

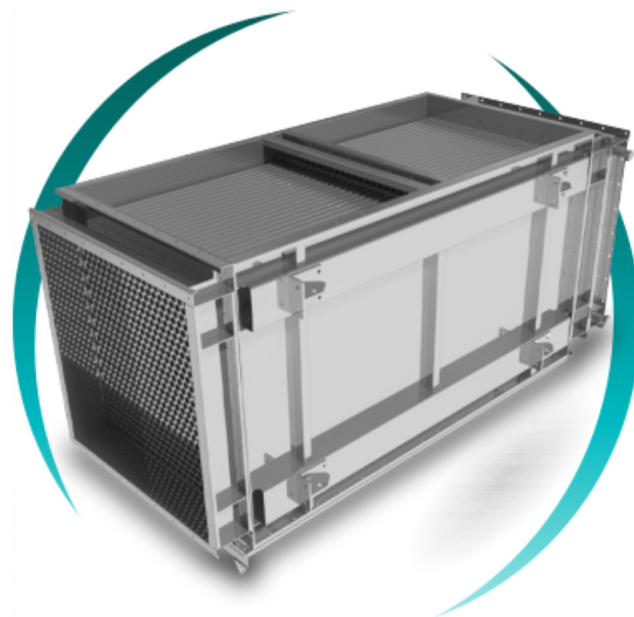
Air-to-air exchanger

Thermal recovery between air streams



Industrial equipment designed to transfer thermal energy between two independent air streams, without fluid mixing. It uses expanded-tube-against-end-plate technology, achieving a tightness of approximately 99%. Ideal for processes with high temperature, high fouling and the need for accessible maintenance without prolonged downtime.

It is used in the food industry —dryers, dehydration—, paper, chemical, pharmaceutical, ceramic, metallurgical and agricultural sectors. It allows recovery of up to 80% of the thermal energy from extraction or process gases, with typical returns on investment of between 3 and 12 months. When the process requires 100% tightness or handles polluting gases, the air-to-flue gas exchanger with welded tubes is chosen. The design is fully custom, configuring single or multiple cross-flow geometry from the real process data: temperatures, flow rates, available space and the specific operational requirements of the installation.



TECHNICAL SPECIFICATIONS

Technology	Expanded tubes (weldless)
Tightness	~99%
Recovery efficiency	up to 80%
Operating temperature	up to high temperature
Materials	AISI 304, 316, 309, 310 / carbon steel
Typical application	Air / gas preheating
Flow configuration	Single or multiple crossflow

~80%

thermal recovery
efficiency

~3-12m

typical return on
investment

~99%

system tightness