## EXOTHERMICS HEAT EXCHANGERS

### FOR DAIRY APPLICATIONS

# Air-to-air heat exhangers for improved process efficiency in dairy applications.

**Exothermics Stainless Steel** Sinusoidal Plate-Type heat exchangers are designed specifically to meet the requirements of the dairy industry. Exothermics has worked closely with the USDA towards a heat exchanger design which meets their acceptance for dairy applications. The criterion for acceptance encompasses both materials of construction as well as methods of manufacture. The design includes 100% stainless steel construction, USDA approved gasket materials, a proprietary heat transfer core and a case design that minimizes opportunities for airborne particulate to gather in the exchanger.

Our engineering team designs the right heat exchanger to suit each application precisely, delivering maximum process efficiency and short payback times for our customers.

#### Designed for Clean Operation

Our heat exchangers utilize a proprietary sinusoidal plate design to minimize opportunities for airborne particulate to gather on the heat exchanger media.

#### **Engineered for Performance**

High heat transfer effectiveness is achieved by corrugating the heat transfer plates to achieve our exclusive sinusoidal wave pattern. The corrugated surfaces create air flow turbulence as the air passes through the unit. Heat transfer is further enhanced by using a counterflow design.



"SP" model heat exchanger featuring access covers

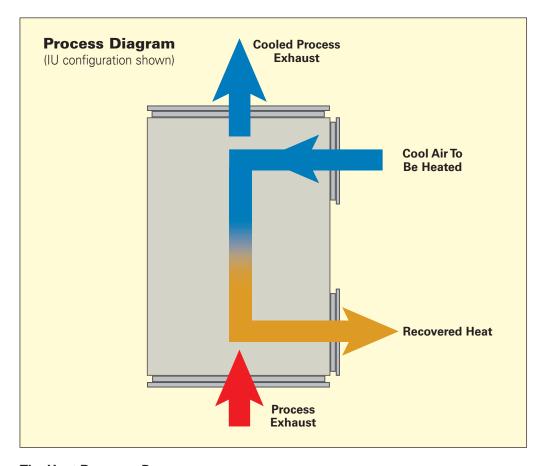
#### Features and Options

- Heat exchanger is entirely constructed with 304 stainless steel.
- USDA accepted gasket materials.
- Proprietary sinusoidal plate design with 0.5 inch plate spacing.
- Robust, all welded construction by AWS qualified welders under the supervision of an in-house CWI Weld Inspector.
- Process temperatures up to 1200° F.
- 4 customizable flow configurations.
- Counter flow or parallel flow patterns.
- Standard pressure rating of 1 PSI, with higher pressure ratings available.
- Virtually maintenace free.
- Optional insulated side panels and access covers are available.
- Each unit is inspected through our ISO 9001:2008 registered quality system.



## Exothermics Heat Exchangers

High performance heat recovery for food and dairy applications.



#### **The Heat Recovery Process**

As the air to be heated enters the unit, it is directed over the corrugated plates in a counter-flow direction, opposite the process exhaust air flow direction. Heat from the process exhaust air is absorbed by the plates, transferred to the cooler airstream and then exits the unit as recovered heat that can be reused or recycled.



#### The Sinusoidal Plate Advantage

Our proprietary plate design delivers maximum heat transfer while minimizing the accumulation of airborne particulate on the heat exchanger media. With Exothermics, you get the dual benefits of superior efficiency and clean operation.



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