

ENERGY SAVINGS

ENERGY RECOVERY



ECONET

WHERE RENEWABLE AND RECOVERABLE
ENERGY COMBINE

ECONET KEY BENEFITS

- One common circuit for the heating supply, resulting in a more compact unit and minimized pressure loss
- Energy efficient flexible cooling system
- High recovery rate for Constant or Variable Air Volume (VAV) systems
- Ideal for renewable energy such as ground water for cooling and waste energy for heating
- One air supply coil instead of 3, reduces the use of fan power by lowering pressure drop
- Flexible, integrated control system which optimizes recovery
- Low temperature thermal energy which allows the use of alternative energy sources
- Fabricated pump, including unit controls and software which allows for faster installation
- 4,000+ systems operating globally
- Reduces AHU footprint

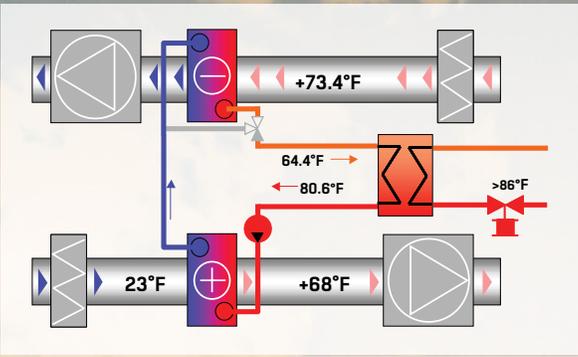
Econet is designed to improve indoor air quality while lowering your energy costs. The components of the SEMCO Econet System are combined to provide a more reliable and efficient Air Handling Unit (AHU) Heat recovery, heating and cooling air integrated to form a common circuit resulting in a more compact ventilation unit.

Unlike traditional run around coil units, Econet uses minimal components for air transfer, resulting in a more energy efficient and environmentally friendly solution to your air quality needs.

Nothing is more efficient than an Enthalpy Recovery Wheel for energy recovery; however, there are circumstances where an Enthalpy Recovery Wheel is not applicable and a hydronic recovery pump package like Econet is the correct application.

- When a SEMCO True 3Å wheel is not specified
- When ductwork is not co-located
- Supply and exhaust airflows have a significant imbalance
- Retrofit applications, where air handling units are prohibitive, due to space
- In place of run around coil applications





Problem: Energy Consumption

It's a fact that we spend the vast majority of our time indoors. A large portion of a building's energy is spent on heating, cooling and ventilation. The amount of energy resources that it take to maintain the right temperature and air quality is considerable.

Solution: Econet

The solution is to recover and use the energy in the exiting exhaust air, this can be achieved through a highly efficient energy recovery system. Econet has a recovery rate up to 80%.

Econet can recover and use energy that us unusable in traditional systems. Through intelligent design, Econet is able to influence the entire energy chain and greatly reduce the energy requirement.

Example: The temperature of conventional chilled water is determined based on ventilation and humidity loads. This leads to lower chilled water temperatures and higher water flows that lead to inefficient chillers. Econet can utilize higher temperature water that will increase the chiller differential temperature and its efficiency.

Econet is a winner! Through the use of alternative energy resources, Econet is not only the most efficient choice, it is right for the environment.



Based on our e³ concept, we provide innovative and sustainable products to help you achieve or surpass your environmental targets while optimizing your investment and Life Cycle Cost.

Econet recovers energy with up to 80% efficiency

An example of savings in energy costs:

	Temperature efficiency (η)	Electricity		Heating	
		MWh	\$/year	MWh	\$/year
ECONET	68%	89	\$17,434	59	\$9,247
Traditional RAC	57%	98	\$19,198	120	\$18,807
SAVINGS	9%	9	\$1,764	61	\$9,560

Location: Boston, running hours 8760 h, air flow 10 cfm, electricity 0.19 \$/kWh, heating 0.16 \$/kWh.

SEMCO's Econet system contains air handling systems and a prefabricated pump unit that controls the system. A heating exchanger package can be delivered as an accessory.



Heat Exchanger Package (accessory)

In most cases some form of supplementary heating or cooling is necessary. Instead of ordering a cooling/heat exchanger separately, SEMCO offers a complete heating exchanger package. This means that shorter delivery times are possible, and better precision is achieved on site.

EXPERIENCE & EXPERTISE

With over a half-century of innovation and expertise to share with our customers, SEMCO® is a global leader in air management. With market presence in 65 countries, we are in a unique position to be a local supplier and an international partner in our customers' projects. Our constant aim is to provide systems that precisely deliver the best indoor air quality and performance, while maximizing energy efficiency.