

# Application News

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The job of the screen changer is to replace a dirty filter instantly on an operating extrusion line without interrupting production. The dirty filter is replaced or cleaned while the machine continues to operate.

Screen changers are positioned on the outlet of the extruder. The screens/filters are located on the screen changers and are designed to remove the impurities from the polymer. This is of the utmost importance when the customer is recycling the used polymer.

## Screen Changers

By Walt Flippo

To assure a quality product from an injection molding machine, the foreign particles and impurities must be removed from the polymer.

A screen changer positioned after the extruder will assure the user of a quality product by removing all the foreign particles from the polymer before it reaches the mold.

The filter element is usually a heavy piece of steel plate with two removable screens. When one screen gets dirty or

clogged, the heavy plate containing the screens are rapidly shifted to replace the plugged screen with a clean screen. The moving of this plate containing the screen is accomplished using a cylinder connected to the heavy plate containing the two screens.

The power unit usually consists of a 2hp to 3hp motor, a gear pump and cylinder with a bore of 3-1/4" to 8".

This is an ideal application for an accumulator, since high flow rates are only

required when the screens require changing. The power unit charges up the accumulator to pressures of 1500 psi to 3000 psi. The power unit can be unloaded at a low pressure once the accumulators are fully charged to their required operating pressure.

When the screen requires changing, it is a simple job of shifting a hydraulic valve. The clogged screen can be replaced or cleaned while the machine continues to operate.

