SNE

Joint district heating project for a fossil-free future

Vattenfall has realised with the Hakfort project the largest capacity heat transfer station utilising plate heat exchangers. This investment of Vattenfall enables the expansion of the Amsterdam district heating grid. In total, the district heating grid will heat up to 290.000 households in Amsterdam by 2040. An unprecedented capacity of 84MW uses SWEP B649 heat exchangers.



In the early 1990s the city of Amsterdam set out on its decarbonising heat journey in a joint venture partnership with Vattenfall, one of the largest energy suppliers in the Netherlands. Since those early days, the Amsterdam district heating network has gone from strength to strength.

To enable more and more households to be able to benefit from district heating, Vattenfall is expanding the heat network in Amsterdam Southeast, by laying extra pipelines and building a heat transfer station.

The Hakfort Heat Transfer Station is integral to the project, as it will transfer heat from the main heat network based in Diemen to the new area of Amsterdam Zuidoost (south east), benefiting existing and new customers as more housing is developed. And it is here that SWEP has played a major role.

SWEP's first involvement was at the pre-tender stage in 2018 after Vattenfall had appointed Croonwolter&dros as lead contractor for the project. Vattenfall's project team specified a requirement for brazed plate heat exchangers. SWEP's proposal highlighted their gasket-free BPHEs which provide cost effectiveness and a compact footprint, along with their ability to maintain high level working with little wear of components, therefore requiring minimal maintenance. In



addition the SWEP BPHEs are easy to install and are very energy efficient, with 95% of the material used in the heat exchangers used for heat transfer.

Croonwolter&dros's spokesperson said "We were very impressed with the SWEP solution and when we discussed with the team at Vallenfall we agreed the SWEP proposal met all the project requirements. The end technology – 6 x B649 units that make up the 84 MW capacity – is as cost-effective as we could have hoped for."

SWEP's involvement in the project was led by Marvin Gosewisch, Regional Manager for the Netherlands & Belgium. Marvin reflects "The project has been a great collaborative effort between SWEP and the Croonwolter&dros team. SWEP is proud to have been involved in this groundbreaking initiative that can save 50% of carbon emissions that would be emitted by regular gas boilers.

The last word belongs with Vattenfall, whose project manager concludes: "Vattenfall is already actively developing multiple sustainable sources for its heat network and making them available to the entire city of Amsterdam. Looking to the future, Vattenfall plans to deliver fossil free heating solutions within one generation."



Key facts at a glance

- 290,000 households to be connected by 2040
- SWEP's largest ever single station capacity order
- 6 x B649 units make up the 84 MW capacity

84 MW 6 x B649/SPx840	Primary side	Secondary side
Design Pressure	25 bar	15 bar
Temperatures	125° > 71°	66° > 120°

