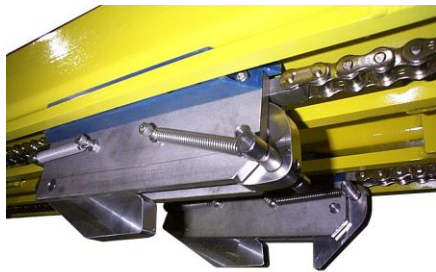


REPLACEMENT HYDRAULIC SHIFTER SYSTEMS

Hydraulically driven plate shifter systems are available from Micronics for installation on any make of filter press, whether overhead or side-bar design.

These self contained units may be installed using a customer's existing control and power pack or the shifter may be purchased with a replacement power pack and/or control. Power packs can be sized to run only the shifter system or to run the filter press, the shifter and any ancillary systems such as drip trays as well.



OVERHEAD MODEL

Principal of Operation

Two stainless steel carriages are driven by a single hydraulic motor connected by a common jack shaft. The speed of movement and force applied is controlled in both directions by integrated flow control and cross line relief valves. A conservative plate movement time is 6 seconds per plate but accommodation can be made to discharge at faster speeds if required (*multiple plate movement systems for fast cycling filters*).

The shifter carriages leave their parked position, located at the crosshead (cylinder) end of the filter press, and travel to the first plate to be moved. A stainless steel pin in the plate handle, or mounted to the top of the plate for overhead models, stops the carriage on the "stop cam" after the "pick-up cam" has latched the plate pin. The carriages then travel in the opposite direction and the filter plate is deposited in the open position. Directional change is controlled by either a timer or pressure sensors. After all the filter plates are moved the carriages enter a "knock down" housing, which sets the cams down into the carriage body. A proximity or limit switch provides logic, which runs the hydraulic motor in the reverse direction returning the carriages to the "park housing" position. On reaching the park position the carriage cams are released and are ready for the next cycle.

