

# ENERGY OF THE FUTURE IS ALREADY HERE.

[www.recuperator.eu](http://www.recuperator.eu)  
[www.RecuperatorUSA.com](http://www.RecuperatorUSA.com)



THE MAIN SOURCE OF ALTERNATIVE ENERGY IS ENERGY SAVING, AND HEAT RECOVERY IS ONE OF THE SIMPLEST, IMMEDIATE AND CONVENIENT METHODS.

**Recuperator** designs and manufactures plate and rotary heat exchangers, the "core" of any heat recovery system. The high efficiency allows a drastic reduction of energy consumption and air pollution.

**Incorporating heat recovery into new and retrofit projects is a duty of all of us in this environmentally aware age.**

#### Heat exchangers specs:

- › Air flow up to 100,000 m<sup>3</sup>/h (60,000 cfm); Efficiency over 80%.
- › Low pressure drops
- › Different materials availability
- › Low installation and running costs, minimal maintenance

#### Selection programs

Rex selection program and its DLL, personalised for each customer, are essential tools for both performance and price calculations.

They are always accurate and automatically updated on-line.



THE RECUPERATOR  
MODELS COMPLY WITH  
THE NEW COMMISSION  
REGULATION (UE)  
**No 1253/2014**  
**"ECODESIGN"**



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member of CAREL group

# APPLICATIONS



## AIR CONDITIONING AND VENTILATION

Pre-heating and pre-cooling in the air handling units



## SCHOOLS

Heat recovery for air replacement in classrooms



## HOSPITALS

Heat recovery from the exhaust air without mixing of the two air streams



## MALLS

Heat recovery for the air conditioning of the space



## THEATRES

Heat recovery for the air conditioning of the space



## HEAT RECOVERY FROM FLUE GASES

Air pre-heating at burner intake



## TELECOMMUNICATIONS

Heat sink into Shelters and Cabinets of the telecommunications industry



## ROTOGRAVURE PRINTING MACHINES

Heat recovery from solvent process and ambient heating



## SMOKE HOOD

Heat recovery from smoke and gas for industrial kitchens



## MUSEUMS

Heat recovery for the air conditioning of the space



## RAILWAY INDUSTRY

Heat sink into Converters of air conditioning systems of train cars



## SPRAY BOOTHS

Pre-heating and pre-cooling in the spray booths



## SWIMMING POOLS

Pre-heating and pre-cooling in the air handling units



## CRUISE SHIP

Recovery of sensible and latent heat for air conditioning



## ARENAS

Heat recovery for the air conditioning of the space



## DRYERS

Air dryers pre-heating and ambient heating purposes



## PASSIVE HOUSES

Heat recovery on very low energy consumption houses



## PHARMACEUTICAL INDUSTRY AND HOSPITAL

Pre-cooling of the electromedical equipment



## AGRICULTURE

Heat recovery for the air conditioning of livestock shelters



## DATA CENTER

Indirect evaporative cooling for Data Center



## HOTEL

Heat recovery for the air conditioning of the space



## SMOKING AREAS

Heat recovery of refresh air in smoking areas



## OFFSHORE

Heat recovery on oil platforms and heat sink into wind turbines

## FOR EXAMPLE, IN A DRUGSTORE...



The air quality in a building is one of the main factors for internal comfort. The air must be continuously changed to maintain safe conditions.

This process wastes energy, which can be recovered by installing a plate heat exchanger.

Let's examine a drugstore with an area of 1235 m<sup>2</sup> (13,000 sf), and an average density of 310 people. To change the air, 10,000 m<sup>3</sup>/h (6,000 cfm) of fresh air, is needed.

The example shows a system with our air to air plate heat exchanger:

› **Model**  
**FI AL 09 N 1400 M 1 AE SM**

› **Class of heat recovery H3**  
**(according to EN 13053)**

› **Total year saving:**  
**Euro 2.632,00 (US\$ 3,579)**

**PAY-BACK OF THE INVESTMENT: ABOUT 9 MONTHS**