



integral **SOLUTIONS**

heat
recovery



Radiation recuperators

FOR USE IN FRIT AND GLASS MELTING KILNS, AS WELL AS IN FORGE KILNS

They allow reductions of fuel consumption by preheating combustion air up to 40%, with a compact design that facilitates the installation.

Double shell radiation recuperators are made of two concentric cylinders in which the secondary fluid flows through the circular crown, either in parallel to the recuperator axis or helicoidally, counterflow or in parallel drafts, and are appropriate for working pressures up to 2.000 mm. W.G.

For higher working pressures the ring arranged tubes cage recuperators offer a better performance, a higher resistance and a more homogeneous air distribution.

They are designed replacing the interior shell by a ring arranged tubes cage, though which the air flows, so that the heat transfer is still made by radiation.



INTEGRAL SERVICE

The fabrication of any element of the installation in our workshop allows us to thoroughly control each phase of the production process.

CHARACTERISTICS

- FUEL SAVINGS UP TO 40%.
- DRASTIC REDUCTION OF GREENHOUSE EFFECT GASES EMISSIONS.
- SPECIFIC CALCULATION FOR EACH RECUPERATOR.
- INVESTMENT AMORTIZED IN A SHORT PERIOD OF TIME.

optimum energy recovery

Convective recuperators

Using steel plain tubes, in these recuperators the heat transfer between the primary and secondary fluid is made by means of convection.

They can be installed in a horizontal gases duct (underground or elevated) or vertical (stack), or even include the internally covered cage.

For use in:

- Iron and steel industry
- Calcination furnaces.
- Waste valorization.
- Gases or air cooling.

These equipment can be aimed at cooling a primary fluid, so offering an alternative to the air dilution in gases cleaning systems. These equipment, as a previous step to cleaning, avoid gases from getting to the cleaning systems at a too high temperature.

GASES-AIR HEAT EXCHANGERS

They are equipment with a more compact design, which allows a quick and easy assembly.

In a heat exchanger the tube bundle is fixed to the frame that contains it, so avoiding possible breaks as a consequence of the different thermal expansions between the bundle and the frame, adding compensators or bending the bundle tubes.



For use in:

- Solvent incineration installations in the automotive industry.
- Cogeneration installations.
- Metal and plastic surfaces treatment installations.



TAILOR-MADE SOLUTIONS

We guarantee the optimum adaptation of the installations to the client's requirements, adjusting the design to the different technical specifications of each project.



EXPERIENCE

More than 30 years of experience in the design and manufacture of heat recuperators.

