

THE IMPORTANCE OF PROPER FILTER CLOTH DRAINAGE IN MUNICIPAL & OTHER
LARGE-SCALE FILTER PRESS SYSTEMS

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ABSTRACT

Dewatering of municipal and industrial biosludges is commonly done in standard recessed (fixed volume) filter presses at generally 15 bar (225 psig) pressure. Gentle, variable speed pumps are used to fill the fixed volume press at high flow; and then turned down at higher pressure to deliquor the formed cakes in order to achieve high cake solids. The initial part of this dewatering cycle is generally prone to allow solids bleed into the filtrate particularly since fairly open monofilament cloths are used. As a result, solids accumulate in the plate drainage area and restricts flow over time. This paper will discuss how proper filtrate drainage can eliminate this problem and result in longer cloth life.