



Reduce your parlour  
water heating costs by up to  
**50%\***

GEA Farm Technologies

## **ExtraHeat:** Recovering wasted energy

- High efficiency heat recovery system
- Reduced energy consumption
- Lower operating costs - improved profitability
- Risk-free operation
- Better for the environment
- From 270 to 1080 litres
- Extends compressor life
- Easily fitted and serviced

...a brilliantly simple way to save money

# ExtraHeat

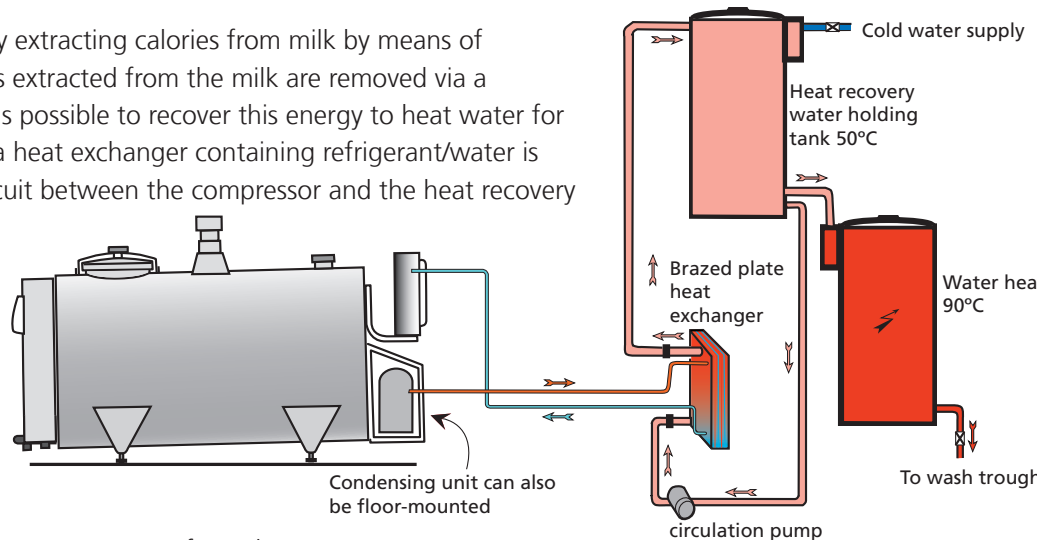
## Tested systems that adapt to your needs

Expert in milk cooling and heat recovery, we offer proven and high-efficiency heat recovery systems that are simple to install and operate with proven reliability.

## Reduced water heating costs as you cool milk

### Operating principle

Milk refrigeration works by extracting calories from milk by means of a cooling unit. The calories extracted from the milk are removed via a condenser and are lost. It is possible to recover this energy to heat water for the dairy. To achieve this, a heat exchanger containing refrigerant/water is installed in the cooling circuit between the compressor and the heat recovery water-holding tank.



### Bulk tank

The bulk tank compressor compresses gas from the evaporator, which increases its temperature. The hot gas loses part of its calories to the water when passing through the heat exchanger. The resulting cooled gas reverts to the liquid state in the condenser prior to being once again injected into the evaporator to extract calories from the milk.

### ExtraHeat

The warmed water is stored in a heat recovery water holding tank which can then supply a water heater. Water from the lower part of the heat recovery water holding tank is pumped by the circulation pump through the brazed plate heat exchanger before being raised into the upper part of the heat recovery water holding tank. This operates on a continuous flow principle whilst the bulk tank is cooling. Warm water is available in a few minutes and is released to the existing water heater when required.

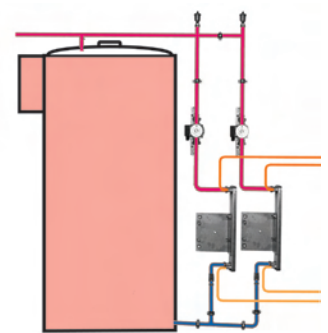
### Special Notes:

- The amount of energy recovered is subject to the milk production volume and the compressor running times.
- A water softener must be installed and used.

\* Cost savings will vary according to prevailing energy prices, individual consumption profiles and compressor running times.

### Profitable environmental protection

By adopting a heat recovery system, you participate in environmental protection and reduce your energy needs. By recovering the heat extracted from the milk, you reduce your hot water bill and improve your operating costs.



Adding plate heat exchangers and additional circulation pumps lets you recover heat from two cooling units to a single tank.



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