FULLAUTO
FILTER PRESS

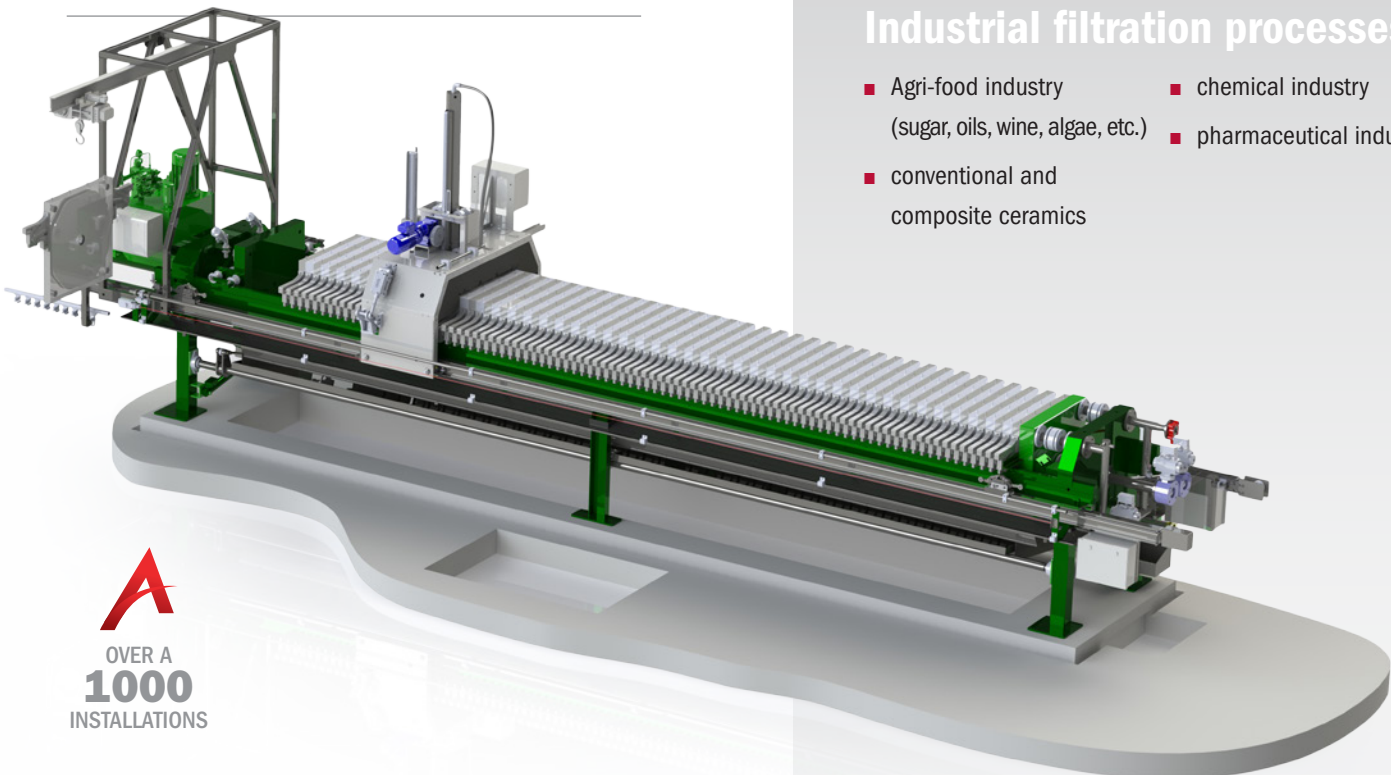fournier

FULLAUTO
FILTER PRESS

FACTS

Runs 24h/7 without operator intervention

Integration into continuous automatic processes

Simple, robust and reliable

High performance cake dryness

Municipal & Industrial applications

OVER A
1000
INSTALLATIONS

AREAS OF APPLICATION

Dewatering of sludges from:

Municipal sludges, drinking water plants, industrial slurry

- Aggressive media

Industrial effluent

- Agri-food industry
- Mines and quarries
- Hydrometallurgy
- Surface treatment
- Exhaust gas scrubbing
- Chemicals and pigments
- etc.

Industrial filtration processes

- Agri-food industry (sugar, oils, wine, algae, etc.)
- conventional and composite ceramics
- chemical industry
- pharmaceutical industry

THE UNIQUE AND FULLY AUTOMATIC ROBOT

The Robot takes care of:

Plate weighing

For sticky material, plates are automatically weighed during the cake discharge cycle. A plate over weight detection will generate a shaking cycle.

Plate shaking

Plates will be shaken automatically if required by the nature of the sludge or by the command of the plate weighing device.

Automatic Core Blower

Robot may also be equipped with a core cleaning mechanism.

Automatic wash

Robot can be equipped with a mobile wash manifold to be used with high pressure water or in some specific applications, acid solution.

«This simple and inexpensive solution leaves the cloths untouched and ensures that they remain intact.»

PROCESS COMPONENTS

Filter press peripherals

The following units can be offered as an option to produce a turn key plant operation: conveyors, transfer pumps, dosage pumps, agitators, flocculation tank, settlement tank, reactor, etc.

Cake collection

- Direct drop can be used or conveyors can be supplied to accommodate customer needs.

Protection of personnel

- Light curtains, pull cords and barriers which comply with UL, CSA or other regulations can be provided.
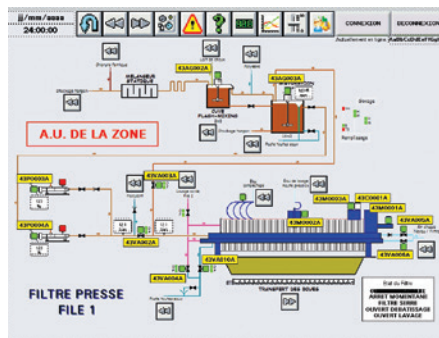

High-pressure cloth washing

- For a larger size press and for automation purposes, a booster pump can be supplied.

Acid washing

- Acid dilution and feeding system can be supplied when needed by the application.
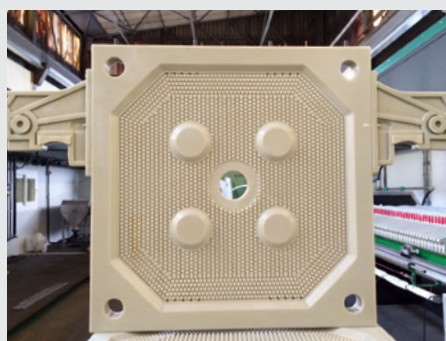

Electrical control cabinets

- Operator interface allowing friendly operation and control provided with PLC as per the customer requirements.

Cake discharge
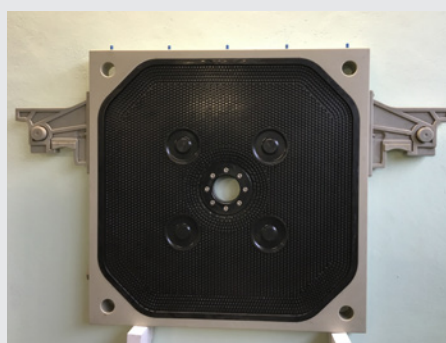
- **100% automatic:** the device for shaking the plates is connected to a weighing system which ensures that the cakes are discharged without operator intervention.

- Anti-corrosion mechanized cake discharge: this accurate and reliable device enables the chambers to open without operator intervention. The stainless steel material ensures that they remain in perfect condition over time.
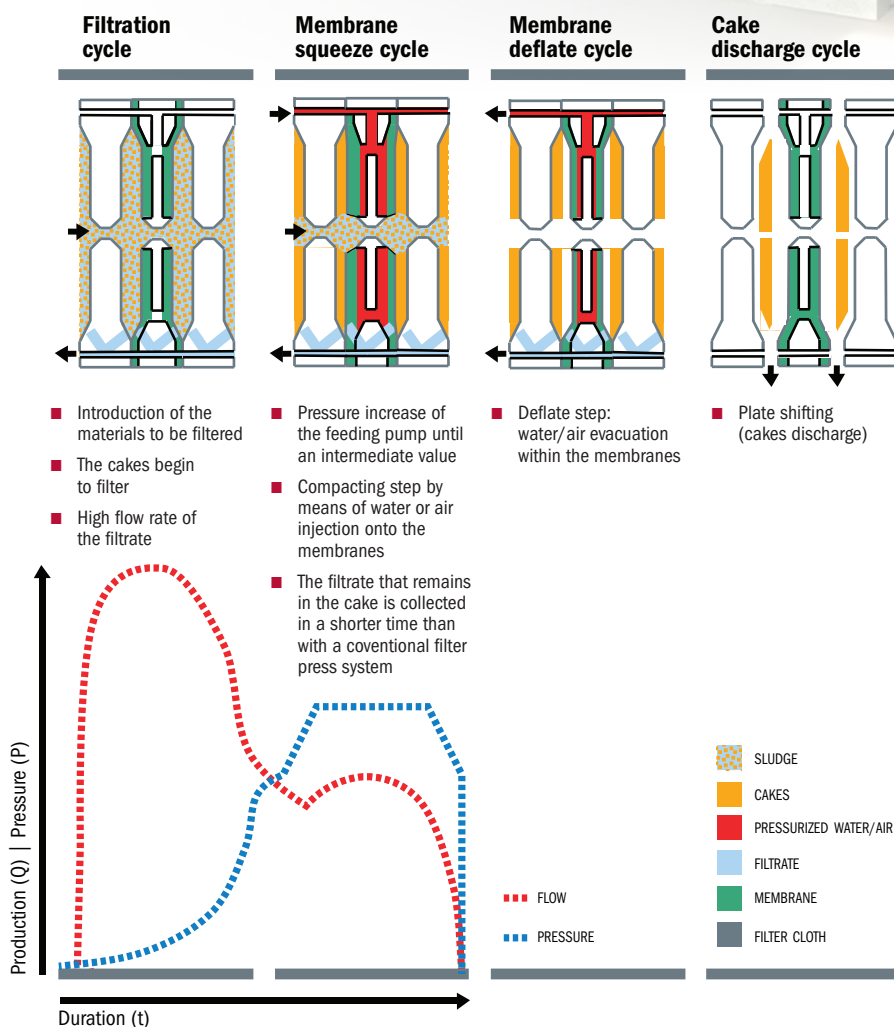
FULLAUTO
FILTER PRESS

Recessed plate

Membrane plate

Plate with cloth

Membrane filter press operating principles

Filtration cycle	**Membrane squeeze cycle**	**Membrane deflate cycle**	**Cake discharge cycle**

- Introduction of the materials to be filtered
- The cakes begin to filter
- High flow rate of the filtrate

- Pressure increase of the feeding pump until an intermediate value
- Compacting step by means of water or air injection onto the membranes
- The filtrate that remains in the cake is collected in a shorter time than with a coventional filter press system

- Deflate step: water/air evacuation within the membranes

- Plate shifting (cakes discharge)

Production (Q) | Pressure (P)

Duration (t)

····· FLOW
····· PRESSURE

- SLUDGE
- CAKES
- PRESSURIZED WATER/AIR
- FILTRATE
- MEMBRANE
- FILTER CLOTH

DESCRIPTION	PLATES SIZES (INCHES/MM)	MAX NBR OF PLATES	MAX FILTERING SURFACE (FT²/M²)
207	10 x 10 / 250 x 250	10	9,15 / 0,85
212	20 x 20 / 500 x 500	50	226 / 21
211	24 x 24 / 630 x 630	70	505 / 47
217	32 x 32 / 800 x 800	110	1152 / 107
218	40 x 40 /1000 x 1000	125	2206 / 205
219	47 x 47 /1200 x 1200	140	3498 / 325
219-B	51 x 51 / 1300 x 1300	145	4144 / 385
220	59 x 59 / 1500 x 1500	160	6351 / 590
220-B	59 x 79 / 1500 x 2000	170	9041 / 840
226	79 x 79 / 2000 x 2000	180	12 271 / 1140

![Fournier logo]

![FAURE Équipements logo]

Technology partnership

Ask us about our Pilot unit... Or Lab analysis

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