



Picture: Berg Arkitektkontor AB

## GÄRSTADVERKET: LINKÖPING, SWEDEN

### New incineration plant

#### Plant description

In 2002 Tekniska Verken in Linköping decided to build a new waste-to-energy line at Gärstadverket. In October 2002 they signed contracts with separate suppliers for the building contract, the incinerator/boiler contract and the flue gas cleaning contract. The turbine supplier has not yet been chosen.

Babcock & Wilcox Vølund was awarded the contract for an incinerator/boiler line with a capacity of 24 t/h waste at 11.0 MJ/kg, corresponding to approx. 200,000 t/year. The boiler generates 90.4 t/h steam at 40 bar, 400°C. The supply includes incinerator/boiler with economiser, waste crane, crusher for crushing large objects, ash/slag system, DeNOx plant (ammonium dosing in the boiler first pass) as well as electrical and DCS systems.

The plant is almost identical to a plant recently built by BWV in Esbjerg, Denmark. The economiser is of vertical design in order to reduce building volume.

The building contractor is responsible for the coordination of the contracts until the start of the cold testing of the plant. Subsequently, BWV will take over the coordination.

The new plant is scheduled for commissioning in October 2004 and for final take-over on 1 January 2005. The construction work is scheduled to commence in July 2003.

With the new line the total capacity of Gärstadverket will be approx. 350,000 tons of waste per year, mainly consisting of unsorted domestic waste and industrial waste. Furthermore, the plant will be capable of burning sludge from water purifying plants as well as animal waste, car fluff, wood chips, etc.

The new waste-to-energy line will generate both electricity and district heating. The district heating company in Linköping supplies 90% of the city with heat. The electricity will be fed into the main grid. The turbine will provide an electricity output of 20 MW.

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