Energy-efficient Cooling System for Musikkens Hus (House of Music)

DESMI has delivered and installed highly efficient pumps, pipes and wells for intake of water from the fiord for the cooling system of Musikkens Hus.

JOB RAPPORT

Musikkens Hus is known as the musical gathering point of Northern Denmark and covers more than 20,000 m^2 distributed on nine storeys and among other facilities it hosts four concert halls, five stages, a restaurant, and educational and administrative facilities.

For cooling of the impressive building, DESMI was chosen to supply and install pumps and wells for the handling of the water intake from the fiord.

As part of the project, an intake well was mounted at quayside and connected to a pump well provided with two highly efficient centrifugal pumps.

Lars Nørgaard, Operations Manager at Musikkens Hus

About delivery and co-operation with DESMI, Lars Nørgaard, Operations Manager at Musikkens Hus, states:

"It has been a pleasure to work with a supplier who is capable of independent action, so that at Musikkens Hus we do not have to spend a lot of time on ordinary, programmed maintenance. In addition, we saw DESMI as being solution-oriented on our behalf".

The pumps are part of the DESMI NSLV centrifugal pump series which are characterised by:

- High efficiency
- Low NPSH values
- Easy installation
- Minimal need for maintenance

The pumps are placed in a poly-ethylen (PE) well, and the regular adjustment of the pump capacity is ensured by energy-efficient frequency converters installed in the central cooling system.

Musikkens Hus has two different roles. On the one hand it is a concert hall whose main task is to offer the best musical experience to the audience. On the other hand, Musikkens Hus acts as landlord and co-operating partner for the residents. By gathering concerts, education, research, libraries, restaurant, art, and architecture in the house, all residents get an opportunity to enter into dynamic co-operation and thus create a house that is buzzing with life and sound.

From www.musikkenshus.dk

Energy-efficient Cooling System for Musikkens Hus

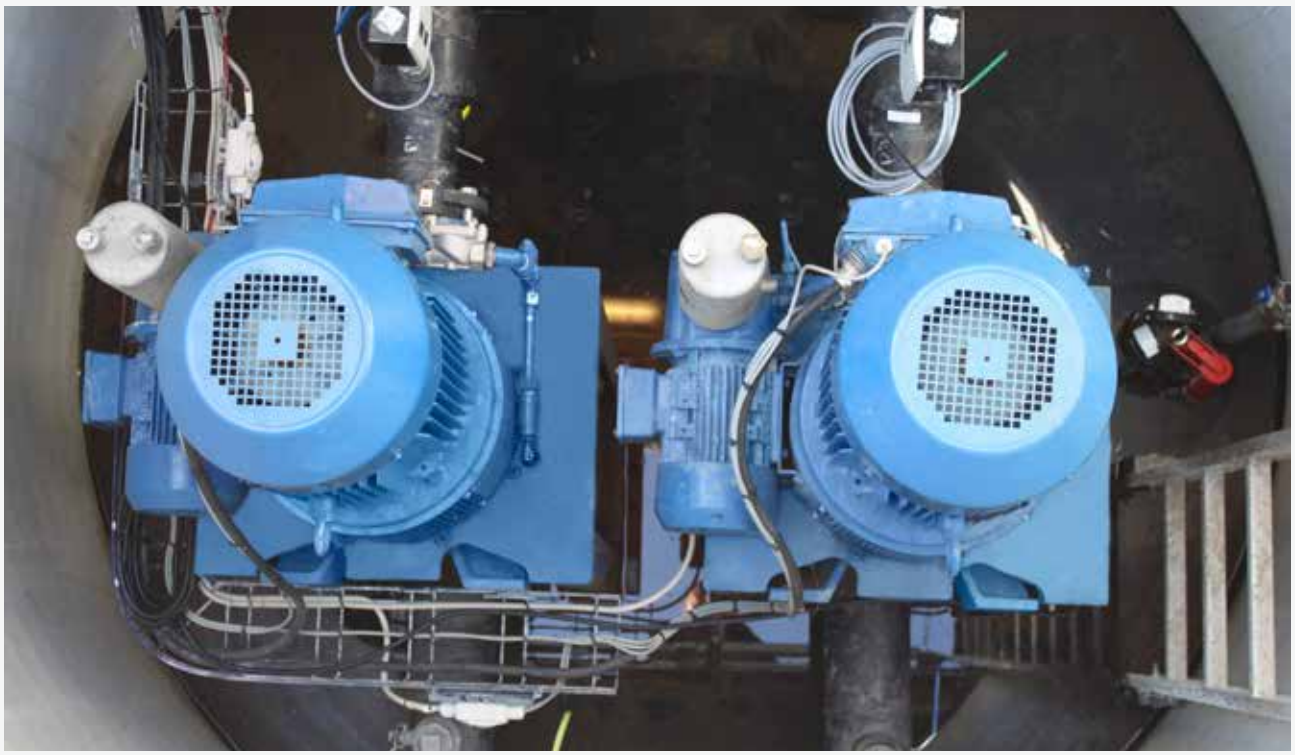
Energy-efficient Cooling

The purpose of district cooling is to deliver cooled water from a central location through pipes to a number of buildings. In this way, there us no need for cooling units in each room, and costs and current expenses are thus significantly reduced. In addition to these savings, the system is also environmentally friendly and almost maintenance-free. Remote cooling is not only extremely cost-effective, the environmental advantages are also significant. Big energy savings also bring a significant reduction in electricity generation and thus also in CO_2 emission.

Remote cooling uses environmentally friendly refrigerants in a closed and controlled environment, and combined with strict health and safety standards this means less risk of damage to the ozone layer.

DESMI supplies pumps and pump solutions for water supply, district heating/cooling and sewage. Operational reliability, energy optimization and serviceability are important parameters for a company that services cities, buildings and, not least, people.

Technical Specifications	
NSLV100-265/E02 End Suction Pump	
Pump series:	NSLV
Pump medium:	Seawater
Materials - pump casing and cover:	Bronze
Flange connections inlet/outlet:	125/100 mm
Impeller diameter:	265 mm
Shaft:	Duplex stainless steel AISI 329



Pump well at Musikkens Hus