

## Tranter's Heat Exchangers in Gävle Hamn's Green Initiative for District Heating

Gävle Hamn has a strategically important location just 170 km from Stockholm and a catchment area that extends from Uppland and Dalarna northwards. Among other things, Gävle Hamn has, for some time, been supplying Arlanda Airport with all its aviation fuel directly by train. One train replaces just over 30 tank trucks, which previously transported the fuel through Stockholm up to Arlanda. Gävle Hamn has total storage capacity of 950,000 cubic metres in around 140 tanks.



The large oil and chemical tanks in the port have previously been heated with fossil fuel in the form of oil.

This relatively expensive method of heating is now being replaced with green district heating.

The district heating specialist Palmat System AB chose Tranter's Swedish-made plate heat exchangers for the order it received from Gävle

Rörteam AB, which is installing the district heating in Gävle Hamn.

– Tranter represents cutting edge technical knowhow. Combined with their fast, reliable deliveries, this is a decisive competitive advantage in our customers' eyes, says Per-Arne Tönners of Palmat System AB in Stockholm.

### **Just over 3,000 cubic metres of oil replaced with district heating.**

A round figure of 3,300 cubic metres of oil is now being replaced with district heating that is conveyed to the port area via a submarine pipe just over one kilometre long beneath Gävlebukten. 3,300 cubic metres of oil is roughly equivalent to what 165 normal-sized houses in Sweden consume in – one year...

The first stage of the installation is expected to be ready in summer 2010. Almer Oil & Chemical Storage AB is one of the oil companies in Gävle Hamn that is being connected to the new district heating pipe.



– We have six oil-fired boilers that are used in part to heat oil stored in 12 large tanks. The oil and chemicals stored require a temperature of between 40°C and 70°C. Otherwise, the products stored solidify, crystallise or paraffinise. In the severe winter we have just had, we probably burned between 300 and 400 cubic metres of oil to heat the products we

store here,” says Lars Almer,

Terminal Manager at Almer Oil’s facility in Gävle Hamn.

– When we replace oil with district heating, we naturally

reduce our direct emissions and thus also our impact on the environment.

**Lower power consumption and short repayment period are additional advantages.**

Almer Oil also finds that Tranter’s plate heat exchangers are much more energy-efficient than the old tubular heat exchangers. In some cases, the power consumption fell from 22 kW to 4.4 kW just by replacing the exchangers and circulation pump. An additional advantage is the short payoff time,” says Lars Almer of Almer Oil.

The equipment from Tranter consists of 21 plate heat exchangers of various sizes with gaskets. They are placed in containers with pumps and controls at each storage tank.

