

CASE STUDY

Alimak goods & passenger elevator serves the chemical industry

An external Alimak freight elevator with 2,000 kg payload capacity has been installed at the Dormagen plant of Bayer AG, Germany, one of the world's biggest chemical groups.

Bayer bought their first Alimak rack and pinion elevators for permanent installation on a chimney at their main site in Leverkusen. Since then Alimak has delivered a number of permanent elevators to the company which operates a total of five sites in Germany. The Dormagen Chemical Park near Düsseldorf occupies six square kilometers of land and no less than 6,800 people are employed there.

For the new "B655" building at Dormagen the plant management chose a goods and passenger elevator from the Alimak range of rack and pinion elevators. The elevator is needed to transport bags with plastic granules as well as personnel. The staff work in three shifts and the elevator is used an average of 5–10 times per shift.

The elevator travels a total of 14.5 meters in an open steel structure. Apart from the base station there are four upper access levels to the adjacent building. The landing levels have manually operated double-leaf doors which are mechanically and electrically interlocked.

As the Alimak rack and pinion elevator does not need any elevator shaft, no such provisions had to be made which saved costs and simplified the planning process. The Alimak rack and pinion elevator system offers a wide range of car sizes for lifting capacities between 300 kg and 7,000 kg. The car that Bayer AG chose to use in Dormagen is 1.43 m wide x 2.99 m deep and operates with variable frequency drive, the travelling speed being 0.6 meters per second.



Bayer AG chemical plant, Dormagen, Germany

ELEVATOR DETAILS

Location:	Bayer AG chemical plant, Dormagen, Germany
Application:	Steel tower
Elevator type:	Rack and Pinion
Elevator model:	Alimak GP 20 FC
Capacity:	2,000 kg
Elevator car size:	1.43 m x 2.99 m (W x L)
Speed:	0.6 m/s
No. of landings:	5
Lifting height:	29 m