



Mammoth District Cooling Scheme from Tranter

Tranter International AB has demonstrated its experience in the field of district cooling projects with the design and delivery of seven impressively large plate heat exchangers (PHE) with a physical height of around 5 meters each, and total cooling effect of 84 MW. The units are currently being delivered to a project Fortum is carrying out in downtown Stockholm.

When complete in June 2009 the installation will help to remove excess heat from vital IT facilities at a number of commercial buildings and supply district cooling to residential properties in the Swedish capital.

The scheme design is highly efficient because the heat

exchangers achieve their purpose in one pass thanks to their unusually high thermal length. The primary coolant is seawater is obtained from Värtan – the strait that separates the island of Lidingö from mainland Stockholm - and the entire installation is housed in a 70000 cubic metre cavern which has been excavated from the hillside.

Although part of a tried and tested range, the units are among the largest of their kind that Tranter has delivered to date and possibly among the largest units built in the world. It took the heat exchange specialist around two months to tailor and finalise the unique product design. “Tranter was awarded the order because it had the best technical solution and good lead times,” said Fortum project manager Jan Green. “On top of that it had all the right references which gave us confidence in its ability to see it through.”



District cooling is becoming big business around the globe both for reasons of comfort and for essential all year round cooling of facilities such as computers and other equipment, office and meeting areas. Increasingly it is being recognized that traditional cooling methods are energy intensive, can leak environmentally harmful substances and also require the siting of noisy equipment

at rooftop levels. At current growth rates traditional cooling would also require construction of more power generation facilities which is unacceptable to many governments.

Fortum is a leading energy company focusing on the Nordic countries, Russia and the Baltic Rim area with activities that cover the generation, distribution and sale of electricity and heat and the operation and maintenance of power plants.



GASKETED PHE	
Temperatur	-40°C up to +180°C
Pressure	10 bar up to 25 bar