



MARGARINE REMELT UNIT

The FH SCANDINOX continuously working remelt unit is a compact skid-mounted unit, of sanitary design which is easy to integrate in the overall process plant, but which is also engineered to be easy to service and to keep a good maintenance practice.

DESCRIPTION

The continuous remelt unit is designed to remelt crystallised margarine that is bypassed the packing machine for re-processing. At the same time, it keeps the packing machine free of any undesired back pressure. This complete remelt system, is designed with one section in the plate heat exchanger (PHE) in which the crystallised product is melted in a concurrent flow with hot water.

Surplus product, typically about 3-5%, from the packing lines is continuously returned to the buffer tank as rework product. In the event of packing machine downtime, the rework capacity is 100%. This enables all excess product to be continuously remelted and to be recycled to the emulsion buffer tank.

The consistency of the product is very different depending on whether it is produced to be packed or filled. It is obvious that a packed product must exhibit a firmer texture than a filled product and if this texture is not optimal the product

will be diverted to the remelting system, melted and added to the buffer tank for re-processing. Different remelting systems are available but the most used and common system is the PHE remelt system. A stainless steel rework tank is also a possibility for the process, but most likely in small scale margarine production.

PRODUCT APPLICATIONS

- Table margarine
- Puff Pastry margarine
- Industrial margarine
- Cake margarine
- Low fat margarine
- Shortening
- Ghee
- Spreads

DESIGN

The FH SCANDINOX remelt unit consists of a single plate heat exchanger (PHE) for melting crystallised product with hot water. It also includes one brazed PHE to provide the unit with hot water by condensing saturated steam, one lobe rotor positive pump, process valves, temperature regulation valves, and belonging pipes and fittings.

The FH SCANDINOX remelt unit is equipped with double jacketed product pipes. The hot water will be supplied from the internal hot water loop (the FH SCANDINOX hot water unit).

The margarine remelt system can be delivered completely pre-manufactured with pipes and fittings, and electrically pre-wired to a local junction box as well, ready to install at the factory.

The remelt system is prepared for CIP cleaning.

NOMINAL CAPACITY

The nominal capacity is depending on product application and product and temperature profile. The nominal capacities are based on a typical rework temperature profile from +10-12°C > +60- 65°C.

MATERIALS

The stainless steel plates in the PHE are made of Titanium. Other product contacting parts are made of stainless steel AISI 316L.

CERTIFICATION

The construction is in accordance with the European Pressure. Equipment Directive (PED) 97/23/EC. Other certifications can be delivered on request.

