Polaris Capital Power
"ONE STOP" energy consortium and investment

AdvancedHTF SOLUTIONS

AHTF® - Advanced Heat Transfer Fluid Solutions

AHTF® and ERU (Energy Recovery Unit) Performance

Advanced Heat Transfer Fluid Solutions believes it has identified two markets that are candidates for AHTF® additive acceptance based on current end user pricing. ***The goal is to demonstrate best results for the quickest return of capital and the optimum ROI.*** This becomes possible on systems with high utilization.

Energy Recovery Systems:

Laboratory or hospital environments for example, require their systems to utilize 100% outdoor air and not recirculated air. Heating and cooling outdoor air, usually 24/7, requires a high amount of energy. The basic reason for using an energy recovery unit (ERU) is to pre-heat and pre-cool outdoor air that is replacing air exhausted from a building by design. Further, these ERU's must be designed so that there is no cross contamination. Meaning the exhaust (dirty) air stream must have no chance of mixing with the supply (clean) airstream.

These ERUs are designed using what is called a "run around loop". This run around loop consists of two water coils (when climate conditions require, a mixture of 30% to 50% glycol is needed) connected with piping and pumps. The air being exhausted from the building passes through one coil and transfers energy to the fluid in that coil. The fluid is pumped through the second coil where outdoor enters. This coil then transfers the energy to that air. This system reduces the cooling load in cooling months and reduces heating load in heating months.

Well designed and applied energy recovery systems can dramatically reduce heating and cooling loads***. AHTF® can increase those efficiencies by 20 – 30%.***