

TEMPERMIX

FOR THE FOOD AND PHARMACEUTICAL INDUSTRIES

TEMPERMIX is a particular rotating heat exchanger with an unscraped surface. The need to eliminate the scraper (used to increase the efficiency of the heat exchange) comes from sanitary, technological, financial and sanificating requirements. Its use is specifically suitable in aseptic applications for viscous and abrasive pharmaceutical and edible products.

The machine body is built wholly with machine tools starting from the full stainless steel drill rods and the cooling system is obtained by deep drilling.

Application with a bevel motor



ADVANTAGES OF THE UNSCRAPED SURFACE

The tolerances between rotor and external body,

are based on thirty years' experience and depend

variable from 0.020 mm to 0.350 mm,

on the application.

Sanitary: Avoid the release in the product of metal micro-dust caused by the abrasion of the scraper or any of its parts due to the accidental breakage of the scraping blades.

Technological: The heat exchange is instantaneous in the whole product mass and such to allow:

- regular cooking without any overheating

- amorphous structures of margarine (due to plasticizing) that disperse easily in the mixtures and do not require maturing (cristallizzatori).

Financial: The machine body is not subject to wear and tear. The ratio between heat exchange surface and residual volume is about 10.5 times higher than in the normally used scraped surface heat exchangers. For instance, with the same exchange surface, the Tempermix shown here has a residual volume of 16.5 litres in comparison with about 170 litres in scraped surface heat exchangers; the result is a considerable saving both of product when production is started and halted, and of waste water when flushing.

Sanification: All mechanical components in contact with the product are in AISI 316 stainless steel and therefore suitable for the flushing acid-base treatments normally used.





Tempermix H1700 margarine ◀ plasticizing system

MAIN APPLICATIONS

Fat plasticizer Anhydrous and/or hydrated margarine production Chocolate tempering

Emulsifier-aerator

Mayonnaise Semi-fluid floury cake-type mixtures Anhydrous creams for the confectionery industry

Cooker-pasteurizer Meat and vegetables sauce Semi-fluid cheese Hydrate creams for the confectionery industry Egg mixtures

Cooler

Im

Downstream from a cooker-pasteurizer Anhydrous creams containing monosaccharide sugars

Tempermix H1700 cooling-heating system

Tempermix H1300 rotor and casing



Tempermix H1700 with thermally insulated cabinet



TECHNICAL FEATURES

BASE MODELS	H 1700 / H 1300
OPTIONS	heated / cooled

Thermal exchange area:	4,7 m
Residual volume:	l 6,5 litre
Thermal exchange values:	
- Cooking-pasteurizing ∆T of 15°C:	300.000 calories/hou
- Cooling ΔT of 15°C:	230.000 frigories/hou
- Margarine plasticizing:	27.000 frigories/hou
Feeding and discharge (DIN, SMS, Tri-clamp):	50 mn
Power of the main motor:	5,5–9,2 kV
Weight of the main body (exchanger):	1.300 k

Exclusive international design, construction and distribution: ALIFAR Srl

Registered Office: Via Firenze, 18 I-36065 Mussolente (Vicenza) Italia Fax: 0039 0424 031316 - 0039 0424 577210 Headquarters and Offices: Via Regia, 71/C I-35010 Vigonza (Padova) Italia Tel. 0039 049 8934593 • Fax 0039 049 8936156 Internet: www.alifar.it e-mail: alifar@alice.it e-mail: info@alifar.it