

WASTE-TO-ENERGY PLANT

Likeng II

Guangzhou, China



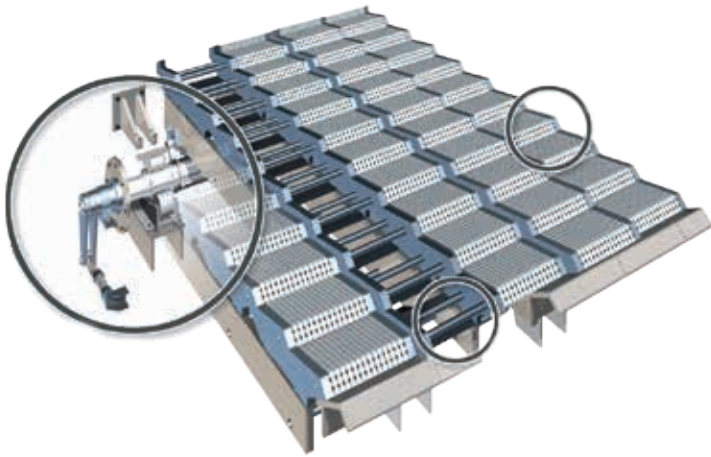
Babcock & Wilcox Vølund's license partner Grantop (Guangzhou Environment Protection Investment Co. Ltd.) has completed the Likeng II waste-to-energy plant in Guangzhou, China. The plant is one of the largest Chinese waste-to-energy plants and it is specifically designed for Chinese waste. This includes the

waste characteristics with high moisture and low calorific value.

The Likeng II plant has 3 lines of 750 tonnes waste capacity per day each, based on B&W Vølund engineering design and key components.

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The Vølund grate

The Babcock & Wilcox Vølund air-cooled grate is a longitudinal beam grate— a thoroughly proven design, highly suitable for continuous high-efficiency combustion of mixed household and bulk industrial waste with minimal emission of harmful substances and maximum energy recovery.

The beam grate is of a robust design, specifically developed for heavy-duty and high-temperature operation with a high availability and operational reliability thus ensuring minimal shutdown for routine maintenance and cleaning.

- Minimum emission of harmful substances and maximum energy recovery.
- High availability and operational reliability with minimal downtime.
- Perfect air distribution and minimal power consumption.
- Combustion of all types of waste.
- High thermal efficiency.
- Handling of unsorted waste.
- Low total organic carbon in ash content.
- Possibility of biomass co-firing.

SCOPE OF SUPPLY

Babcock and Wilcox Vølund has supplied:

- Basic design of boiler including technical assistance for construction and commissioning. Furthermore, a review of boiler detail design a review of boiler detail design and functional description for DCS.
- Air-cooled Vølund grate.
- Waste charging system with a feeding damper.
- Feeding chute and feeding pusher.
- Slag pusher.
- Construction and commissioning advisors.



Grate blok

Data plant design		
Process parameters	Values	Units
Waste capacity	3 x 31.3	t/h
Heat value, lower	6.8	MJ/kg
Steam output	3 x 63	t/h
Steam temperature	400	°C
Steam pressure	40	bar
Gross electric output	2 x 25	MW
Feed water temperature	130	°C