

HOW FILTER PAPER IS USED

When not used alone, filter paper is often used as a cover sheet for cotton or synthetic cloth or over woven metal filter media. The filter paper can increase retention and protect the cloth from premature "blinding." After filtration, the paper is easily removed from the plates leaving the cloth or metal clean. Filter paper is also an excellent supporting medium for filter aids.

OVER FILTER CLOTH

Filter paper is used over cloth in two basic ways:

- A single sheet over each plate surface
- A double sheet draped over both surfaces of the plate

Single sheets are smaller and less expensive per plate surface to convert. However, they can be difficult to use because each sheet must be physically held in place on the plate until the following frame is closed. Double sheets are easier to use: they drape over both plate faces and hold their place while the press is being closed. Double sheets cost more than single sheets, but they require less labor cost to dress the press.

Paper and cloth, used together, make an extremely successful filter combination. The cloth serves both as septum (support for the paper) and as secondary filter media. The paper becomes the primary media which protects the cloth from fine or gelatinous particles that tend to blind cloth quickly. Because of the protection that paper provides, washing the cloth after each filter operation is usually unnecessary. Paper also increases the retention of particles and thus improves the overall clarity of the filtrate.

OVER METAL PLATES

Filter paper is commonly used as a cover for perforated metal plates. This application occurs most frequently in horizontal-plate filters. By experience, a metal plate having perforations approximately 1/16 inch in diameter on 1/8 inch centers and about 40% open area provides efficient drainage area and support for even lightweight sheets of paper. In this application, the paper is usually die cut into circular shapes with a center hole to fit each filter exactly.