

# HEAT PIPE TECHNOLOGY

advanced energy recovery and dehumidification



## THE HRM-V™ SPLIT PASSIVE HEAT PIPE

utilizing heat pipe heat exchangers

when side-by-side recovery is not possible

laboratories  
sports complexes  
medical buildings  
manufacturing  
educational facilities  
data centers

The HRM-V™ Split Passive Series of energy recovery heat pipes are compact and highly efficient heat transfer devices. They are used to recover energy in process applications and from exhaust air to pre-cool or pre-heat outside air in comfort applications without the risk of cross-contamination.



[heatpipe.com](http://heatpipe.com)

# The HRM-V™ Split Passive Heat Pipes By Heat Pipe Technology

utilizing heat pipe heat exchangers



This unique design is intended for applications where two air streams are not in close proximity, either to prevent contamination of the supply air by the exhaust air, or other design consideration.

This technology gives the design engineer a lot of flexibility and more importantly a ZERO cross contamination system. And, compared to average water run arounds, it comes with higher effectiveness, no moving parts (except for dampers in the DSO™ option), and better efficiency. A typical system comprises 3 circuits, each circuit has a vapor header at the top end and a liquid header at the bottom. With a fixed elevational difference between supply and exhaust air streams, system can be optimized for the season that yields the most BTUs. In Minneapolis, for example, the system would be optimized to recover heating. Control valves are usually added and located on the liquid side of each circuit. When open, full recovery is taking place, when shut, no recovery is taking place. This would be utilized during economizer conditions and in extreme climates to prevent frosting on the exhaust coils.

When supply and exhaust coils are on the same level, and summer as well as winter recovery are equally important, an HRM-V with a Dynamic Seasonal Offset (DSO™) system is utilized (see diagram on the following page). This system will yield equal cool and heat recovery with 45% effectiveness on average. Optimized performance is achieved by using integral face dampers to direct flow through sections of the heat pipes to create an offset effect, thus enhancing performance.

Typical Applications include laboratories, healthcare facilities, industrial processes etc.

## the no cross-contamination solution

- ZERO cross contamination
- Multiple circuits for improved performance
- Dimensional flexibility in height and length
- Dynamic Seasonal Offset (DSO™) option for equal summer/winter recovery
- Can be optimized to recover the most BTUs
- Optional control valves for economizer mode and to avoid frosting
- Five year limited warranty is offered on the heat exchangers
- AHRI 1060 certified and ETL listed to UL 207 and CSA STD C22.2

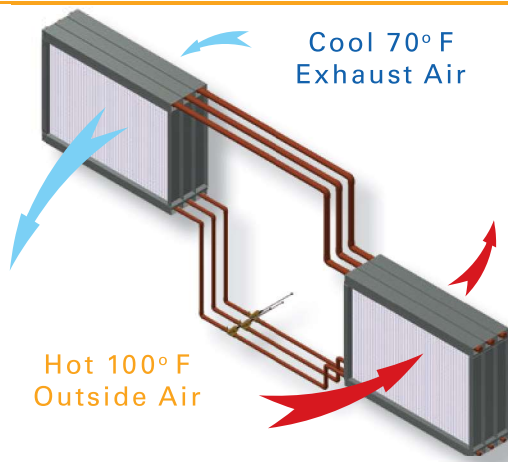
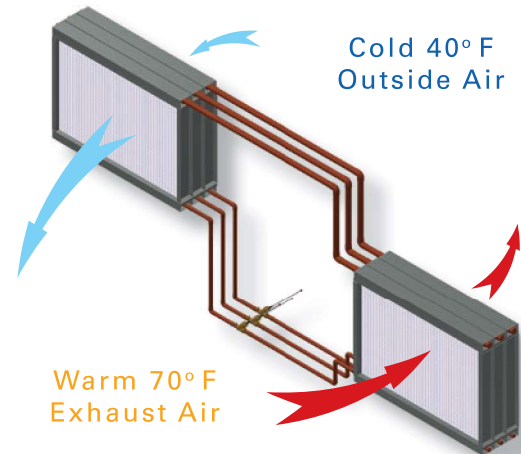
Up to 120 linear feet of supply/exhaust separation



## Optimized for Winter Recovery

when cooler outside air intake is above warmer exhaust air

- Comfort heating with some cooling
- Process cooling or outside air preheat
- Data center free cooling



## Optimized for Summer Recovery

when warmer outside air intake is below cooler exhaust air

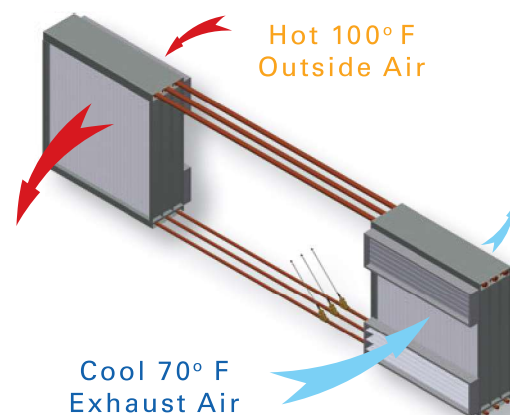
- Comfort cooling with some winter heating
- Process air precooling

## Winter/Summer Recovery

with *Dynamic Seasonal Offset (DSO™)*

when outside air intake is on the same level as exhaust air

- Summer/Winter peak load reduction
- Process cooling/heating
- Outside air precool or preheat



Call us for details 1 (800) 393-3464



# The HRM-V™ Split Passive Heat Pipes By Heat Pipe Technology

utilizing heat pipe heat exchangers

- Copper tubes and aluminum fins
- 10 & 12 fpi spacing
- 2, 4 and 6 rows
- Optional corrosion protective coatings
- Optional stainless steel casings
- Controllable
- Cost effective
- Check with factory for other options

Providing cross-contamination free solutions for:



laboratories  
sports complexes  
medical buildings  
manufacturing  
educational facilities  
data centers



advanced energy recovery and dehumidification

6904 Parke East Blvd., Tampa, Florida 33610

(813) 470-4250 • TF: (800) 393-3464

Email: [info@heatpipe.com](mailto:info@heatpipe.com)

Web: [www.heatpipe.com](http://www.heatpipe.com)

© 2020 Heat Pipe Technology, Inc..

All Rights Reserved

LIT CODE: HRM-V 08/2021



CONFORMS TO  
UL STD 207  
CERTIFIED TO CSA  
STD C22.2 # 140.3

