



SOLUTIONS

Tips for Enhancing Heat Pipe Design

October 2015 - In This Issue:

Recently Shipped - 44 Large Energy Recovery Heat Pipes

***NEW Feature* - Customize Flanges for DHP-U Frames**

White Paper - Critical Dehumidification Systems in Tropical Locations



Providing energy savings solutions to the world market

Our knowledgeable, worldwide rep network will work with you to implement our technology for both dehumidification and energy recovery applications.

Find a representative in your area.

Recently Shipped - 44 Large Energy Recovery Heat Pipes Designed to Significantly Reduce Loads and Address Concern of Cross Contamination with Lab Exhaust



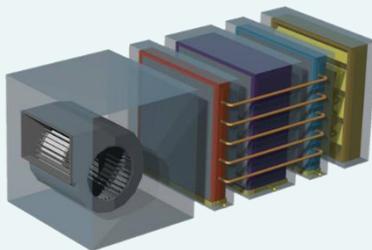
This newsletter is a service of HPT, Inc. It is meant to familiarize users with our technology and design software SelectPlus™.



A direct pipeline to savings



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[Click here to read more about the DHP Series](#)



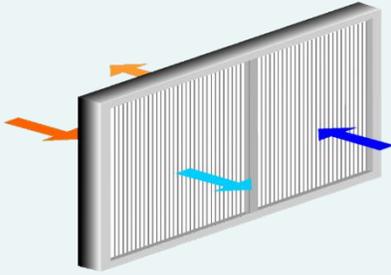
HPT recently shipped 44 large energy recovery heat pipe (HRM) systems to a major New York university. These systems were designed to handle 430,000 CFM of supply airflow. With the addition of the HRMs, the cooling load reduction at design is estimated at 115 tons and the expected heating load reduction at design is estimated at 1475 tons!

The design engineer chose HRMs based on the following:

- Initial load reductions and long term energy savings
- Address concern of cross contamination with lab exhaust
- Allowed for a smaller AHU footprint, which led to a better mechanical room layout
- Energy recovery wheels could not be used based on the class of air type outlined in ASHRAE Standard 62.1 5.16.3

Furthermore, when examining the Recovery Efficiency Ratio (RER), HRMs perform better than wheels in primarily heating climates. RER is defined as the energy recovered divided by the energy expended in the recovery process, expressed in BTU/Wh (AHRI Guideline V). For HRMs, the energy expended is only the additional fan power required to overcome the added static. However, with an energy recovery wheel, one has to consider pressure drop, motor, and additional airflow required to account for leaks and purge.

HPT continues to design systems that push the boundaries of energy savings with a product that requires no moving parts and little to no maintenance.



[Click here to read more about the HRM Series](#)

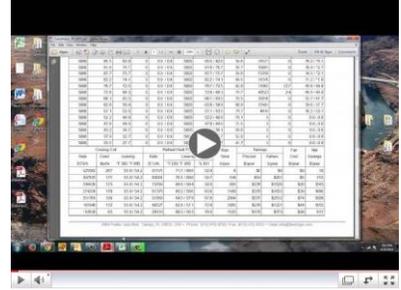


***NEW FEATURE* SelectPlus™ - Customize Flange Dimensions for DHP-U**

This video will walk users through a new feature recently added to SelectPlus™.

Users will now have the ability to modify the top and bottom flange dimensions for the DHP-U Frame. The dimensions can be modified at the drawing screen. This provides users and OEMs even more flexibility to match the AHU tunnel and/or cooling coil dimensions.

[Click here to view](#)



White Paper - Critical Dehumidification Systems in Tropical Locations

Wrap around heat pipes have been used for decades in the most demanding and critical applications where humidity is a concern. When compared to the "brute force" solution of dehumidification of overcool/reheat, the wrap around heat pipe provides the same psychometrics when reheat is used to control humidity. [Click here to download and read more](#)

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