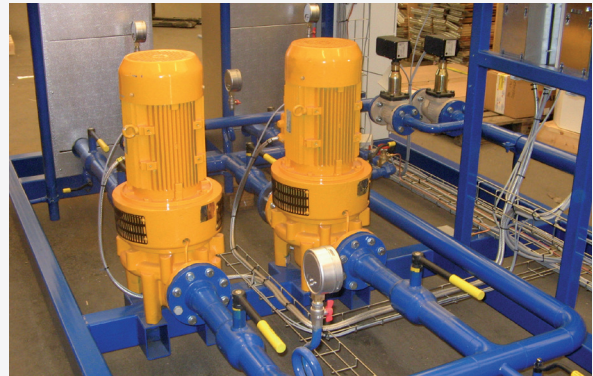


# Harbin Daoli - District Heating, China

In cooperation with ABB A/S Skovlunde and APV A/S Kolding DESMI A/S replaced large parts of the heating network in Harbin in China.

Daoli is one of the seven districts of Harbin, the largest city in North East China with approx. 11 million inhabitants. It is known for its bitterly cold winters and is often called the "Ice City" - so therefore the city welcomed this district heating project, where ABB provided the turnkey supply, which included energy efficient pump solutions from DESMI.

The hot water produced by Harbin Hua Neng District Heating Co. Ltd. was used as primary heating resource. Water from the pre-insulated underground pipes was transferred to 156 self-operating heating exchanger units instead of the traditional boiler room and then directly fed into residential radiator installation, covering an area of 17.58 million square meters.



CASE STORY

## When the installations were completed in 2007 the project was the largest district heating project to date in China.

Under the contract, ABB provided 96.1 km of pre-insulated pipes, 378 frequency converters, 252 secondary network circulation pumps, 252 heat exchangers, 2000 instruments that are used to supervise and control the network and substations, as well as a SCADA system with more than 10,000 signals. ABB also helped the customer rebuild 42 turnkey substations and include them in the SCADA system.

- In total, 252 pumps supplied by DESMI.
- Coal saving 300,000 tonnes per year.
- CO<sub>2</sub> emissions decreased 500,000-550,000 tonnes per year.
- Heat supply 17.58 million m<sup>2</sup> for 1 million residents through 156 sets of automatic controlled heat exchanging stations.
- In cold winter with -25°C external temperature, residences enjoy 18°C spring room temperature;

- High efficiency, low noise, frequency control and individual pump solution from DESMI

Upon completion of the project Harbin's Vice Mayor added the following comments about the project: "Although northeast China's Heilongjiang Province experienced its strongest snowstorm in 56 years last winter, citizens in Harbin, the nation's northernmost provincial capital city, enjoyed a comfortable winter, sitting in warm homes and viewing the snow through their windows.

Thanks to a district heating project by the Harbin government, the Danish government and ABB, our people enjoyed a warm and comfortable winter," said Wang Shihua, vice-mayor of Harbin. "As a key project in Harbin in the 11th Five-Year Plan, the district heating project not only improves the heating system in a cold city, but also makes a huge contribution to an environmentally friendly society."