



Mecomb Singapore Limited

# amston®

## FILTER PRESS

SS ISO 9001:2000 QUALITY MANAGEMENT SYSTEM

• Solutions To Your Filtration Needs •



*From  
Manual  
System*



*To Fully  
Automatic  
System*



Solutions To Your Filtration Needs

# amston® filter Presses Are Designed With You And Your Needs In Mind

## Customisation for special application

- Acetylene Gas Production
- Chemical Industries
- Electroplating / Chroming Plant
- Food Processing
- Iron / Steel mills
- Leather Tanneries
- Marble / Granite Industries
- Metal Surface Treatment
- Paint Industries
- PCB Manufacturing Plant
- Printing Industries
- Semiconductor Industries
- Servicing Workshop
- Sewage Treatment
- Titanium Dioxide Treatment

- Agar Agar Industries
- Agrochemical Production
- Beer Breweries
- Bentonite & Activated Clay Plants
- Cocoa Butter Manufacturing
- Kaolin Clay Production
- Oleochemical Production
- Palm Oil Refineries
- Pharmaceutical Manufacturing
- Portable Water Plants
- Power Plants
- Rice Flour Plants (Bee Hoon)
- Semiconductor Plants
- Sugar Refining Industries
- Textile Dyeing
- Tyre Manufacturing

# amston® filter Presses



Metalic Hydroxide Waste



Kaolin Clay Production



Semiconductor Waste

## Design of filter press

- Manual
- Semi-mechanised
- Fully-mechanised
- Fully-Automatic



Manual

## Choice of plate

- Plate & Frame
- Chamber
- Combination (Mixed-Pack)
- Membrane



Semi-Mechanized

## Features

- Filtrate leakage collection
- Air-Track or Automatic Plate Shifting Mechanism
- Portable cloth washer or Automatic Cloth Washing System
- Core-blow, face piping & valves, cake chute, cake hopper, cake conveyor, infra-red light curtains, sludge feeding pump, polymer dosing system



Fully Automatic



Sewage Treatment Plant



Acetylene Gas Production



Palm Oil Application

## Filter Plates



Chamber



Gasket

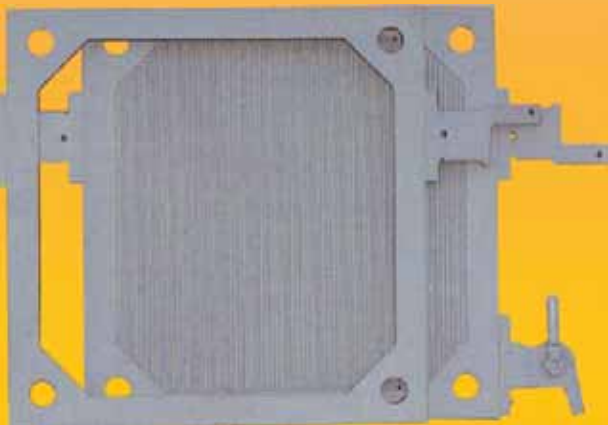


Plate & Frame



Membrane



Spacer bar

## Hydraulic System



Hand Pump

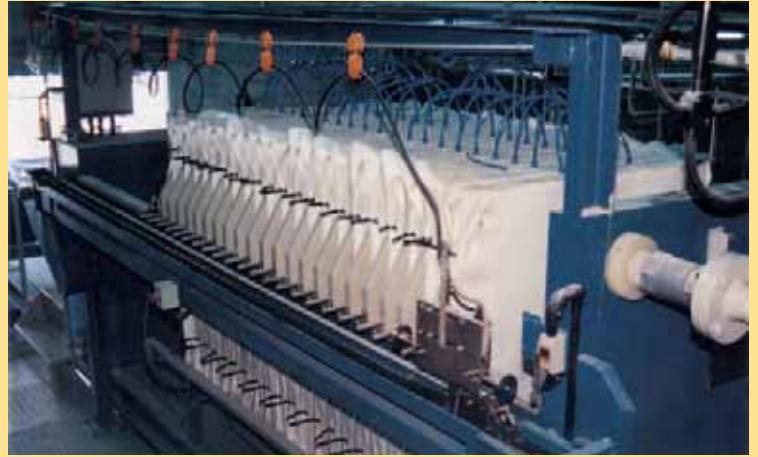


Motorized Pump

## Plate Shifting Mechanism



Air-Track Type



Automatic Type



Cake Conveyor



Bomb Door Drip Tray



Cake Hopper



Cake Chute



Panel

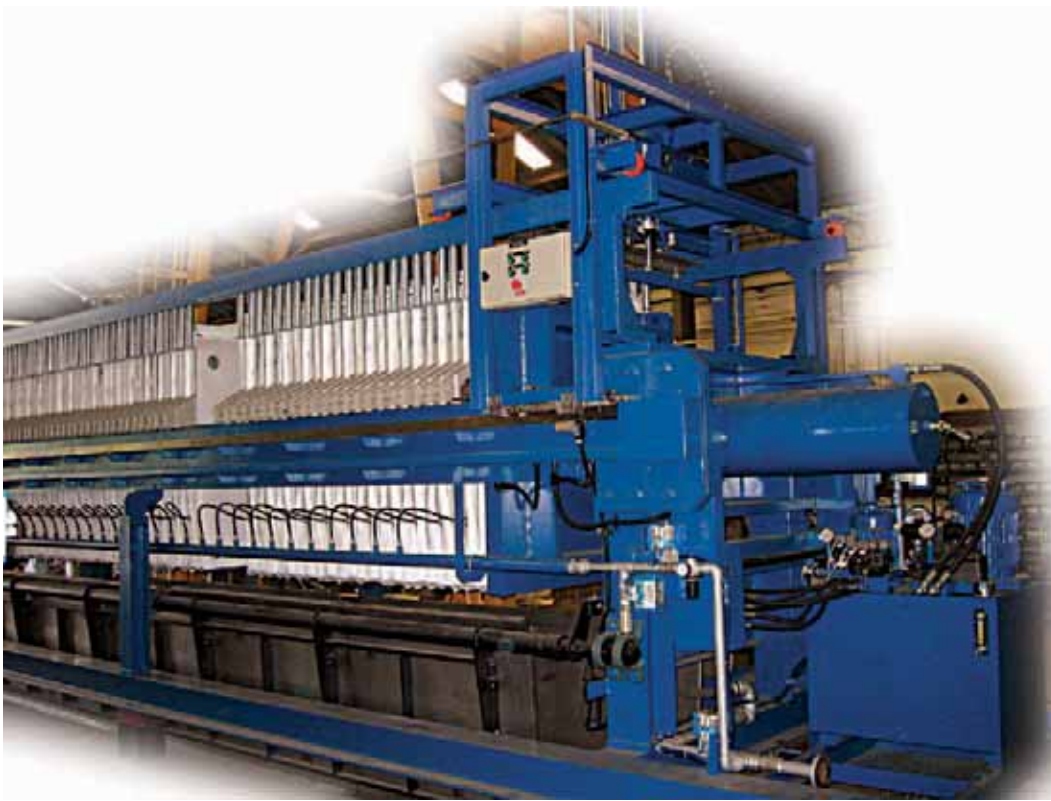


Platform



## Automatic Cake Discharge Device

Fully Automatic Filter Press Operates Without Operator Attendance Even During Cake Discharges.



Cake discharge is done automatically by the movement of filter plates. The filter cloth/plate is vibrated by a vibrator to remove the cake.



Plate Vibration device



Cloth Vibration Device

## Automatic filter cloth washer



The cloth cleaning system is interlinked with the plate transport mechanism. The water supply to the high pressure jets is controlled by solenoid valves and spray guides are provided to protect the surrounding area



Portable cloth washer





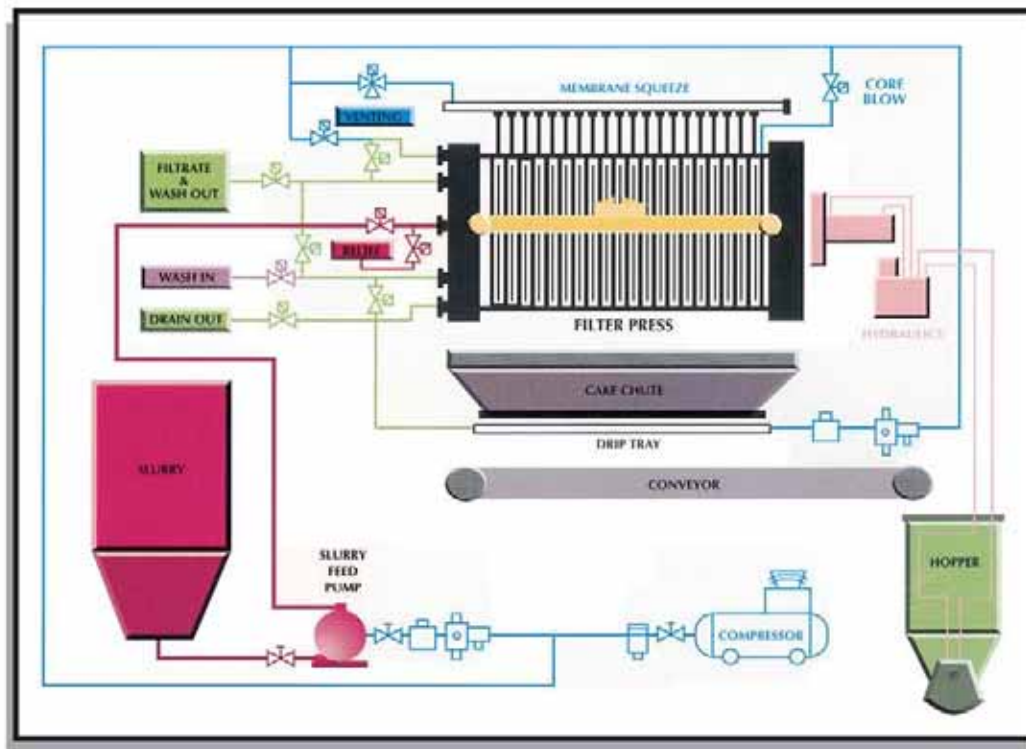
## AN OVERVIEW OF FILTER PRESSES

Filter presses have long been used as a liquid/solid separator in many industries.

A filter press consists of a series of moulded ultra high molecular, heat stabilized polypropylene filter plates. Each of these plates are fitted with a filter medium. During filtration, the plates are compressed tightly by a hydraulic closing device.

Sludge with suspending solids is fed at high pressure into the recessed chamber of the plates. While the solid are retained as compressed cakes, the effluent is forced through the filter cloth (medium). One major advantage is the ability to treat the cake within the chambers. They could be washed to reduce, for example, acidity or toxicity before discharge. Use of and/or disposal of cake and effluent depends on the process purpose. The cakes are released into convenient storage containers and the effluent may be diverted for specific downstream purposes.

In recent advances have and will continue to improve the effective and efficient use of filter presses. Membrane filter plates have contributed largely to yield and cycle time reduction, while automation has minimized setbacks associated with batching systems, reduced staff requirements and supervision costs. Clearly, filter presses will not only be used to meet industrial and domestic needs, but will also serve to preserve and enhance our precious living environment.



amston<sup>®</sup> exclusive to:



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