

CASE STUDY

A twin car Alimak industrial elevator maximises productivity at a Tongchuan cement plant

According to Global Cement Magazine, Tangshan Jidong Cement Co., Ltd. has been ranked as the world's sixth-largest cement manufacturer.

The busy cement production facility at Tongchuan will benefit significantly from a ready-to-use industrial elevator based on Alimak's tried and tested rack and pinion drive technology.

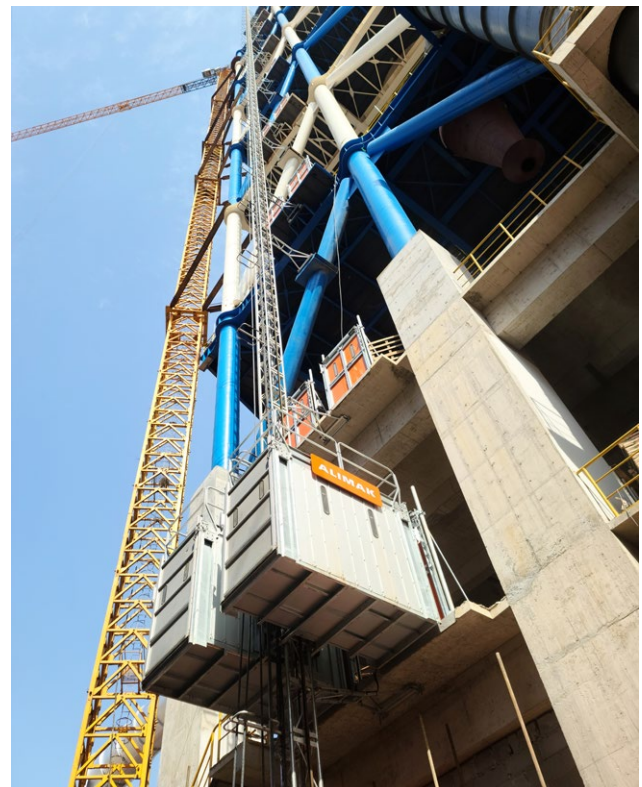
As in many varied industrial applications, the vertical access solution for the plant's important preheater tower was required to meet several specific transport requirements for the demanding industrial application. The solution delivered was made possible through Alimak's innovative rack and pinion drive system located above the elevator car itself. As a result, there was no need for a shaft or a separate machine room, a critical feature due to the limited space available. The reliable and robust design engineered by Alimak is also uniquely well-suited to harsh industrial environments, such as cement production while also offering ease of maintenance and lower operating costs throughout its life.

A twin car, Alimak SL-H industrial elevator with a weight capacity of 2,000kg for each car maximizes the transportation capacity available for the preheater tower, reaching a height of 137 meters. The dual car design also represents significant cost savings compared to two traction elevator units.

In this instance, a pre-configured, 'ready to use' industrial elevator system provided by Alimak was the optimal solution, as significant challenges regarding the timescale and the limited area for installation were at the forefront of the project. In addition, the installation was also required to take place during the rainy season, adding further challenges.

A tight schedule was met to avoid undue disruption to the operations of the cement plant. With the tower crane only available for a short period, the elevator was used to complete the build of the mast section, tie-ins, and each of the ten landing areas.

As a result, three expert technicians completed the installation at a safe yet efficient pace in 35 days.



Tongchuan, Shanxi, China

ELEVATOR DETAILS

Location:	Tongchuan, Shanxi, China
Application type:	Cement preheater tower
Elevator model:	SL-H 2000Twin
No. of elevators:	1 Twin provided
Payload capacity:	2,000 kg / car
Elevator car size: (W x L x H)	1,400 mm x 3,000 mm x 2,130 mm
Speed:	0.9 m/s
Lifting height:	137 m
No. of landings:	10
Installation year:	2021

www.alimak.com

ALIMAK