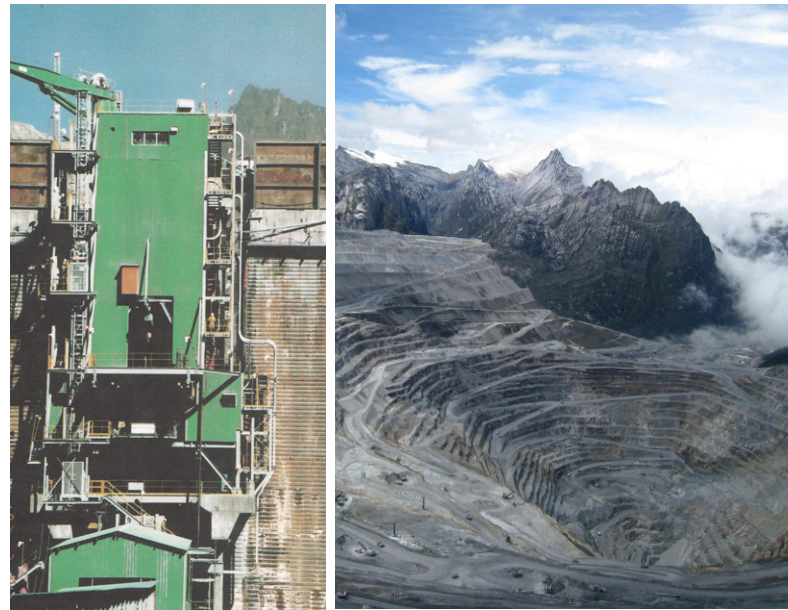
The two Alimak U-600 elevators give access for service and maintenance and emergency access in a vertical inspection raise at a lifting height of 640 m each. These two elevators are both the highest situated – at an altitude of about 4,200 m above sea level – and the deepest with 640 m lifting height.

Two additional Alimak U-600 elevators was installed to give the operators access to the two crusher stations with 27 m lifting height. Besides the four Alimak elevators, five Champion US elevators have been installed at the mine operations mobile crushers, in shafts and towers.

EXPERIENCED SUPPLIER

Alimak Hek has considerable experience with installations within the mining industry both underground and surface mining applications. Alimak elevators can be found on pelletising plants, smelters, concentrators, and other ore processing plants, worldwide.

Ideally suited for operation in even the most extreme environments, the durable nature of the Alimak elevators has made it the perfect access solution for the most demanding conditions. From the freezing and exposed conditions of the Antarctic and Iceland, to the extreme heat of the Australian desert, Alimak elevators are built to last in world's toughest environments.



At an altitude of about 4,200 meters above sea level, this is the highest Alimak elevators ever installed. With the impressive lifting height of 640 meters they are also the deepest.

ELEVATOR DETAILS

Location:	Grasberg Mine, Irian Jaya, Indonesia
Altitude:	~4,200 m
Applications:	Mine shaft and crushers
Elevator type:	Rack and pinion
Elevator model:	ALIMAK U-600, US 900, 1400 & 2200
No. of elevators:	9
Capacity:	Varies between 600 kg and 2,200 kg
Lifting height:	Varies between 27 m to 640 m