

POWERING SUSTAINABLE HEATING

A DISTRICT HEATING
FACILITY INSTALLATION



Armstrong supplied a fully integrated iFMS solution featuring Design Envelope pumps with Sensorless technology, factory-mounted piping, controls, and accessories, enabling efficient heat recovery, reducing energy consumption, and minimizing installation costs through a plug-and-play system.

West Strasbourg Boiler House

The Design Envelope Intelligent Fluid Management System (iFMS) is a comprehensive, factory-integrated solution that combines advanced pumps and control technology. It delivers an optimized heat transfer solution for district heating networks while enhancing overall energy performance.

Background

As part of an extensive renovation and expansion project aimed at decarbonizing a district heating network, Evos (a subsidiary of ENGIE Solutions) undertook the long-term modernization of the West Strasbourg Boiler House. Over a 20-year period, the initiative will transform the existing network and production facility by integrating a predominantly renewable energy mix while maintaining compliance with established air emission standards.

Armstrong was asked to contribute to the project by supplying an advanced pumping solution for the new heat pump plant, which plays a critical role in recovering heat from both the HautePierre Hospital and the condenser wash systems of the nearby biomass plant. This recovered energy is then re-integrated into the district heating network via the upgraded boiler room at the West Strasbourg facility.

“Decarbonisation is essential not only to stabilise the climate but also to protect human health, preserve ecosystems, and ensure long-term economic resilience. Evos is your partner in transitioning to a carbon neutral world and we have chosen Armstrong as our supplier to optimize the energy and environmental performance of HVAC system through energy efficiency and emission reduction solutions”, says Gerald Drafero, Operations Manager, Engie.

Armstrong helped to optimize energy performance and reduce lifecycle costs by delivering a fully integrated iFMS (Intelligent Fluid Management System). This integrated, factory-built system features Design Envelope pumps with Sensorless technology, controls, accessories and piping.

Offsite manufacturing, assembly and testing means the system arrives on-site fully complete and ready for installation. This significantly reduces the project timelines, and the labor costs associated with the traditional stick-build approach. Embedded Design Envelope technology combined with Armstrong’s Systems Envelope control and automation solution improves the pumping efficiency of the entire boiler system and supports Active Performance Management.

Over the next few years, the district heating development project will continue with the phased implementation of multiple renewable energy production systems, reinforcing the facility’s role in enabling a low-carbon, high efficiency energy future for the region.

Tech-info

- Armstrong Intelligent Fluid Management System (iFMS)
- Design Envelope 4300 pumps
- Suction Guides
- Flo-Trex valves

