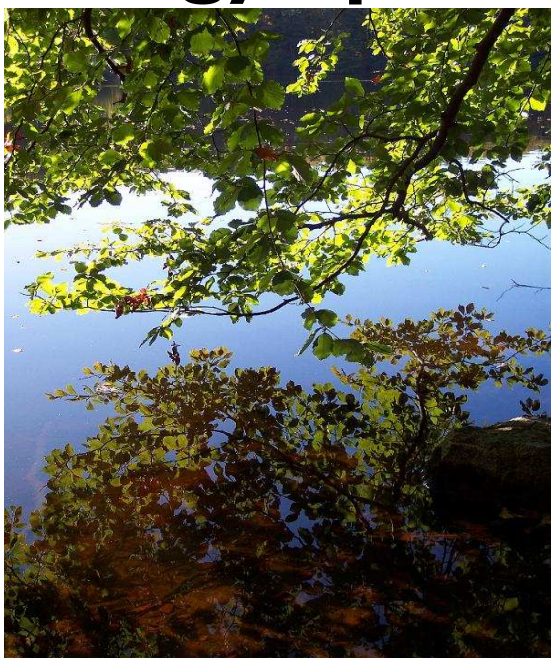
Productinfo

Lildal
Part of LM-Group

Energy optimization



Our nature is an important resource

Helping our customers

to optimize their production and by that bringing down the costs for energy consumption in the rendering process is one of our main targets. The customer benifits from lower processing costs and larger profitability margin on the end products.

The traditional rendering process is a very energy consuming process because the water in the raw material has to be evaporated. But by thinking energy saving into the planning of a new rendering plant will both lower the daily operating costs and the pay-back time of the plant.

Lower processing costs can be achieved by

- **U**sing the heat energy in the exhaust steam from the cooking process by running the steam through a heat exchanger. The gained energy can be used for heating purposes in buildings or to heat process equipment. In the last case will the cost for steam be reduced.
- **D**raining as much free water from the raw material as possible before entering the process machinery. Drainage can take place both in the receival silos, in the feeding conveyor from the silos and by pre-heating the raw material at 80 ºC where the coagulation process is most effective and where most of the bound water will be released. This will result in reduction of steam consumption and smalller heating surfaces in the subsequent process machinery.
- **U**sing energy efficient electrical motors. And by reducing the rotation velocity of the processing machinery where possible and by that achieve smaller sized motors.

Please involve us as early as possible in planning of a new rendering plant or when you need to optimize an existing plant.

Process

Input: Thinking energy saving into planning of new and existing plants

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Reduction of process operating costs

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Output: Larger profitability margin

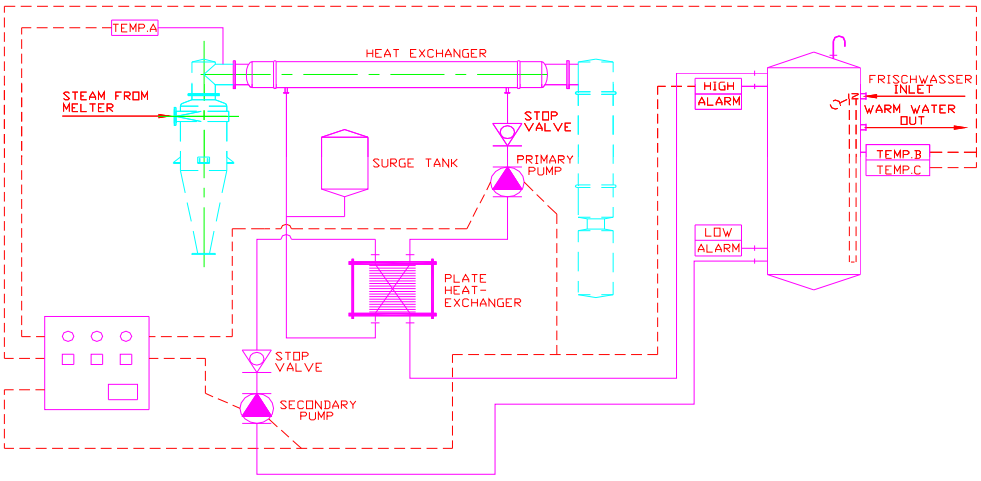
Design Features	Customer Benefits
Heat exchange of the exhaust steam	Energy saving
Draining of water in silos and conveyors	Lower steam consumption
Coagulation of raw material	Lower steam consumption
Energy efficient motors	Lowering of the operating costs
Lowering the rotation velocity of the processing machinery	Smaller sized motors and reduction of operating costs

Distributor/ Agent

Energy optimization, continued

Examples of energy saving equipment

Super-cooker WHSC 1700 erected at DAKA in Denmark
for pre-heating of raw materials



Example of P & I Diagram of a system using the exhaust steam from the process

Press screw with adjustable pressure
for de-watering of the raw material

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