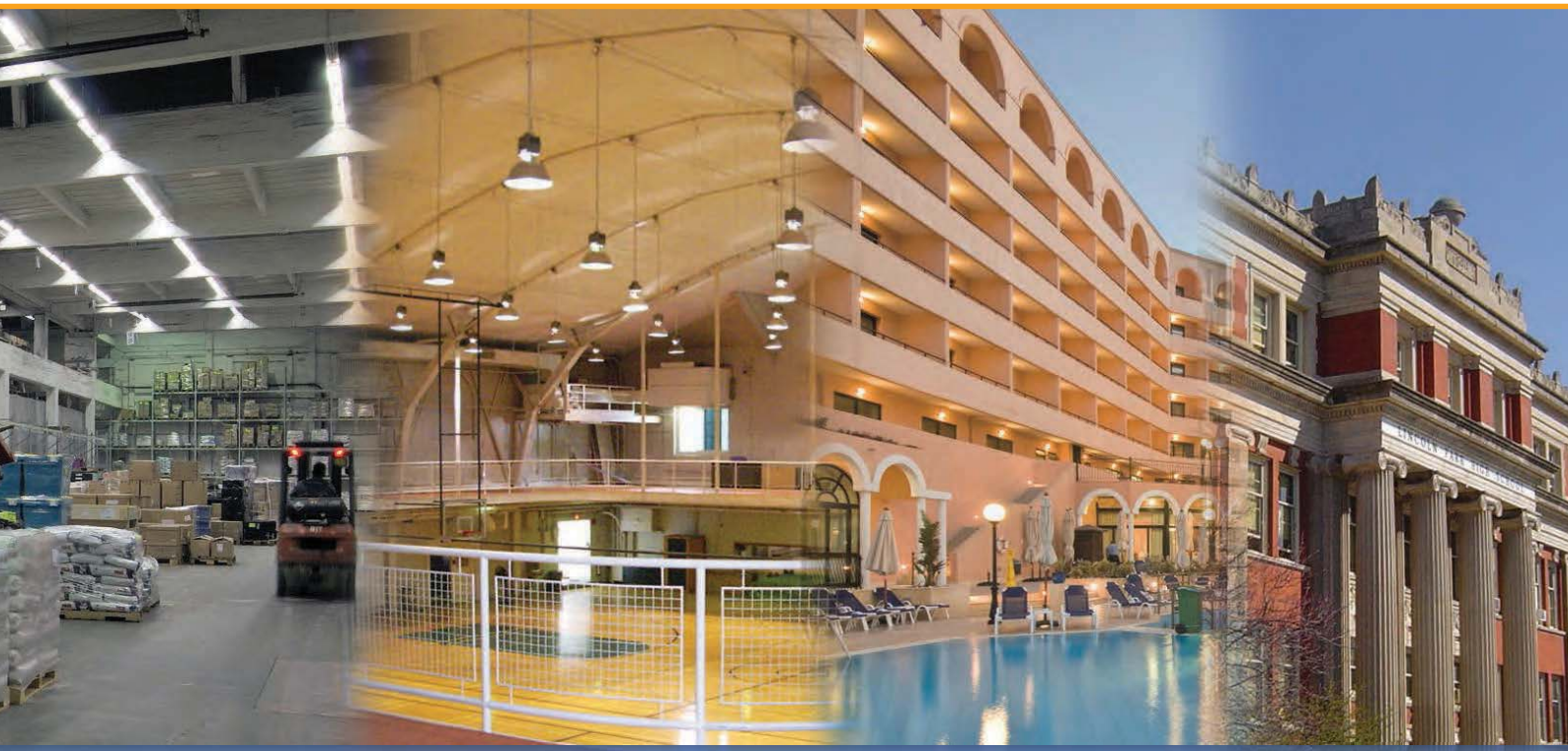
ECO HEAT PIPE TECHNOLOGY



EHP-D WRAP AROUND HEAT PIPE FOR DEHUMIDIFICATION APPLICATION

utilizing heat pipe heat exchangers

solving high humidity problems
saving energy

pharmaceuticals	military bases
hospitals	schools
hotels/motels	laboratories
libraries	data centers
museums	arenas

EHP-D Site Installed Dehumidifier Wrap Around Systems are compact and highly effcient heat transfer devices designed to provide both pre-cooling and reheat in applications where both the temperature and humidity must meet requirements as well as solve high humidity problems.

The EHP-D Series

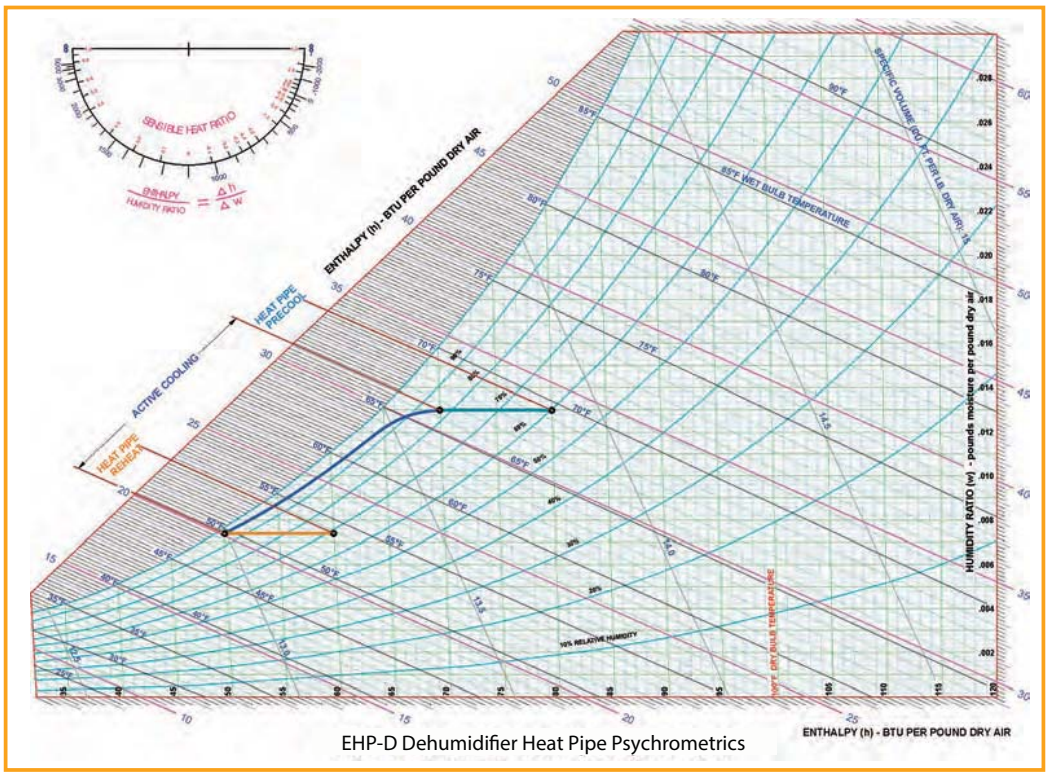
Site Installed Dehumidifier Wrap Around Systems

utilizing heat pipe heat exchangers
solving high humidity problems
saving energy

ECO Utilise heat pipes wrapped around a cooling coil to save energy and increase the moisture removal capacity of air conditioning systems. In addition to installing these heat pipes the heat pipe systems can also be installed in DX and Chilled Water AHU's already installed in the field.

Wrap around heat pipes can save energy and enhance dehumidification, either by replacing or minimizing the expensive reheat, or by reducing the Sensible Heat Ratio of the A/C equipment. Heat pipes fit totally inside the AHU and are easily controllable if needed.

One strategy is to "oversize" the heat pipes at design conditions but modulate their effect and then allow them to operate morefully at part load conditions. This will maximize the overall energy savings.



EHP-D Dehumidifier Heat Pipe Psychrometrics

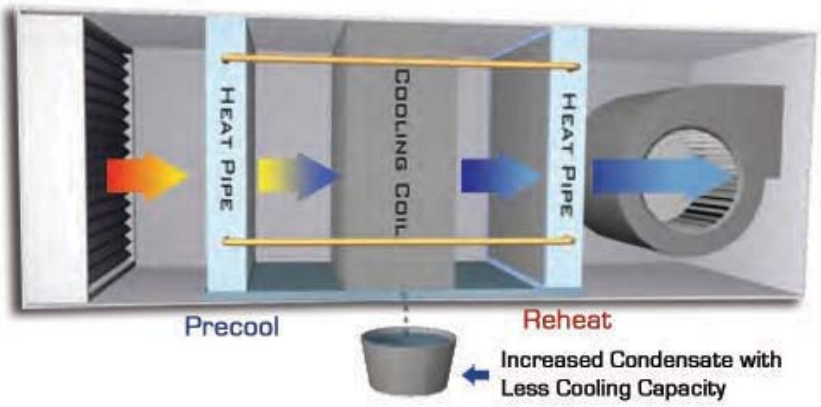
The sensible solution to high humidity

HEAT PIPES

Heat pipes are thermal transfer devices capable of moving large amounts of heat energy - with no moving parts - from the incoming air stream to the supply air stream in A/C units. The dehumidifier heat pipes consist of two sections, the precool (evaporator) section placed before the cooling coil and the reheat (condenser section) placed after the cooling coil.

APPLICATIONS

- 100% Outside Air Systems
- Mixed air AHUs
- Replaces electric or hot water reheat
- Multi-zone AHUs
- Systems from 23000l/s – 47100l/s
- Chilled Water, Brine, and DX Systems

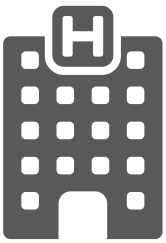


As hot incoming air passes over the precool coil, the liquid refrigerant vaporizes, absorbing heat from the air stream, thus lowering its temperature. This allows the cooling coil to run at a lower temperature. As a result more condensate is removed. Vaporized refrigerant then moves through connecting tubes to the reheat section downstream of the cooling coil, where it condenses, warming up leaving air and reducing its relative humidity.

HOW IT'S DONE

1. Contact Eco Aire or your sales representative with a description of the system.
2. An ECO representative will visit the job site to inspect and pre-qualify the system.
3. ECO then sets up an inspection trip, studies the technical aspects of the customer's systems and controls, and determines the project's requirements.
4. The customer and ECO work together to determine the time for the installation to take place. This may include working holiday hours, only at nights, or scheduled shut downs.
5. The final comprehensive proposal complete with technical performance data and the conditions of the work is submitted to the customer for final accptance
6. The work is performed totally by ECO employees and the customer receives the benefit.

Eco Aire has an air conditioning unit to suit any industry from Residential to Industrial. What ever the need may be.



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