

## CASE STUDY

# A robust rack and pinion elevator replacement for a tough cement plant application

Alimak's rugged rack and pinion elevator has earned a strong reputation in the cement industry over many years of successful installations. This level of trust can be seen in action at the Omya cement plant in Avenza, Italy.

They have been impressed by the quality and performance of a previous Alimak industrial elevator installed at the plant in 1991, along with the excellent maintenance record. Omya therefore contacted Alimak when the time came to replace the existing elevator and presented some very specific requirements and parameters.

The cement plant environment presents some of the toughest working conditions in any industry and therefore calls for an equally robust industrial elevator capable of withstanding a wide range of challenges. Cement plants unavoidably mean an environment subject to dust issues along with high levels of heat and humidity. These conditions can place strain on workers climbing up and down, as well as any equipment which has not been made to high standards, impacting productivity and safety. You can rest assured that all of Alimak's elevators will stand the test of time, with Alimak's reputation of industry innovation and high quality manufacturing, all vertical access equipment has been tried and tested in the world's most demanding industrial settings. Alimak's shaft-less elevators cuts out the risk of dust particle build up and the traction problems associated with standard elevator operation.



Omya cement plant, Avenza, Italy

### ELEVATOR DETAILS

Location:	Omya cement plant, Avenza (MS), Italy
Elevator type:	Alimak SE 2000 FC
Capacity:	2000kg
Elevator car size:	(W x L x H) 1.04 m x 1.43 m x 2.17 m
Speed:	0.6 m/s
Lifting height:	43.5m
No. of landings:	7

Omya presented a challenging brief which required an industrial elevator with a payload capacity of 2,000 kg. In addition, the car dimensions needed to be large enough to transport pallets through a single door for entry and exit located on the opposite side to the elevator mast. The project was further complicated by the very limited space available and predesignated fixing points of the elevators mast tower tie-ins, which could not be adjusted.

After careful analysis and development work by our expert mechanical engineers, Alimak have been able to produce a specialised rack and pinion elevator for this project which meets the unique specifications while delivering all the benefits of our wide range of robust industrial elevator products.

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