

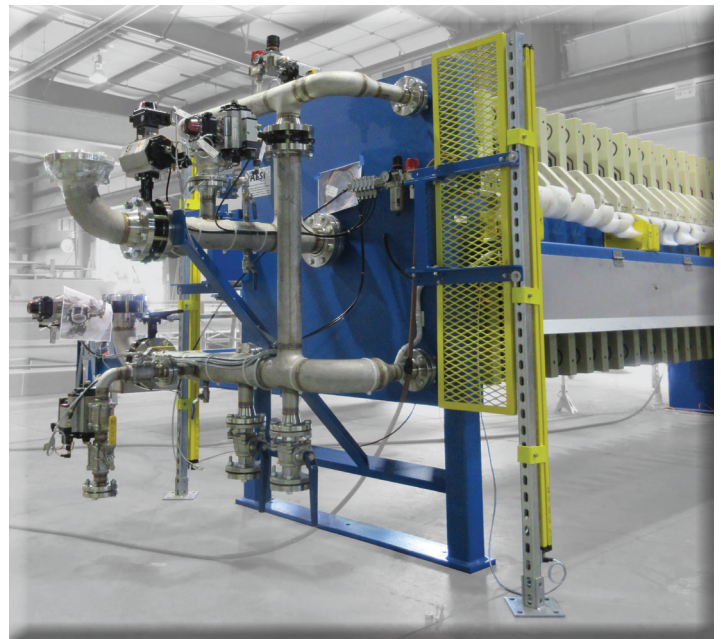
Filter Press

The Filter Press is a highly efficient system for liquid/solid separation under pressure. Its design produces clearer filtrate and a drier filter cake than other filtration alternatives. Our customers have achieved up to 80 percent solids by weight.

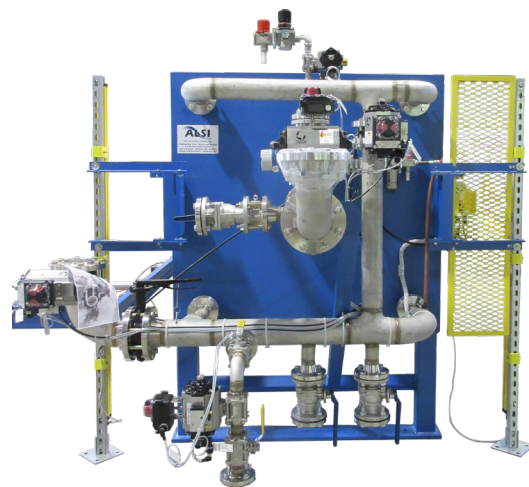
Design has been tailored for zinc phosphate filtration. A header assembly is fabricated with 316L SS with flanged connection points to minimize any possibility for leakage. Utilization of a flow meter and pressure switch in conjunction with a VFD control system allows for automatic operation.

Particles are uniformly deposited on the surface of the filter cloth. These larger particles later act as the filter. The clarified filtrate passes through the cloth and is channeled to the discharge ports. The discharge stops when the chambers fill with solids and, based on pressure differential, the supply pump is signaled to turn-off. To remove any excess liquid remaining in the press, air blow-down is utilized. Blow-down is accomplished by introducing pressurized air into the center feed line directly where the line enters the head plate.

Dewatering of the solids occurs as the air forces remaining liquid toward the discharge ports at the corner of each filter plate. After a preset amount of time, the upper corner valves are closed to push air out of the lower corners. This ensure the air blow-down does not simply take the path of least resistance. The plates are then separated by turning the selector switch to the “open” position and sliding the plates apart to reveal the dried filter cakes. The removed solids are allowed to fall from the chamber recesses, through a chute and into a hopper below. The filter plates are closed by turning the selector switch to “close”, which activates a pneumatically actuated hydraulic pump to cycle on and press the plates closed. The filtration process then re-starts once the liquid supply pump is signaled to resume operation



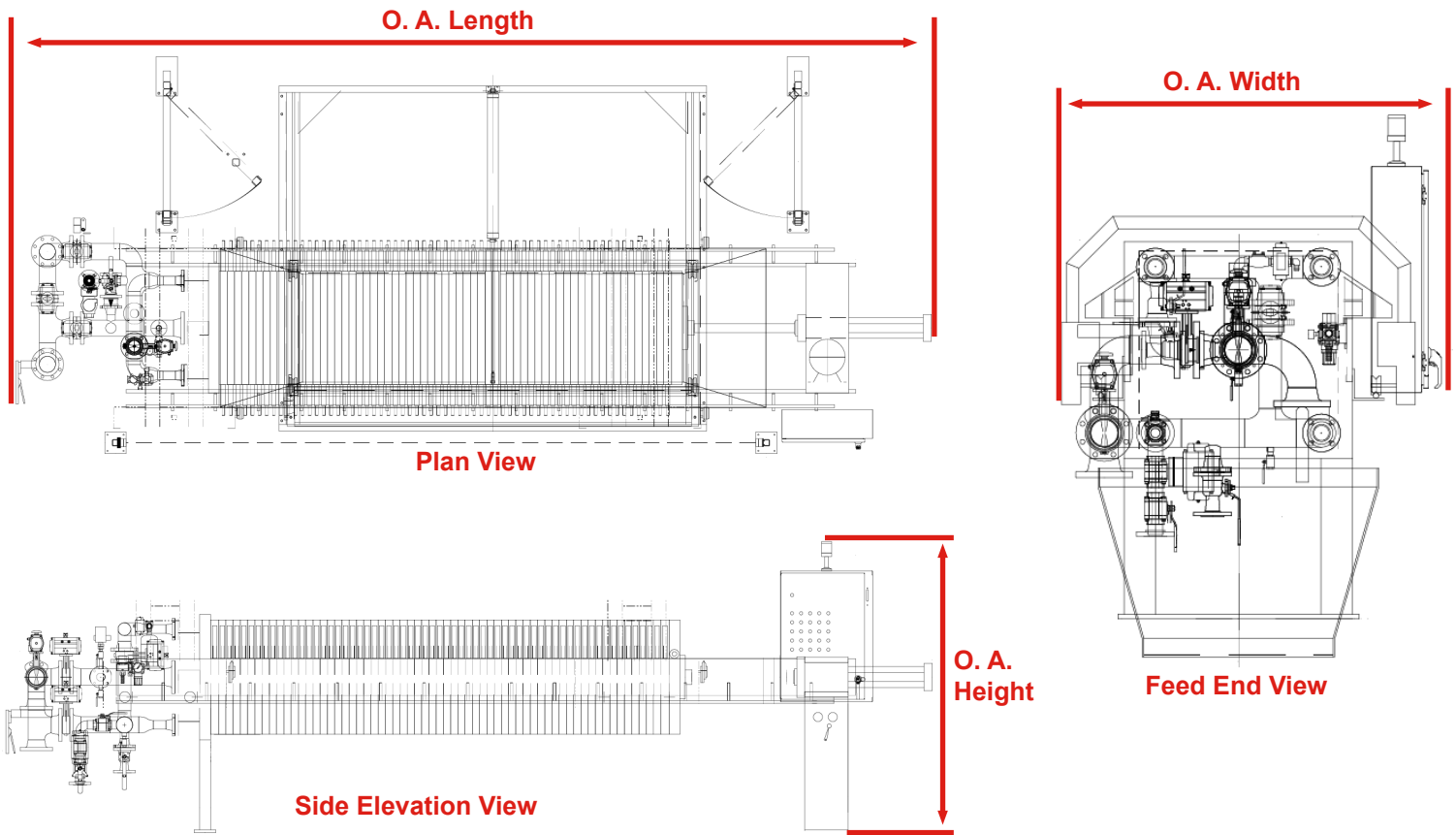
Typical inlet and discharge piping arrangement
Optional light curtains shown in yellow



Features

- Operation is automatic and requires little monitoring.
- Durable filter cloths are designed for long life and easy release of filtrate solids.
- Filter plates are lightweight and easy to handle.

Technical Data



System Dimensions						System Weights					
Total Volume	# of Chambers	# of Plates	Filtration Area	Plates Length	O. A. Length	Dry Plates	Wet Plates	Steel	HYD Pkg	Total Dry	Total Full
15 ft ³ 0.42 m ³	21	22	370.2 ft ² 34 m ²	45.9 in 1,166 mm	128 in 3,251 mm	1,452 lb 659 kgm	2,427 lb 1,101 kgm	6,400 lb 2,903 kgm	1,100 lb 499 kgm	8,952 lb 4,060 kgm	9,927 lb 4,503 kgm
20 ft ³ 0.57 m ³	28	29	493.4 ft ² 46 m ²	60.5 in 1,537 mm	143 in 3,632 mm	1,914 lb 868 kgm	3,214 lb 1,458 kgm	6,535 lb 2,964 kgm	1,100 lb 499 kgm	9,549 lb 4,331 kgm	10,849 lb 4,921 kgm
25 ft ³ 0.71 m ³	35	36	616.7 ft ² 57 m ²	75.1 in 1,907 mm	157 in 3,988 mm	2,376 lb 1,078 kgm	4,001 lb 1,815 kgm	6,661 lb 3,021 kgm	1,100 lb 499 kgm	10,137 lb 4,598 kgm	11,762 lb 5,335 kgm
30 ft ³ 0.85 m ³	42	43	740.0 ft ² 69 m ²	89.7 in 2,278 mm	172 in 4,369 mm	2,838 lb 1,287 kgm	4,788 lb 2,172 kgm	6,796 lb 3,083 kgm	1,100 lb 499 kgm	10,734 lb 4,869 kgm	12,684 lb 5,753 kgm
35 ft ³ 0.99 m ³	49	50	863.4 ft ² 80 m ²	104.3 in 2,649 mm	186 in 4,724 mm	3,300 lb 1,497 kgm	5,575 lb 2,529 kgm	6,922 lb 3,140 kgm	1,100 lb 499 kgm	11,322 lb 5,136 kgm	13,597 lb 6,167 kgm
40 ft ³ 1.13 m ³	56	57	986.7 ft ² 92 m ²	118.9 in 3,020 mm	201 in 5,104 mm	3,762 lb 1,706 kgm	6,362 lb 2,886 kgm	7,057 lb 3,201 kgm	1,100 lb 499 kgm	11,919 lb 5,406 kgm	14,519 lb 6,586 kgm
45 ft ³ 1.27 m ³	63	64	1,110.1 ft ² 103 m ²	133.5 in 3,391 mm	216 in 5,486 mm	4,224 lb 1,916 kgm	7,149 lb 3,243 kgm	7,192 lb 3,262 kgm	1,100 lb 499 kgm	12,516 lb 5,677 kgm	15,441 lb 7,004 kgm

System capacities based on 1 inch (25 mm) cake plate thickness

Scan here to visit our website.



1680 S. Livernois Road
Rochester Hills, MI 48307
info@airliquidsystems.com

P: 248-656-3610
F: 248-656-3620
www.airliquidsystems.com