



FLEXIBLE-DESIGN AIR HEATER

Industrial air heaters use water, steam or thermal oil to heat process, ventilation or drying streams. **They provide reliable thermal performance** in industrial systems, process plants and air treatment applications.

Depending on the application, the unit can be designed with elliptical finned tubes, round finned tubes or plain tubes without fins. Different materials, casing arrangements and special variants allow the heater to be matched to the required capacity, airflow, temperature range and pressure conditions.

KEY TECHNICAL ADVANTAGES

Wide Application Range

Suitable for industrial air heating, air pre-heating, drying systems, process ventilation and heavy duty thermal applications.

Matched Design

Selected according to heating medium, airflow, capacity, temperature range, pressure conditions and installation requirements.

Tube & Material Options

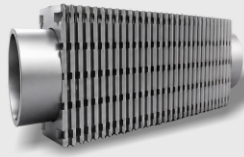
Available with elliptical finned tubes, round finned tubes or plain tubes, in carbon steel, stainless steel, aluminium-finned or galvanized versions.

Reliable Operation

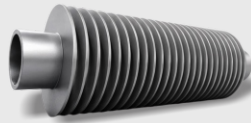
Robust construction, suitable tube selection and appropriate corrosion protection support long service life in demanding operating conditions.



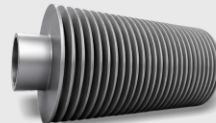
OUR TUBE TYPES, FEATURES AND BENEFITS



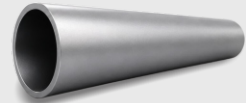
Elliptical finned tube



Round extruded tube



Round welded tube



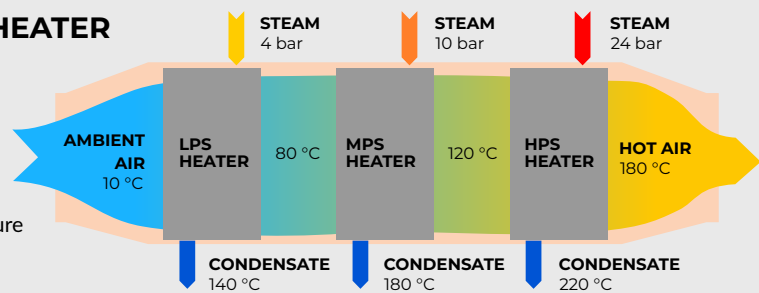
Round plain tube

Feature	Elliptical galvanized	Elliptical brazed	Welded	Extruded	Plain
Cost efficiency	●●●	●●●●●	●	●●●●	●●
Thermal performance	●●●●	●●●●●	●●	●●●●	●●●
Pressure drop	●●●●●	●●●●●	●●●	●●●	●
Compact design	●●●●	●●●●●	●●	●●●	●
Fouling resistance	●●●●	●●●	●●	●●●	●●●●●
Cleanability & durability	●●●●	●●●	●●●●●	●●	●●●●●
Temperature range [°C]	●●	●●●	●●●●	●●●	●●●●●
	-20/220	-20/300	-190/550	-50/350	-190/750
Material range	●	●●	●●●●	●●●	●●●●●
Tube material	seamless CS	seamless CS	seamless or welded, CS, SS, high-alloys	seamless or welded, CS, SS	seamless or welded, CS, SS, high-alloys
Fin material	CS	aluminium	same as tube	aluminium	n/a

SAMPLE STEAM HEATER CONFIGURATIONS

MULTI-STAGE STEAM AIR HEATER

- Stepwise increase in air temperature
- More efficient use of available steam pressure levels
- Reduced thermal stress compared to single-stage heating
- Flexible control of the final air temperature
- Suitable for high-temperature drying and process air heating



STEAM AIR HEATER WITH CONDENSATE SUBCOOLING SECTION

- Additional heat recovery from condensate
- Lower steam consumption in the main heating section
- Overall thermal efficiency is improved
- Reduced condensate outlet temperature
- Suitable for systems with a high steam duty and continuous operation

