



armfield

PRESSURE HOMOGENISER

FT9

issue 5



The Amfield Pressure Homogeniser is a bench-top unit designed to provide practical training in this important industrial process. It is also particularly useful for preparing small batches of product in research laboratories.

PROCESS CAPABILITIES

- *effect of valve pressure on homogenisation*
- *effect of product temperature on homogenisation*
- *importance of hygiene and method of 'clean-in-place' for this type of equipment*
- *homogenisation of fat in milk, cream, ice cream mix and other products*

Food Process Engineering and Technology

FT



DESCRIPTION

The homogeniser stands on a baseplate having bolt holes which must be used to fix to a bench top. It is supplied with a 4.5 litre capacity stainless steel feed hopper and a hygienic, diaphragm type pressure gauge. The electric motor drives the homogeniser through an aluminium gearcase containing double reduction precision steel gearing and housing ball and roller bearings.

The homogeniser valve incorporates a piston ram pump type action which forces the product through the homogeniser jet giving consistent results on both rough emulsion and suspensions provided that the liquid will flow into the pump head.

The cylinder block is machined from solid stainless steel bar, as are all the other components which come into contact with the liquid being processed except the fibre sealing washers and the silicone gland seal for the ram.

A safety valve, air venting valve and jet control are provided and the machine is readily dismantled for cleaning. Supplied complete with pressure gauge, pipe unions, tools and instructions.

TECHNICAL SPECIFICATION

Throughput:	approx 45 litres/hr
Pressure:	variable up to 70 bar
Feed hopper capacity:	4.5 litres

ORDERING SPECIFICATION

- **Self-contained, bench mounted homogeniser with a capacity up to 45 litres/hour.**
- **An adjustable needle valve on the pump outlet allows pressures up to 70 bar to be used.**
- **A 4.5 litres capacity feed tank is connected to the homogeniser inlet. This is easily removed should there be a requirement for a continuous feed.**
- **Homogenisation pressure is displayed on an analogue gauge with hygienic diaphragm connection.**
- **All process-contacting parts are constructed from stainless steel.**
- **A complete set of tools required for maintenance is supplied as is an instruction manual providing installation, commissioning and maintenance details.**

SERVICES REQUIRED

Electrical supply:

FT9-A: 220-240V/1ph/50Hz (0.18kW)

FT9-B: 120V/1ph/60Hz

OVERALL DIMENSIONS

Height:	0.56m
Width:	0.56m
Depth:	0.41m

SHIPPING SPECIFICATION

Volume:	0.15m ³
Gross weight:	60kg

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