

Cross Flow Filtration

Earthgard Inc. has just commenced testing (September, 2004), the concept of cross flow filtration using the R3F design and as a competitive product to cross flow membranes. As with cross flow membranes the concept allows for the development of a filtrate and a permeate. The design utilizes the same approach as the typical pressure R3F filtration technology where a media is fixed in a bed. In the cross flow design, however, there is ΔP across the media and an exit of the concentrated flow at the opposite end to the feed into the filter. Again the media can be easily regenerated through the normal fluidization process and then placed back into position as a cross flow unit. The present pressure filter design will easily accommodate the cross flow concept allowing for the one unit to be used either as a dead end filter or a Crossflow filter.

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