What Others Say ...

Virtually Maintenance Free. "In addition to costing less to buy and install, other advantages are that they eliminate the need for reheat or desiccant systems, require no mechanical or electrical input, are virtually maintenance free, provide lower operating costs and last a very long time..."



From Edison Electric Institute's

"Heat Pipes: Your Answer to Cooling and Humidity Problems."

Saves Money.

"The investment has definitely paid off and I would say that over the past couple of years, it's been well over a million dollars in savings.



Mike Garrison, Director of Engineering Omni Orlando Resort at ChampionsGate

Competitive Performance.

"Heat pipe enhanced air conditioners are competitive with gas desiccant systems from a performance standpoint, and are considerably less expensive to buy and maintain."

From Georgia Power Company's

"Heat Pipes: An Alternative to Gas Desiccant Systems for Supermakrets."

Greatly Increases Moisture Removal.



"It took twenty and one-half days to take out 55.900 gallons $(212m^3)$ of water. That's enough to fill our smaller swimming pool."

John Steele, Director of Property Operations The Hilton at Lake Buena Vista, Florida



"Heat pipes greatly increase the moisture removal capabilities of an air conditioning system, typically from 50% to 100%. Savings on your energy bills are realized from eliminating the need to overcool then reheat the same air... Heat pipes are the economical and environmental technology of choice for efficient dehumidification.

From Virginia Power's

"Heat Pipes, A Dehumidification Enhancement."



a subsidiary of MiTek®,

a BERKSHIRE HATHAWAY Company

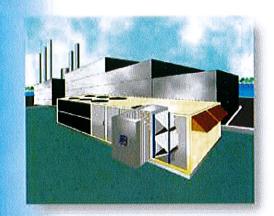
4340 N.E. 49th Avenue Gainesville, Florida 32609 - U.S.A. Ph: (352) 367-0999 Fax: (352) 367-1688 E-Mail: heatpipe@heatpipe.com www.heatpipe.com **Advanced Heat Pipe Pte Ltd**

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COMMERCIAL / INDUSTRIAL

WRAP-AROUND DEHUMIDIFIER HEAT PIPES





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ADVANCED ENERGY RECOVERY AND DEHUMIDIFICATION

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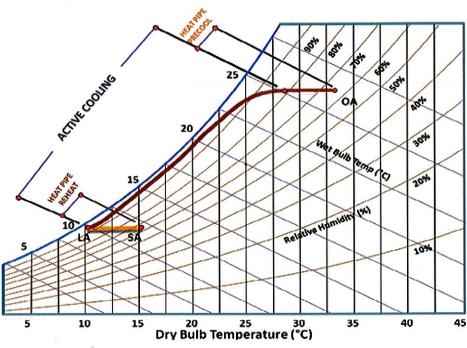
The Most Cost Effective Method of Dehumidification.

WHAT ARE HPT **DEHUMIDIFIER HEAT PIPES?**

HPT Dehumidifier Heat Pipes are thermal transfer devices capable of moving large amounts of heat from the return air stream to the supply air stream of any AC system. Typically, they are charged with a working fluid compliant with ANSI/ASHRAE 34 Safety Group A 1. Because heat pipes move heat with a process of vaporization and condensation, no mechanical parts or energy is needed.

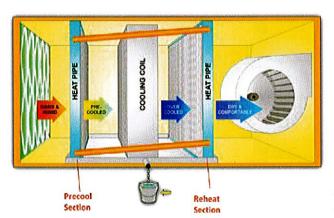
HPT Dehumidifier Heat Pipes consist of two sections. The first section is placed in the incoming air stream before the AC cooling coil. When warm air passes over

Transforming Your HVAC System Into a Powerful Dehumidifier with Heat Pipe Technology.



HPT Dehumidifier Heat Pipe Psychrometrics

the first section, the liquid refrigerant vaporizes, moving heat to the second section, placed downstream from the cooling coil. Because heat has been removed from the air before entering the evaporator coil, air passing through the cooling coil drops to a lower temperature, resulting in more condensate removal. The overcooled air is then reheated to the desired temperature and a lower relative humidity by the second section, using the same heat originally absorbed by the first section.



THE BENEFITS TO YOUR AC SYSTEM

Amazingly, this entire process of precool and reheat is accomplished with no energy due to the passive nature of the heat pipe. The result is an air conditioning system with the ability to remove considerable moisture than before, while free reheat is obtained for better IAQ and energy savings.

In most cases, this dehumidification effect is more than enough to negate the need for any additional humidity control.

When fresh air is introduced,

the heat pipes are of tremendous benefit in reducing the moisture load before it can

become a burden on the building. Not only do the heat pipes drastically reduce humidity, the fresh air is freely reheated to a comfortable temperature. With heat pipes, a fresh air make up AC unit delivers ASHRAE recommended conditions at a considerably lower energy cost than a conventional system using costly reheat.

Dehumidifier Heat Pipes by Heat Pipe Technology, Inc., (HPT) are the most efficient method of dehumidification available today. Since widespread HVAC applications of heat pipes began in the mid- 1980s, thousands of systems are now operating in the field. From hotels and restaurants to schools and manufacturing facilities, our high quality copper heat pipes have proven to be the best solution for humidity-related problems.

Dehumidifier Heat Pipes in any HVAC System

Retrofit Designs

Heat Pipes can be installed on almost any AC unit or air handler, whether at our factory or done on site with a field crew. Years of experience have made us familiar with almost all equipment lines and the specific requirements for each. As a result, installations in the field are done with minimal down time and highest quality.

Custom Wrap-Around Heat Pipes

Because heat pipes are passive and powered by difference of air temperatures, they do not interfere with the existing circuiting of the system, be it chilled water or DX.

U-framed Heat Pipes

Made to Fit Wrap-Around Design

These "U-framed" dehumidifier heat pipes are completely finished, charged and ready to be placed as a fitted component in the air handler. When the configuration and specifications of the system are acceptable for the slide in design, this often provides the simplest and most cost effective method of installation.

Controllable Wrap-Around **Heat Pipes**

Ideal for Controlling Supply Air Temperature

In those applications where precise temperature control is required, HPT dehumidifier heat pipes are equipped with solenoid valves (24V or 110V) installed on the liquid lines of individual circuits. Number of valves is dependant on heat pipes size and number of rows. Control valves are grouped in stages to connect to the building BAS.

■ Low pressure drop

