

# **PRO-X<sup>™</sup> SERIES** FILTER PRESSES

**FEATURES** Pressure Filtration

USDA Approved Coating Tri-Clamp Manifold Fittings

**FDA Compliant:** AOD Pump Reusable Filter Cloths Polypropylene Filter Plates

Plate Dimensions	320 mm x 320 mm (12" x 12")
Capacity Range	0.3 ft <sup>3</sup>
Hydraulics	Manual (Standard)
Plate Shifting	Manual
Plate Shifting	Manual





Plate Dimensions	470 mm x 470 mm (18" x 18")
Capacity Range	1 ft <sup>3</sup> to 2 ft <sup>3</sup>
Hydraulics	Manual (Standard)
Plate Shifting	Manual

Plate Dimensions	630 mm x 630 mm (24" x 24")
Capacity Range	5 ft <sup>3</sup> to 10 ft <sup>3</sup>
Hydraulics	Air (Standard)
Plate Shifting	Manual, Semi-Automatic

Plate Dimensions	800 mm x 800 mm (32" x 32")
Capacity Range	10 ft <sup>3</sup> to 20 ft <sup>3</sup>
Hydraulics	Air (Standard)
Plate Shifting	Manual, Semi-Automatic





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### PRO-X<sup>™</sup> FILTER PRESSES are engineered for Food Industry

- Beverage Industry
- Pharmaceuticals
- Other Sanitary Applications

## WHAT IS A FILTER PRESS?

A filter press is a batch operation, fixed volume piece of equipment ranging from 0.01-600ft<sup>3</sup> that separates liquids and solids using pressure filtration. A slurry is pumped into the filter press and dewatered under pressure. A filter press can be used for process, water, and wastewater treatment in a variety of different industries and applications.

#### A filter press has four main components:

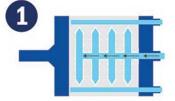
into a common discharge pipe. (C)

PRO 470

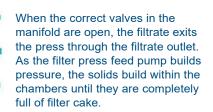
Frame - The steel frame acts as a clamping device for the filter plates. (A)
Filter Plates - A filter cake forms in the chambers between filter plates. (B)
Manifold - Our standard manifold consists of piping and valves which control the slurry inlet and connect the four corner filtrate discharge ports

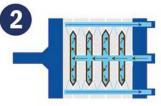
**Filter Cloth** - A cloth filter that is attached to both sides of a filter plate. Solids build up on cloth to form a filter cake, separating liquids from solids.

## HOW DOES IT WORK?



Slurry is pumped into the filter press. The solids are distributed evenly on the filter cloths during the feed (fill) cycle.







Solids begin to build on the filter cloth, trapping the ensuing particles and building a filter cake. The filter cake acts as a depth filter for solid/liquid separation. Filtrate exits the plates through the corner ports into the manifold.

Once the chambers are full, the fill cycle is complete and the filter press is ready to be emptied.

### INDUSTRIAL FILTRATION EXPERTS

At M.W. Watermark<sup>™</sup> we design and build filter presses and other process equipment to separate solids from liquids across a wide range of industries and applications.

M.W. WATERMARK - Equipment and Service for Filtration, Process, and Dewatering Needs Service • Experience • Expertise • Savings

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