

## PNEUMATIC SEMI-AUTOMATIC PLATE SHIFTER

### Principle of Operation

Attached to the filter press side bars, by bolt mounted brackets, is one pair of rectangular stainless steel rails. The semi-automatic plate shifter frame, which is positioned by the operator, is attached to and runs up and down this tracking using wheels with sealed for life bearings. The unit is designed to give easy, single operator discharge of the press cake via a double pushbutton operation. The shifter is entirely pneumatically operated and houses two pairs of cylinders, one for lifting and one for extending the pick up “plate fingers”. When the frame is positioned; triggering the shift cycle raises the filter plate “separator plates” between the filter plate handles (lifting cylinder). The plates are then separated by extending the second cylinder (extending cylinder), which moves the filter plate by pushing on the plate pack to the length of the extending cylinder stroke. On completion of this cycle the extended rod drops, by retracting the lifting cylinder, and then returns by retracting the extending cylinder and is ready for the next cycle.

### CAUTION

The pneumatic plate shifter has been designed to require the operator to use both hands in its operation. This prevents the operator from being at risk from the operation of the pneumatic plate shifter. This system will not protect any other personnel within the vicinity. It is the operator’s responsibility to ensure that other persons are not obstructing the path of the plate being moved.

### CAUTION

During plate shifting ensure that the filter plates are deposited parallel to the moving end. If the shifter jaws become out-of-synchronization it is important that maintenance is carried out to resynchronize their operation. Failure to do so can cause damage to the filter plates or misalignment of the filter press frame when the main clamping cylinder is operated.

