CASE STORY

A compact and efficient solution for micro-CHP

Customer: Indop d.o.o., Slovenia

Indop d.o.o. was established in 2007 as a subsidiary of the Balkan appliance giant Gorenje. Originally manufacturing a range of equipment, the company quickly focused on the development, production and maintenance of advanced energy systems, and in particular, highly efficient combined heat and power (CHP) technology. Since 2010, they have become one of Slovenia's leading cogeneration manufacturers.

While Indop manufactures a range of CHP systems, they have been especially involved in the development of micro-cogeneration units.

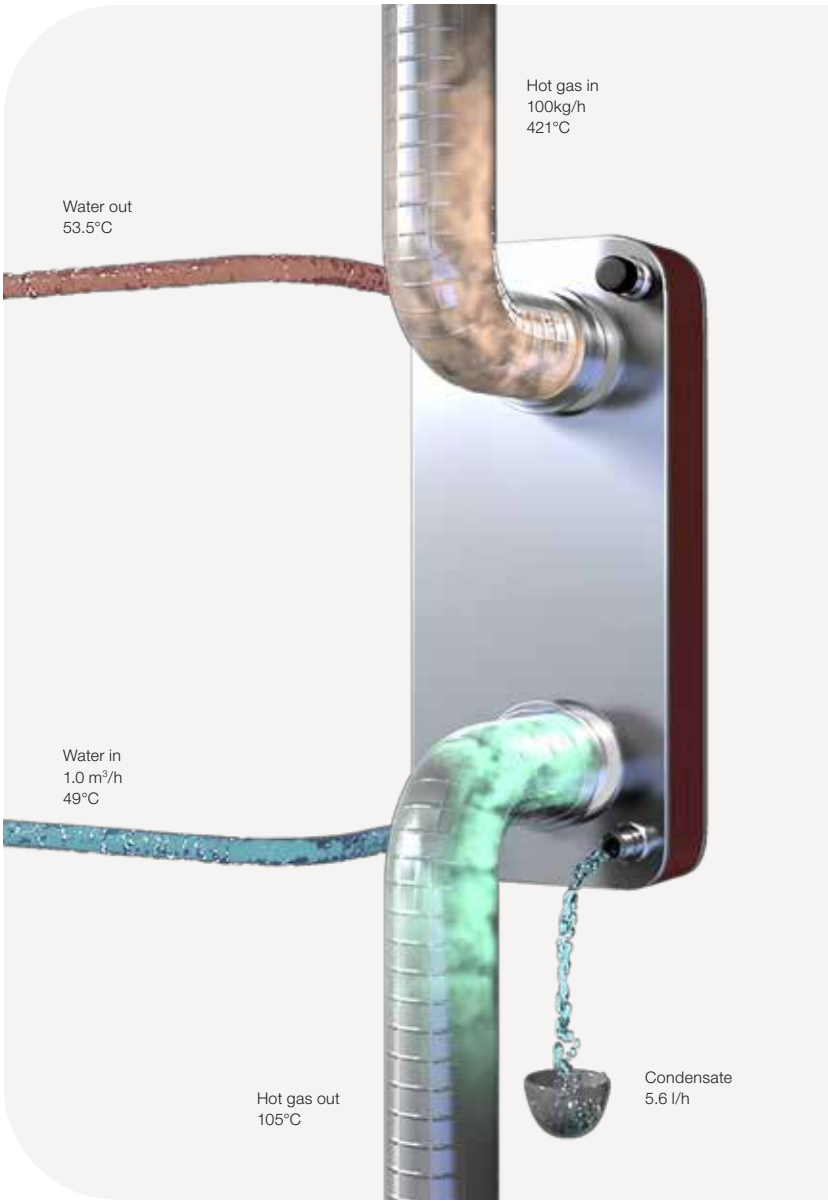
Today the company offers four different sizes of micro-CHP systems, with a rated power of 6, 9, 15 and 20 kW and a rated heat output of 13, 20, 34 and 42 kW. Indop's products have received the EU's highest energy class ratings, and they have been specifically designed to offer customers significant savings.

However, Indop faced a number of initial challenges when selecting a heat exchanger for their micro-CHP units. First, in order to ensure the systems could offer a flexible, compact design, it was equally important that all the components within the units also had as small of a footprint as possible. Second, they needed a heat exchanger solution that could provide both exceptional energy efficiency and installation simplicity. Lastly, it was critical for Indop to consider both safety and the ability to keep down the total costs of their systems.

One design – several benefits

Fortunately, Indop was able to find an ideal solution to all of their demands in Alfa Laval gas-to-liquid plate heat exchangers. The copper-brazed construction is fully compatible with the natural gas engines Indop uses in their micro-CHP systems, and Alfa Laval's unique gas-to-liquid technology has allowed the company to achieve thermal efficiency above 85% with very low pressure drop.

The extremely compact design of Alfa Laval's plate heat exchanger has also made installation simple for Indop, and they have been able to easily integrate the heat exchanger into their systems without adding to the overall footprint. It is also extremely safe and reliable technology – to date, there are no known cases of problems with clogging or corrosion.



Example specifications for Indop micro-CHP unit

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com

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