<u>Cetetherm</u>



EXPOFORUM - ST PETERSBURG FOCUS ON ENERGY EFFICIENCY



It's more than 5 years ago that 9 Maxi heating substations have been installed in this high-tech congress center in a suburb of St Petersburg in Russia. A city with very specific climate circumstances coping with strong winds, cold winters and hot summers. How has Cetetherm created a perfect indoor climate for any time of the year?

BACKGROUND

The Expoforum congress and exhibition center in St. Petersburg opened in 2014. This is the most modern platform in Europe and Russia for business and entertainment events of any scale and format - exhibitions, congresses, forums and cultural events.

The designers - all from leading architectural bureaus and builders managed to create not only a multifunctional complex that accumulated the experience of the largest European and Asian congress centers, but also a unique architectural object that claims to be the symbol of St. Petersburg.

Every year more than 160 events are held at Expoforum, including Russia's largest economic event – the St. Petersburg International Economic Forum - as well as the St. Petersburg International Gas Forum, important medical, IT, industrial and social events.

During the construction in 2014 the most modern technologies and equipment were used, especially to create and maintain a perfect indoor climate for such huge volumes with many thousands of participants during summer heat and winter cold.

The Expoforum include giant exhibitions halls with more than 13.000 square meters each, hotels, convention centers, offices and warehouses. The 9 Maxi heating substations are installed in almost every building, allowing each building to adjust the indoor climate under any circumstances.



MATERIAL SUPPLIED BY CETETHERM

9 Maxi heating substations; modules from 46 kW (small heating circuit) up to 3855 kW (ventilation system in a huge exhibition hall)

In accordance with the requirements of high energy efficiency modern plate heat exchangers and highly efficient energy-saving pumps with built-in frequency converters of rotational speed were used. To achieve reliable and stable operation, both brazed and gasketed heat exchangers and pumps with a "dry" and "wet" rotor were fully doubled as «working / standby» ones.

Correct equipment choice and wise dimensioning by the Russian engineers team ensured the functioning of our company modules without failures and breaks while moving the blocks into the different buildings. Also easy access for maintenance and monitoring of the units have been taken into account at the design stage.





2 out of the 9 heating substations before delivery to Expoforum

Expoforum facilities	
Indoor exhibition space	50.000 M ²
Outdoor exhibition space	40.000 M²
Total number of congress halls	45
Total capacity of congress halls	10.000 persons
Hotels	441 rooms
Business center	25.000 M²
Customs & Logistics	60 euro trucks
Parkings	4700 places

INSTALLATION

An important issue was the careful and correct planning of deliveries in connection to the situation of the construction works on site. This allowed the assembly of the 9 different Maxi heating substations on site avoiding any additional construction work. It provided an easy and quick installation and start-up performance at the opening stage.

Result

Since the opening of Expoforum in 2014 there hasn't been a single failure of any component of the 9 heating substations! All modules work equally well, providing Expoforum visitors the opportunity to fully enjoy the innovative climate of modern technologies... made by Cetetherm.