

F

ADIABATIC COOLING



FRESH AND NATURAL AIR
TO FIGHT THE HEAT AND THE THERMAL STRESS



MET MANN
Creando Clima desde 1959

Your comfort and satisfaction

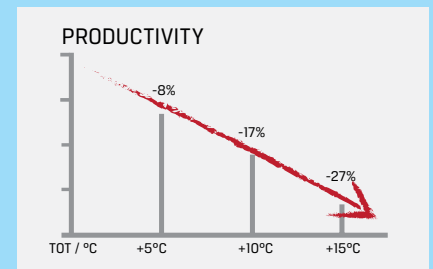
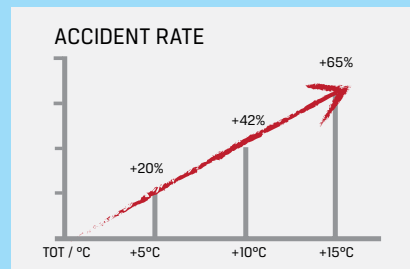
www.metmann.com

Tel. +34 93 851 15 99

How is the heat and the thermal stress affecting the industry ?



Some studies like the NASA's study (NASA Report CR-1205-1) are clearly demonstrating the relation between the heating increase with the increase of the accident rate and the productivity decrease, too.



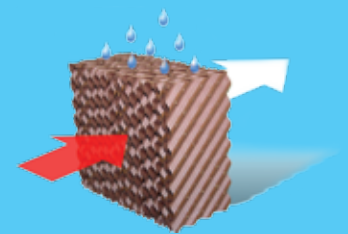
Which are the comfort conditions that the legislation regulates ?

The current legislation in Spain is demarcated in the Real Decreto 486/1997 (ANEXO III), that it's indicating the work conditions for the workers in closed buildings. The temperature into buildings where soft works are realised, it has be between 14°C and 25°C, until 27°C if sedentary works. The humidity will be between the 30%HR and 70%HR, the air renewal must be higher to 50m³ by hour and worker. The companies managers but the insurance companies, too; they must watch the compliance of these rules that will directly have effect above the company benefit.



What is our solution ?

The external warm air becomes fresh air when it goes through the cellulose panels soaked with water. This air, until 12°C lower than the external temperature, is impelled into the building, producing a nice see breeze effect.



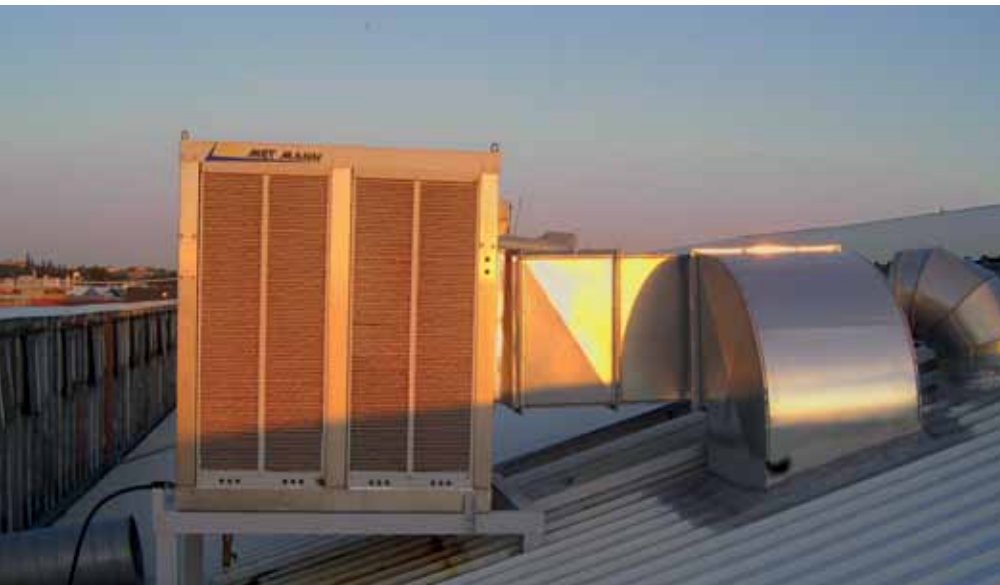
Obtained benefits

- VENTILATION THANKS TO FRESH AND NATURAL AIR.
- TEMPERATURE DECREASE UNTIL 12°C.
- ENERGY SAVING UNTIL 80%.
- IT CAN WORK WITH OPEN DOORS.
- EASY AND ECONOMICAL INSTALLATION AND MAINTENANCE.
- DECREASE OF THE WORK FATIGUE.
- INCREASE OF THE PRODUCTIVITY.
- DECREASE OF THE WORK ACCIDENTS.
- ELIMINATION OF SMOKES, DUST AND ODOURS.
- ELIMINATION OF THE STATIC ELECTRICITY.

 ECOLOGICAL

€ CHEAP

✓ EFFICIENT



MET MANN coolers

MET MANN has more than 50 years of experience in the manufacture of evaporative coolers, natural cooling and humidification processes. Our units produce the same effect than the sea breeze, impelling fresh and natural air into the building. The temperature of the launched air varies between 4°C and 12°C lower than the temperature of the external air, making the internal temperature be around the 24°C regarding the external conditions.

The cooler includes systems and automatism that permit minimise the maintenance and make flexible the system for any application.

Antimicrobial technology

A lot of studies demonstrate that the legionella bacteria becomes active on water temperatures between 25°C and 40°C, in dammed water and with the necessary nutrients. His transmission is possible through micro drops of water (aerosols).

THE MET MANN COOLERS ARE 100% SAFE

- Automatic water evacuation system "SV" (it makes a full water evacuation of the tray in any stop of the units).
- Delayed stop of the fan for the good drying of all the internal elements.
- Rigid structure and anticorrosive water tray (polyamide, stainless steel AISI-316) that avoid the oxide formations.
- Ultraviolet light system for the bacteria elimination (optional).



Quick opening system through half turn fasteners.



Automatic water evacuation system patented by MET MANN nº200601656.



Water distribution system on the unit roof.

AD SMALL PREMIUM

ECOLOGICAL EVAPORATIVE COOLER
5.500 TO 15.000 M³/H



AD BIG PREMIUM

ECOLOGICAL EVAPORATIVE COOLER
28.000 TO 63.000 M³/H



FRESC MANN PREMIUM

ECOLOGICAL PORTABLE EVAPORATIVE COOLER
4.200 TO 12.000 M³/H



ADIABATIC COOL PREMIUM

ADIABATIC MODULES 2.100 TO 8.000 M³/H

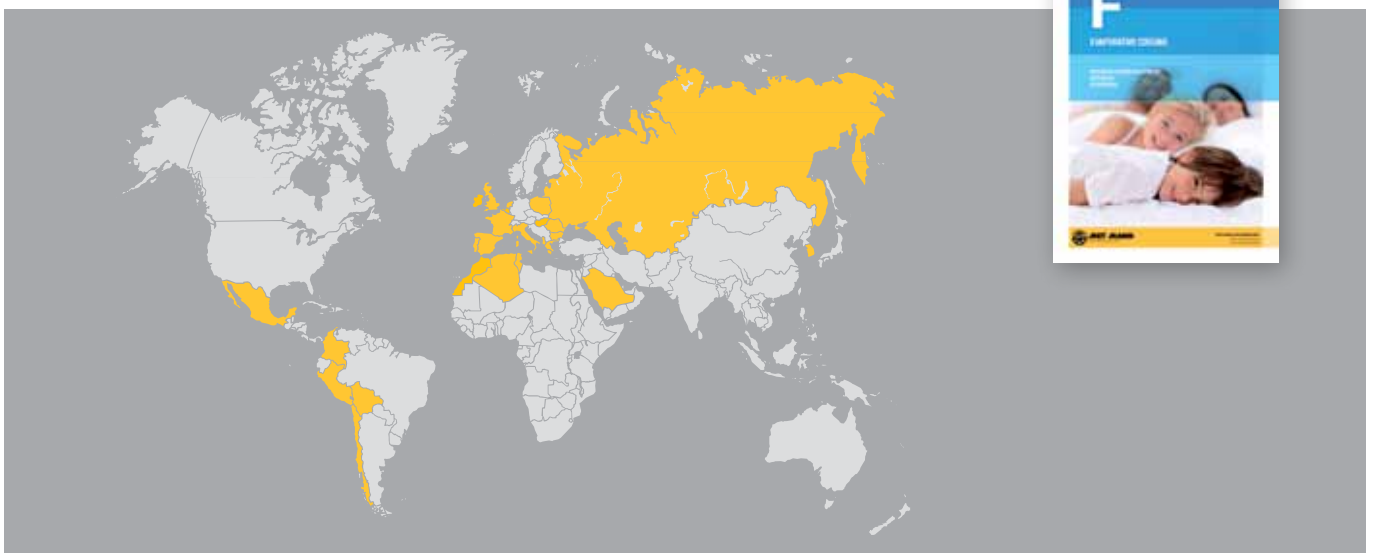


More favoured sectors



Which HVAC options is the market offering ?

	VENTILATION	AIR CONDITIONING	MET MANN EVAPORATIVE COOLERS
ADVANTAGES	<ul style="list-style-type: none"> • Low investment cost. • Low work cost. • It permits the open building. 	<ul style="list-style-type: none"> • Total control of the temperature. 	<ul style="list-style-type: none"> • Minimum investment cost. • Low work cost. • It works with open doors. • Fresh and renewed air. • Constant humidify level.
DISADVANTAGES	<ul style="list-style-type: none"> • It doesn't reduce the temperature. 	<ul style="list-style-type: none"> • High investment cost. • High work cost. • It needs closed doors. • Harmful thermal jumps. • Dried up and corrupted air. 	<ul style="list-style-type: none"> • Temperature reduction limited to the external conditions.



MET MANN
Creando Clima desde 1959

Metalúrgica Manlleuense S.A. Contact for customers
 Fontcuberta, 32-36 T +34 93 851 15 99
 Apartado de correos 23 F +34 93 851 16 45
 08560 Manlleu (Barcelona) www.metmann.com
 SPAIN metmann@metmann.com

