

DATASHEET



OPTIMIZE ENERGY RECOVERY

TO BETTER MEET YOUR NEEDS

Innovent offers the industry's most diverse portfolio of energy recovery options, from sensible flat plate heat exchangers to enthalpy wheels to regenerative heat recovery.

With over 40 years of air-to-air energy recovery experience, Innovent will help you select the optimal energy recovery technology to meet the needs of your specific application.

WHY CHOOSE INNOVENT ENERGY RECOVERY?

- A breadth of options to match the right technology to your application.
- Integration into a completely custom ventilation unit with heating, cooling, filtration, and controls — giving you the ability to maximize energy transfer between air streams with tremendous design flexibility. Casing can be designed to accommodate section splits for tight installations or for very large airflows (up to 400,000 cfm).
- Units can be designed for lowest first cost, lowest operating cost, or lowest maintenance cost. Tempering incoming air, in both heating and cooling seasons, minimizes operating costs and can even reduce first cost by reducing equipment load requirements.



BUILT TO ORDER. BUILT FOR EFFICIENCY. BUILT TO LAST.

APPLICATION SPECIFIC ENERGY RECOVERY

- ENTHALPIC CORE HEAT EXCHANGER. An enthalpic plate offers high amounts of sensible and latent energy recovery, and low amounts of cross contamination between air streams. No moving parts reduces maintenance requirements.
- ENTHALPY WHEEL. An enthalpy wheel can provide the highest amounts of both sensible and latent energy recovery in applications with relatively clean return air, due to moderate cross contamination between the supply and return airstreams. Proper and routine maintenance is required to ensure rotation and effectiveness of the wheel.
- SENSIBLE FLAT PLATE HEAT EXCHANGER. Flat plate heat exchangers provide sensibleonly energy recovery, with almost zero cross contamination. This simple design contains no moving parts.
- **HEAT PIPE.** Heat pipes provide sensible only energy recovery by transferring refrigerant through a coil-like device. This creates very low cross contamination between side-by-side airstreams, with a relatively small footprint.
- RUN-AROUND COILS. For applications with contaminated exhaust (ex. lab setting), run-around coils can provide energy recovery and ensure zero cross contamination. This is achieved by placing coils in separated supply and exhaust air streams and pumping fluid between them to transfer energy.
- REGENERATIVE ENERGY RECOVERY. Latent and sensible energy transfer with no preheat required and efficiencies upwards of 95%. Unlike an enthalpy wheel that rotates between two separated airstreams, Accubloc's heat exchanger modules are fixed in place. Energy transfer occurs by controlling return and outdoor airflows through two banks of fast-acting two-position dampers.

CATEGORY	Enthalpy Wheel	Enthalpic Core	Flat Plate	Heat Pipe	Run-around Coils	Regenerative Energy Recovery
Heat Transfer Medium	Aluminum or polymer	Paper, polymer, or metal	Aluminum	Refrigerant	Glycol Solution	Aluminum
Sensible Performance	70-85%	60-70%	50-65%	35-55%	30-45%	85-95%
Latent Performance	65-80%	35-50%	0%	0%	0%	70-80%
Internal Pressure Drop	Moderate	High	Low	Moderate	Moderate	Moderate
Leakage and Cross Contamination	Low	Very Low	Almost None	Almost None	None	Low
Maintenance	Moderate, rotates	Low, no moving parts	Low, no moving parts	Low, requires refrigerants	Moderate, requires fluid and pumps	Moderate, moving damper blades

