

TREATMENT PRODUCTS CORPORATION

Wastewater Treatment & Recovery Systems

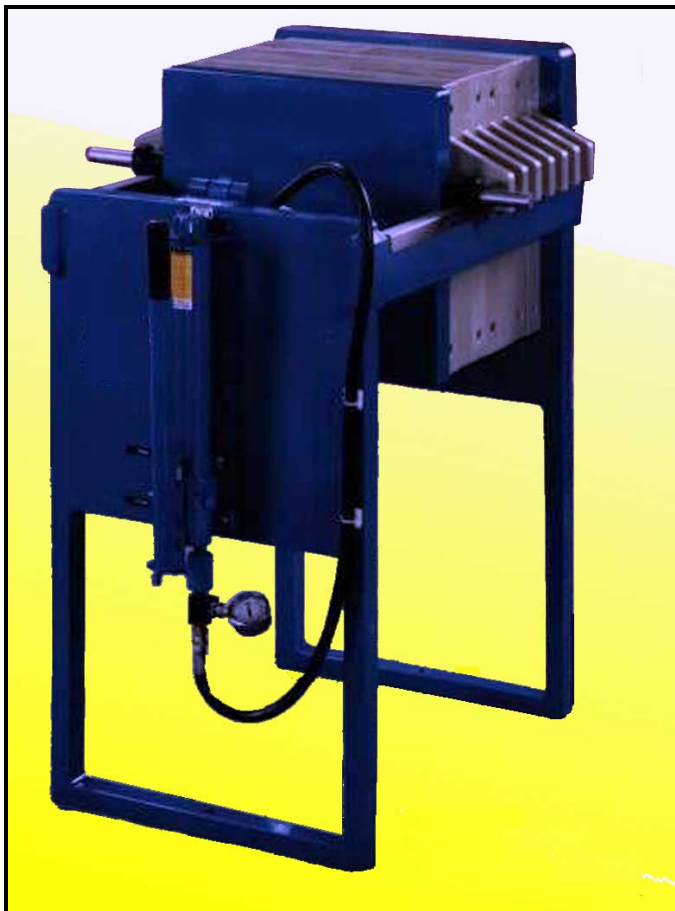
P.O. Box 444 Thorndale Pa. 19372-9998

Phone (610) 384-6279 Fax (610) 384-6239

Email sales@treatmentproducts.com

Website www.treatmentproducts.com

470mm FILTER PRESS



Filter Press without leg extensions

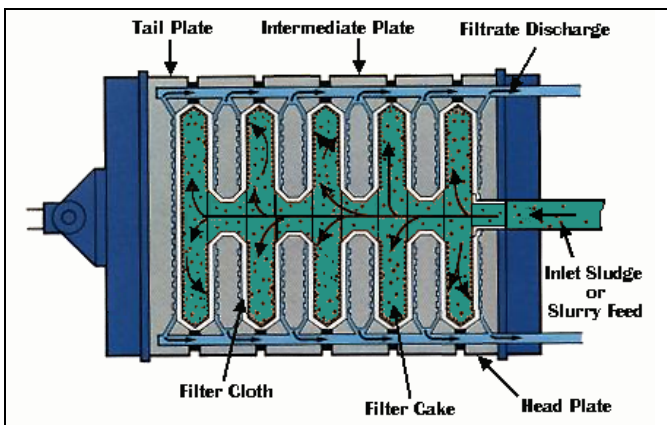
PROCESS DESCRIPTION

Filter Presses are designed to separate solids from liquid and dewater the solids to a “dry filter cake”. Typical filter cake dryness ranges from 20 to 85 % dry solids varying with the material filtered. For typical metal hydroxide sludges the filter press will produce a 30 to 40% dry solids cake. In terms of volume reduction for metal hydroxide sludges a filter press will typically reduce the under-flow (sludge) volume from a gravity clarifier by a factor of 20 to 1.

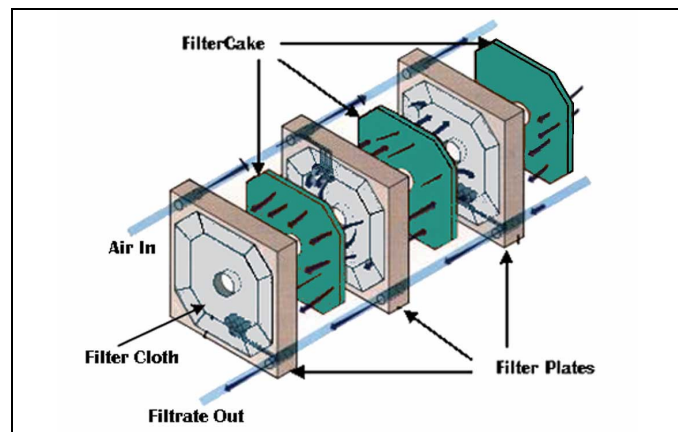
The press is prepared for operation by tightly clamping the filter plates together using the manual hydraulic pump. Once the press is closed the feed pump (typically an air diaphragm pump) is turned on, forcing the slurry or sludge into the filter chamber. Under pressure the particles are uniformly deposited on the filter cloths. The initial deposited layer of solids becomes the filtering media. As operation continues the deposited solids layer continues to build forming the filter cake. The filtrate passes through the filter cloths and is channeled to the discharge ports. As the filter press cycle continues the filtrate clarity will gradually improve until a clear effluent is produced. As the filter cake continues to build the air diaphragm pump will continue to slow. A predetermined pump rate decrease indicates that the press is full.

Air Blowdown is typically used to remove any residual liquid from the press. Compressed air is blown into an upper discharge port, through the filter cake and free liquid and air exit through a lower discharge port. The air blowdown step also helps to separate and loosen the filter cake from the filter cloths.

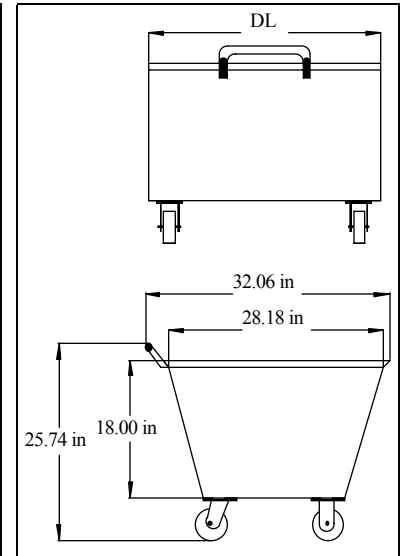
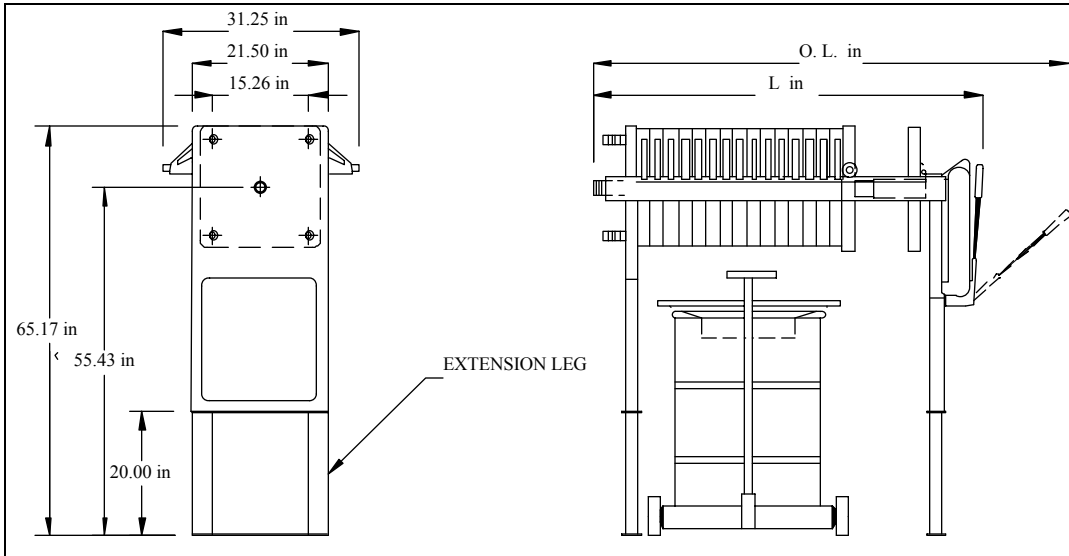
Once the air blowdown is complete the press is opened by relieving the pressure on the manual hydraulic pump. The plates are then spread apart one at a time and the filter cake falls from the recessed camber into a drum or dumpster.



Cross section of Filter Press during fill cycle.



Air Blowdown Cycle helps remove excess liquid, dries and loosens filter cake.



470mm Filter press with extension legs, barrel chute, and drum cart: When optional dumpster is purchased the extension legs, drum cart, and barrel chute are deleted.

Optional dumpster:

NOMINAL VOLUME ft ³	NUMBER OF CHAMBERS	ACTUAL VOLUME ft ³	FILTER PRESS DIMENSIONS INCHES		DUMPSTER LENGTH INCHES
			L	OL	
0.5	3	0.48	39.16	43.93	19.9
1.0l	6	0.96	45.86	50.63	22.9
1.5	9	1.44	52.56	57.33	30.9
2.0	13	2.08	61.56	66.33	36.9
3.0	19	3.04	75.06	78.93	51.9
4,8	25	4.00	88.46	93.23	65.9



Non Gasketed Plate Gasketed Plate
Standard filter presses include Gasketed Polypropylene Plates to ensure minimum leakage during operation.

STANDARD FEATURES

Direct Drum Disposal

Filter Press with 32mm caulked and gasketed recessed polypropylene plates, manual hydraulic closure, leg extensions, drum cart, barrel cake chute, PVC air blowdown manifold, and plastic filter cake spatula.

Dumpster Discharge

Filter Press with 32mm caulked and gasketed recessed polypropylene plates, manual hydraulic closure, filter cake dumpster, PVC air blowdown manifold, and plastic filter cake spatula.

OPTIONAL FEATURES & ACCESSORIES

Air Operated Hydraulic Closure

Non Gasketed Plates

Expansion Piece

Backup Plate

Pre Coat Systems,

Body Feed Systems

Cloth Washing System

Air Diaphragm Feed Pumps

For further information contact.

Represented By:



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