



## EKSJÖ ENERGI AB, SWEDEN

### New waste-to-energy plant

Eksjö Energi AB supplies district heating to the municipality of Eksjö. Since 1979 waste has been used as part of the fuel. For this purpose two boiler plants with fluidised beds for a total of 17.5 WM have been used. The waste was processed and pelleted into RDF. The remaining heat requirement was based on wood chips and oil. An increasing heat requirement has made an extension of the plant with yet another unit necessary. In order to avoid the costly pre-treatment of the waste, it has been decided to build a traditional waste-to-energy plant and let the old fluidised bed boilers continue to burn wood chips. This made it possible for Babcock & Wilcox Vølund ApS in February 2004 to sign a contract with Eksjö Energi AB for the delivery of a waste-to-energy plant for commissioning in October 2005. Buildings, turbine, electrical and DCS (decentralized control system), etc., will be delivered by ETK (Energitekniska Konstruktioner AB).

#### BWV's scope of supply

The supply includes a complete incineration furnace with feed hopper, feed grate, four grate sections (of which two are water-cooled) for ignition and combustion, hydraulic system, slag hopper, complete air system for combustion air, auxiliary

burners, fireproof refractory, complete steam boiler with convection part and economiser. The boiler is provided with sootblowers for cleaning and a complete SNCR-system for reduction of NOx. Flue gas cleaning in the form of a semi-dry system, flue gas fan and chimney are included in the supply as well as measuring equipment for miscellaneous environmental measurements.

#### Plant data

All data related to MCR.

Capacity, domestic waste	18 MW at 9.5 MJ/kg
Fuel flow, domestic waste	7.75 t/h at 9.5 MJ/kg
Capacity, biofuel	18 MW at 10-55% moisture
Boiler output, steam	28,27 t/h
Steam temperature	217 °C
Steam pressure	15 bar g
Boiler efficiency, guarantee	88,5 %

**B&W** babcock & wilcox vølund

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