

FILTER PRESSES

Recessed Plate & Membrane Plate



mclanahan.com



McLanahan's fully automatic Filter Presses have revolutionized the fines dewatering process. They are easy to install, integrate and operate, and they provide the most efficient, cost-effective operation in the industry. McLanahan Filter Presses can eliminate the need for slurry ponds and a full time operator. They use fewer chemicals than belt presses and come with the McLanahan Smart Hydraulics system.



Filter Presses are effective for liquid solid separation in many industries, including:

- Sand & Gravel
- Coal
- Pulp & Paper
- Municipal Waste
- Food
- Chemical
- Dimension Stone
- Concrete
- Soil Washing
- Concentrates
- Mining



McLanahan Benefits:

- Worldwide service and support
- Smart hydraulics system for online monitoring and assistance
- Rapid open and close of plates shortens cycles
- Increased water recovery
- Produces drier cakes
- Made with Allen Bradley or Siemens Controls with remote monitoring capability and assistance via Ethernet
- On-site pilot and lab testing available

Available Options:

- Overhead beam and side beam
- Recessed Chamber and Membrane Style plates (more information on back page)
- 225 psi, 435 psi and 725 psi operating pressure
- Core blow
- Automatic high-pressure wash
- Bomb Bay doors/drip trays
- Open or internal filtrate return
 - Open discharge from each plate allows the operator quick and easy identification of bad filter cloths
 - Internal return prevents filtrate from being exposed to an open environment
- Cake wash and cake blow



SMART HYDRAULICS

McLanahan's Smart Hydraulic system controls operating pressures and positions for fast, precise opening and closing. With pressures of 225-870 psi (16-60 Bar), the press can dewater even the most difficult sludge, including those with a high clay content. The PLC-controlled press has many available cake thicknesses or membrane plates for the driest possible cake.

OVERHEAD BEAM FILTER PRESS

McLanahan's Overhead Beam Filter Press allows greater access for maintenance and has a larger production capacity. It is available for 630mm plates to 2000mm plates.

Design Features:

- Wide opening for better cake release and easier access for cleaning, cloth washing and cloth replacement
 - No side beams or moving parts to interfere with access
- Allen Bradley or Siemens Control System with remote assistance via an Ethernet connection
- Triangular or Quad Tension design
 - Quad Tension shafts eliminate dynamic loads to the beams of the press (2000mm only)
 - Triangular force distribution with easy plate removal (630mm to 1500mm)
 - Hydraulic cylinder and tension shafts are attached to FEA designed plates
 - Smart Hydraulics system controls opening and closing pressures and distances
- Velocity-reducing, dual-feed inlets decrease cloth abrasion and promote cake consistency (50 or more plates)
- High speed carousel system quickly opens the plates for higher production rates
 - One-by-one opening system allows more space and movement for faster and more reliable cake release as well as lower HP.
 - Splash guard isolates and protects moving parts and provides long, reliable plate opening
 - Precision latch system for reliable operation
- One-By-One High-Pressure Wash System for the best possible cloth wash
- Advanced safety systems

SIDE BEAM FILTER PRESS

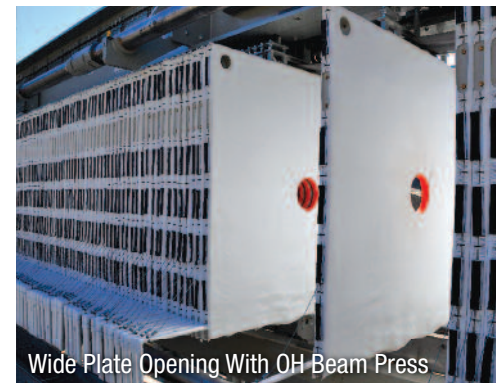
McLanahan's Side Beam Filter Press offers a lower cost alternative to the Overhead Beam Press while still incorporating some of the same advantages. Available on plate sizes from 630mm up to 1200mm.

Design Features:

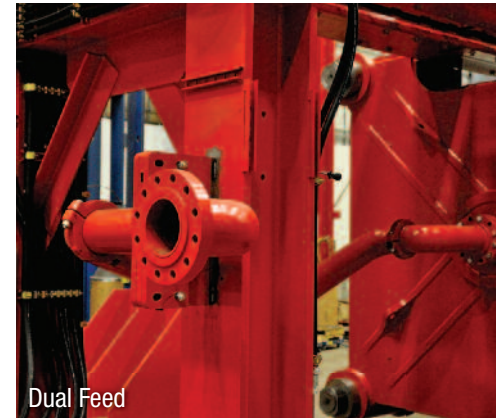
- Single or double hydraulic ram provides quick, precise mobile plate opening
- Allen Bradley or Siemens Control System with remote assistance via an Ethernet connection
- High-speed cake discharge system opens plates in groups
- Plate shaking system helps to release the cakes
- Light curtains help protect operator
- Available with High Pressure Shower or One-By-One High-Pressure Wash Systems
- More suitable for portable applications with lower travel height than the Overhead Beam style



Press Dewatering Concrete Washout Water



Wide Plate Opening With OH Beam Press



Dual Feed

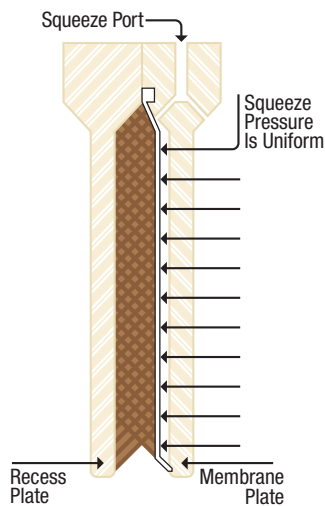


Open Filtrate Discharge

Recessed Chamber Filter Plates



Membrane Filter Plates



RECESSED CHAMBER FILTER PLATES

McLanahan's recessed chamber style plates offer flexibility with a wide range of cake thicknesses and limited maintenance.

Design Features:

- 630mm to 2000mm plates
- No moving parts resulting in long plate life and easier operation
- Cake thicknesses of 15-50mm allowing for proper plate selection for a wide variety of slurries
- Feed pressure from 225 - 725 psi (16-50 Bar)

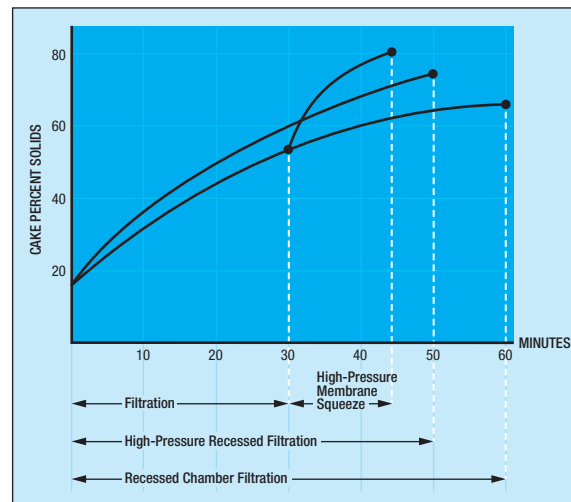
MEMBRANE FILTER PLATES

McLanahan's membrane filter plates offer higher production rates for compressible slurries or slurries that require a cake wash or cake blow.

Design Features:

- 630mm to 2000mm plates
- Cake thicknesses of 15-50mm allowing for proper plate selection for a wide variety of slurries
- Squeeze pressure from 225 - 725 psi (16-50 Bar)
- Help maintain cake integrity during cake wash and cake blow
- Higher-Production rates and drier cake with compressible slurries

Difference Between Recessed Chamber And Membrane Plates On A Compressible Slurry



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FOR TESTING AND ANALYSIS
OF YOUR SLURRY

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