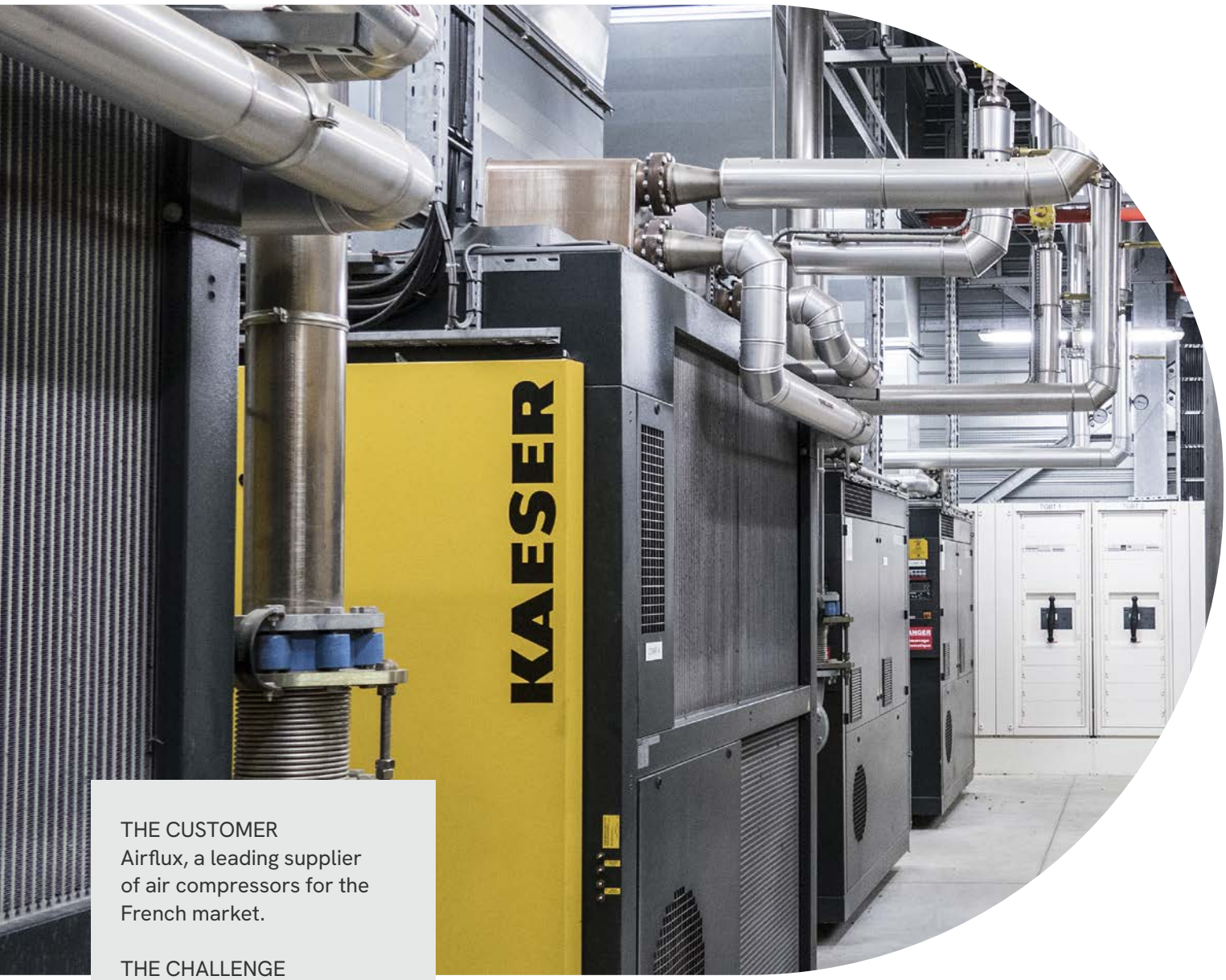
CASE STORY



THE CUSTOMER
Airflux, a leading supplier of air compressors for the French market.

THE CHALLENGE
Recover waste heat to reduce costs and slash CO_2 emissions.

THE SOLUTION
Airflux's Ecosph'Air Energy-Recovery System recovers heat from air compressors for reuse in process industry, domestic hot water production, and heating systems.

THE HEAT EXCHANGERS
For Airflux, SWEP installed countless different types and sizes of BPHEs for a wide range of duties.

THE RESULTS
Improved efficiency, cost- and carbon-emission savings, and reduced payback time.

Airflux and SWEP – recovering waste heat from air compressors

SWEP
A DOVER COMPANY

Recover heat for efficiency, savings, and reduced emissions
The process of compressing air generates large amounts of energy in the form of heat. Unless the air compressor has a heat recovery solution in place, most of the heat produced by the system will be lost. For this reason, efficiency-oriented businesses consider the capacity for heat recovery to be a critical element of their compressed air systems.

The Airflux Ecosph'Air Energy-Recovery System
To maximize the heat recovery efficiency of air compression systems, Airflux engineers have designed the Ecosph'Air Energy-Recovery System, which recovers the heat generated by compression and makes it available for industrial processes, hot water production, and heating systems. The reduction in wasted energy, combined with lowered utility costs, optimizes the payback period. In many cases, it can be as short as 6 months. Businesses that choose to install a heat recovery solution for their compressed air systems can achieve significant cost savings while also lowering CO_2 emissions.

The role of SWEP BPHEs
One of the key decisions during the design phase of Ecosph'Air was choosing the right type of heat exchangers. Compared with other technologies, brazed plate heat exchangers offer a number of advantages, including compact size, increased efficiency, and reliability.

José De Oliveira, Head of R&D at Airflux gives two real-world examples:

- A customer site that produces filler material for the diaper industry has a compressed air system rated at 300 kW, with a potential recovery of 210 kW. This system includes four Ecosph'Air systems that recover energy from five compressors and channel it into process and space heating.

- Airflux installed a 1.2 MW compressed-air system at an industrial signage production facility and also installed heat exchangers to recover heat from the compressors. To make the most of the available space, the heat exchangers were installed on top of the compressors. The total recovered energy, which is reused in the customer's heating system, is approximately 800 kW.

Why choose SWEP?
"Airflux selected SWEP as a partner for two main reasons. First, SWEP is a well-known brand, appreciated in the heat exchange industry. Furthermore, one of our main partners was already successfully integrating SWEP's brazed plate heat exchangers in their systems. We have had a positive experience of integrating SWEP heat exchangers into our customers' machines, so commissioning SWEP as our heat exchanger supplier was a natural choice," says Marc Delannoy, General Manager at Airflux.

More about Airflux
Airflux, based in Lille, France, is a leading provider of air compressors for the French market. "Our market approach has three pillars. First, we want to select and offer our customers compressors and systems that can produce and deliver compressed air with the highest energy efficiency possible. Second, we help our customers produce compressed air more efficiently and find ways to minimize waste. To support this, we conduct audits and leak-reduction campaigns. Third, we are striving to maximize heat recovery for reuse in customers' processes."

Watch how SWEP has helped Airflux with Heat recovery >

SWEP BPHE