

2007-08-10

**Renova orders flue gas cleaning for a better environment. [Up ▲](#)**

Götaverken Miljö has been chosen as supplier for enhanced cleaning of the flue gases from Renova's waste incineration at Sävenäs, Gothenburg, Sweden. The order was received in keen international competition.

- The order is worth SEK 85 million including options and it underpins our position as Scandinavia's leading supplier of highly effective, wet flue gas cleaning for waste incineration, says Lennart Gustafsson, managing director of Götaverken Miljö.

The delivery means that Renova can reduce its already low emissions of above all sulphur in the flue gases from the plant to levels that are clearly below existing emission requirements. By this improved cleaning, Renova can also increase the heat production from the waste incineration. This energy recovered replaces other heat production and therefore the emissions from other sources in the region are reduced.

The order includes multiple stage scrubbers for separation of hydrochloric acid, heavy metals, sulphur dioxide and dioxins and will gradually replace existing scrubber stages on present three incineration lines. The separated sulphur is transformed to gypsum in a separate process giving a safe residual product easy to handle. The dioxin removal takes place with the thoroughly tested ADIOX<sup>®</sup> technology that finally removes the dioxin from the ecocycle.

- It is very satisfying that we as local supplier again have proved our ability to compete internationally and that we can keep modern and strong references on our domestic market when we now increase our efforts on exporting environmental technology, Lennart Gustafsson concludes.

2007-03-26

**Sonderborg Kraftvarmeværk increases the energy recovery. [Up ▲](#)**

Götaverken Miljö has signed a contract to build a plant for energy recovery from the flue gas at Sonderborg Kraftvarmeværk in southern Denmark. This is an investment for the environment and gives a good profitability for the customer with a very short pay-back time. The plant can recover up to 6 MW of heat, corresponding to the need of 6000 houses. The recovered energy replaces existing heat production (with a negative environmental impact) and will result in reduced emissions of greenhouse gases. The installation will also give reduced emissions to air of a.o. dioxins, heavy metals and acids to levels well below EU directives. The energy recovery also produces a hot condensate water, that after cleaning can be re-used in the existing process. The consumption of clean hot water will therefore be reduced, resulting in less environmental impact and lower operational costs.

The plant mainly consists of a condensing scrubber with ADIOX<sup>®</sup> tower packings and a state-of-the-art condensate cleaning system based on membrane technology. The ADIOX<sup>®</sup> material is used to minimize the emissions of dioxin.

- The order is significant and shows that we have competitive products and high competence in the organisation. The order also confirms our leading market position as regards condensing systems in Scandinavia and will strengthen our efforts on exportation, says Lennart Gustafsson, managing director of Götaverken Miljö.

The contract is worth approximately 14 million SEK and the plant is scheduled to be in full operation at the end of the year.

2007-02-19

**In the last two months we have completed four deliveries. [Up ▲](#)**

One **absorption heat pump** of 5 MW was handed over to Alstom Power Sweden on December 7, 2006. The delivery is a part of the flue gas cleaning equipment that Alstom has supplied to Jönköping Energi for the new waste incineration plant at KVV Torsvik.

By means of the heat pump, the flue gas from the incineration process is cooled to approx. 35°C in a flue gas condenser and the gained energy is transferred into the district heating system. The energy recovery is maximized by using the heat pump. Except the economic advantages, the plant reduces the emissions of a.o. carbon dioxide.



On December 13, 2006, a **dry ADIOX<sup>®</sup> dioxin absorber** was taken over by the customer, Tekniska Verken in Linköping, Sweden. This was our very first delivery of an Adiox-absorber for **dry** dioxin removal. The installation minimises the dioxin emissions from three incineration lines with a total of 186.000 Nm<sup>3</sup>/h of flue gas. The equipment with a dry absorber

offers several advantages - simple installation and a very high availability. At the same time it is economically very competitive.

In the autumn of 2006 an **absorption chiller** of 280 kW was installed at Tekniska Verken in Linköping. The chiller is placed in the head office building of Tekniska Verken and the delivery is our first one of a machine providing local cooling in a building. The absorption chiller is driven by heat from the district heating system during the summer season (green energy) and by free cooling in wintertime. The absorption chiller was taken over by the customer on January 26, 2007, and the machine has at test run shown better results than expected.



A little less than a year ago we signed a contract with I/S Vestforbrænding in Copenhagen for a **flue gas condensing** and on February 8, 2007, the taking-over by the customer place. The delivery includes a condensing scrubber with ADIOX<sup>®</sup> material (to prevent the memory effect) and two absorption heat pumps to raise the district heating production incineration line No 5. The power output is increased by nearly 18 MW, corresponding to the power supply to 15.000 households. Also this delivery is a good environmental investment - the flue gas condensing equipment replaces heat production and will not cause additional emissions from



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