ROOKERY SOUTH PIT, ENERGY RECOVERY FACILITY

CASE STUDY

Alimak industrial elevator installed in Rookery South Energy Recovery Facility

An Alimak industrial elevator has been installed at Rookery South Energy Recovery Facility (ERF). The elevator installation was completed in Janaury 2022, with the ERF due to be fully operational by the first quarter of 2022, in a project being led by Hitachi Zosen Inova. The facility will offer a sustainable alternative to landfill by generating clean electricity from waste.

Having provided industrial elevators on three previous projects, Alimak were HZI's preferred supplier, working closely with them to produce a detailed specification to fulfil the project needs. Alimak also worked with the project architect enabling the integration of our drawings early in the design phase.

The Alimak SE 2000 FC rack and pinion elevator measures 2.60m x 1.56m, with a capacity of 2,000kg. It will travel 38.8m and will be used to transport heavy maintenance equipment and spare parts to the boiler hall.

Maintenance support, provided by Alimak Service, will be provided to Covanta, who are the plant operators.

To ensure the project kept within budget, traditional mechanically linked elevator doors were provided, instead of the new wireless communication type. This meant that Alimak's engineers had to design a stabilisation system to ensure the elevator doors and landing doors remained connected to when opening and closing. this was achieved by using a third guide (T-guide) rail, which ran the full height of the installation to allow the correct interface of the doors and maintain a safe and reliable operation.

The most efficient way to install the elevator was to install the complete car in one piece over the top of the elevator shaft. Doing this allowed the elevator to be factory tested. being shipped in one piece meant it was in a fully operational condition when installed and power energised for the first time.



Location:	Rookery South Pit, Bedfordshire, UK
Applications:	Energy From Waste
Elevator type:	Rack and pinion
Elevator model:	ALIMAK SE 2000 FC
Capacity:	2,000 kg
Elevator car size:	2.60 m x 1.56 m (W x L)
	38.8 m
No. of landings:	10

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