



**Heat overload may harm
your employee's health and
damage your business**

Keeping control of your working environment....





Statistics show that productivity falls by 10% when temperatures in the working environment exceed 24°C and that a worker is 23% more likely to make errors or have an accident.



Factory or workplace too hot, employees and business suffering?

By installing our simple and safe low cost adiabatic air conditioning systems, air temperatures can be reduced by up to 10°C, transforming work places into cool comfortable fume free environments and normal productivity levels can be safely maintained even at the height of summer.

The major benefits are:

- © Their cost is up to 75% less than a conventional installed air conditioning system and operating costs up to 90% less.
- © They are safe. There is no risk from potentially dangerous organisms because the water in the adiabatic cooler circulates at a naturally cool temperature.
- © Their unique design and process control prevents water stagnation and they are constructed from non corrosive materials.
- © They only require connection to a mains water and a single phase electrical supply and are easily expanded when additional cooling is needed.
- © They can be installed individually as spot coolers to treat a small hot spot, or as a series of modules to deliver cooled fresh air into a larger space and depending upon conditions, can be installed internally or externally.

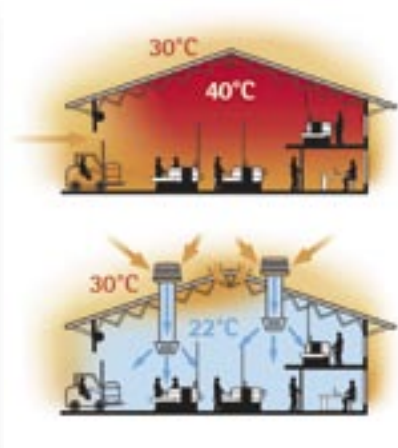
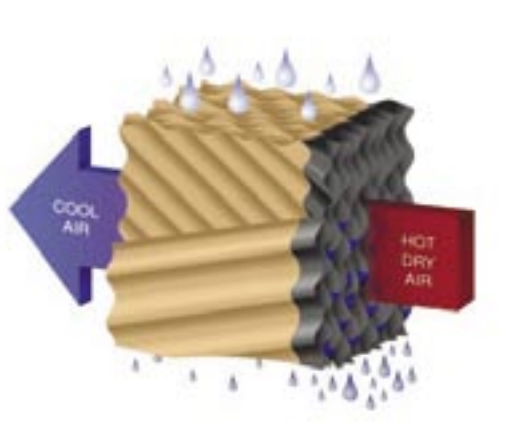
How does it work?

Quite simply, a stream of hot air is moved across a wetted surface. Water is evaporated as it absorbs heat from the air, causing a reduction in air temperature.

Adiabatic coolers generally contain 7 major components within a robust case. Case size is determined by the cooling capacity and this is entirely dependent upon the surface area of the wetted material through which the hot air stream is forced.

The major components are:

- ⊙ A leak tight water reservoir which is automatically kept at the correct level.
- ⊙ High efficiency easily cleaned heat exchange pads which also act as an air filtration system.
- ⊙ A water distribution system which keeps the pads wet when in the cooling mode.
- ⊙ A circulating pump which moves water from the reservoir through the distribution system.
- ⊙ A powerful fan which draws warm air from the outside and forces it through the heat exchange pads.
- ⊙ A controller which monitors the condition of the water in the sump, automatically purging when necessary. It causes the water to be drained from the reservoir when the system is turned off and provides temperature control by turning the fan off, or adjusting its speed when a preset indoor temperature is met.
- ⊙ Cleanable air filters on each air intake side.



Adapting nature's method proves beneficial in other ways too...

- ⊙ They introduce 100% fresh, cooled and filtered air into the workspace, conventional air conditioning systems for the sake of economy generally circulate much of the same stale air.
- ⊙ Doors and windows can stay open since the adiabatic cooling system works by displacing the warm air with cool fresh air, through open doors, windows and ventilation systems. As warm air is moved out, so too are fumes and odours and particles in suspension. Conventional systems require doors and windows to stay shut.
- ⊙ Cooling capacity efficiency is increased as the outdoor temperature rises. The effectiveness of conventional systems will reduce.



Keeping control of your working environment....

Adiabatic cooling systems are perfect for comfort cooling in manufacturing areas operating:

- Ⓢ Plastic moulding and extrusion plant
- Ⓢ Printing lines
- Ⓢ Textile machinery
- Ⓢ Furnaces
- Ⓢ Glass processing plant
- Ⓢ Die casting machinery
- Ⓢ Machining centres
- Ⓢ Metal treatment equipment
- Ⓢ Food production and preparation plant

and also in warehouses or other highly populated non air conditioned areas.

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