



# **PLATE & FRAME FILTER PRESS**



FT14 issue 2

This type of filter is widely used in the food, pharmaceutical, brewing and distilling industries. The laboratory size unit is robust and versatile and has been designed to allow clear demonstration of the mode of operation as well as a high degree of experimentation for scale-up to industrial processes.

### **DESCRIPTION**

The unit is mounted on a stainless steel, floor standing frame onto which the filter, feed pump and pipework are attached. A stainless steel drip tray is also included. A selection of different grades of filter media is also supplied so that optimum combinations can be found for a particular filtering operation. Four grades of filter media are supplied suitable for: pre-coat filter-aid, coarse clarifying, polishing and sterilisation.

The small stainless steel plate pack allows ease of handling, making teaching demonstrations more convenient. The filter pack between the end castings is made up of one end and three intermediate thick turbid frames, and one end and three intermediate filter plates. The filter will take a dressing of 7 x 200mm x 200mm filter sheets giving a nominal filtering surface area of 0.22m² and a nominal solids holding capacity of 1.5 litres.



# **OPERATION**

The slurry to be filtered is connected by hose to the pump suction, and the pump is connected to a suitable electricity supply. A hose fitted to the filter outlet takes the clear filtrate to a suitable receiving vessel. The plate pack has been designed to allow washing of the filter cake when filtering is complete. A pressure gauge situated at the filter inlet is used to monitor the filtering process.

# **FEED/CIRCULATING PUMP**

Centrifugal pump of all stainless steel construction with polished internals.

Maximum flow rate: 18.0 litres/min

Maximum head: 2.0 bar

Motor: 0.25kW, 2800 rpm

# **ORDERING SPECIFICATION**

A fully self-contained plate and frame type filter press constructed entirely in stainless steel. A centrifugal pump is mounted integrally in the framework and is connected to the filter inlet via a throttle valve and pressure gauge. The filter pack is made up of four plates and four frames which will accept a dressing of seven filter sheets 200mm x 200mm. The filter pack and sheets are compressed manually using a hardened steel screw thread. Filter surface area is 0.22m² and solids holding capacity is 1.5 litres. A back pressure valve is located at the filter outlet.

### **SERVICES REQUIRED**

Electrical supply:

FT14-A: 220-240V/1ph/50Hz FT14-B: 120V/1ph/60Hz

### **ANCILLARY EQUIPMENT**

Feed tank
Product collecting vessel
Flexible hose

# **OVERALL DIMENSIONS**

Height: 0.57m Width: 0.73m Depth: 0.30m

#### SHIPPING SPECIFICATION

Volume: 0.5m³ Gross Weight: 120kg

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