

FILTER PLATE DISTRIBUTION RINGS

Distribution Ring – Shown in cross section, distribution rings are located in the feedholes of membrane filter plate pack installations. The purpose of the distribution rings is twofold:

Advantages

- To provide support at the feedhole position, essentially like the support provided by a plate stay boss. This support guards against excessive web deflection and can also allow a thinner web (and plate) to be installed.
- To seal the filter cloth without using a stitched, rubber or plastic neck.

How they work

The two collars slip together and a seal is provided using a single 'O' ring on the OD of one collar against the ID of the mating collar. The internal sleeves are designed so as not to "bottom out". A constant force is provided with the filter press' pressure sustaining hydraulic closing system. This ensures the cloth is sealed and allows for a small amount of cake contamination on the rings face, without excessive loads being generated.

The Companion plate collar is slotted around the flanges circumference, which provides passages for the feed slurry to enter the recess chamber.

When to use them

- With fast filtering slurries or very long filter presses and where feed delivery may be uneven. These conditions can cause or create the potential for differential chamber pressures. (see the [Micronics data sheet on differential pressure](#)).
- Where excessive velocity or abrasive materials may cause damage to the cloth feed neck.
- When replacing plates in existing filters and thinner plates are required to obtain the capacity required.

Disadvantages – Changing filter cloths may take longer. The slotted feed channels have less open delivery than a conventional center feed fitted with rubber or stitched necks (see the [Micronics data sheet on rubber necks](#)).

