

Precoat Discharge System

Unique to Rotary Drum Vacuum Filters, a Precoat Discharge System is used in specific conditions when:

- the filtrate is the product and its clarity is of utmost importance
- the solids are of low concentration and do not readily form a filter cake
- the solids are gelatinous and have a tendency to blind the filter medium
- the solids are typically less than 5 micrometres
- the solids are not to be recovered as the product

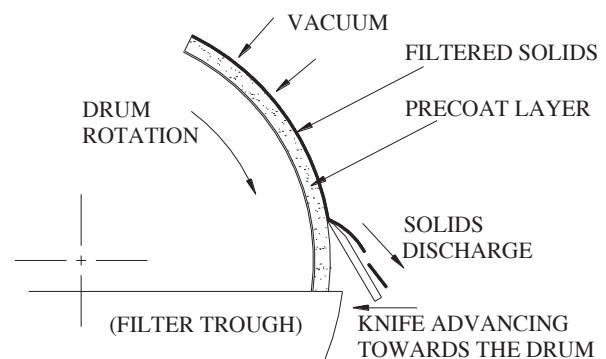
The process

Prior to the filtration process commencing, a precoat layer up to 100mm thick is applied to the drum. Typically this will be in the form of diatomaceous earth, perlite, cellulose or wood flour which forms a high permeability, sacrificial filter medium. Once filtration begins, the process suspension is filtered through the precoat layer. The solids are retained on the surface of the precoat whilst the liquid passes through the permeable structure. On each rotation of the drum, a sharp advancing knife removes the filtered solids plus a very thin layer of precoat, refreshing the filter medium for its next rotation.

In 1996 Filtration Services developed our bespoke Automatic Knife Advance System (AKAS) which has been used to optimise precoat usage. Knife advance rates can be set in increments as low as 5 micrometres per drum revolution, providing exceptional accuracy and controllability. Filtration Services will configure the AKAS for optimum filtration and precoat usage.

Most suitable for use in the processing of:

- Biofuels
- Fats and oils
- Pharmaceuticals
- Food products
- Fine chemicals



Other Discharge Options



Belt Discharge



Roller Discharge



Scraper Discharge



String Discharge



Clarity Through Engineering

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