



## I Application

The Maturing/Fermenting Unit is a tank which allows milk to be heated and also cooled, with the aim in mind to pasteurize (heat) the product and control its fermentation (cool). The unit can be used to produce yoghurts of different types, fermented milks and sour cream. Additionally this very same equipment forms an integral part of the process to produce butter.

## I Operating principle

**Production of yoghurt:** after exiting the pasteurizer the milk is fed into the Maturing/Fermenting Unit. This heat treatment eliminates principally all the pathogenic flora. The contents are then cooled and the ferments or 'starters' are added.

To make liquid yoghurt incubation is carried out in the Maturing unit with mixing and temperature control until the process of fermentation has finished. It is then cooled and packaged.

To make firm-type yoghurt packaging is carried out before incubation. It is then placed in a heated store-room for maturing and then cooled afterwards in a refrigerated store-room.

**Butter making:** the elaboration of butter starts with the cream obtained from the process of skimming or standardisation of the milk. The cream is cooled and stored in the Fermenting Unit in a similar way to that of yoghurt.

## I Design and features

Vertical closed unit in stainless steel AISI 316L o AISI 304.

Double jacket for heating with water or steam.

Cooling by iced water.

Variable speed agitator for uniform mixing.

Temperature control probe.

Adjustable temperature.

Level sensors.

Air entrance with filter.

Spray balls for CIP cleaning.

Peephole with illumination for visual inspection.

Man-hole for inspection and maintenance.



## I Materials

|                                           |                        |
|-------------------------------------------|------------------------|
| Parts in contact with the product         | AISI 316L and AISI 304 |
| Rest of materials                         | AISI 304               |
| Gaskets in contact with the product       | EPDM                   |
| Interior surface finish (product contact) | $Ra \leq 0.8 \mu m$    |
| Other exterior finishes                   | Matte polished         |

## I Options

Filters for sterilization with steam.

## I Technical specifications

Capacities from 250 l to 5.000 l.  
 Butterfly valves 1" and 3/4" in stainless steel AISI 316L DN25 with EPDM gasket.  
 Vertical actuator for C-Top control unit in stainless steel AISI 304L.  
 C-Top control unit and Magnetic Reed switch 24v DC 1E 1M.  
 Safety and drainage valves DN25.  
 Pressure gauge 10 bar, 1 1/2".  
 Sample-taker, Keofitt brand.

