

Dewatering sludges: vacuum filter.



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Low energy consumption, high efficiency

The vacuum filter is a method for dewatering of sewage sludges. It consumes less than 1 kWh/m³ and thus significantly less energy than any other dewatering system.

The vacuum filter is virtually maintenance free, requires less chemical precipitants and achieves a high dry matter with only little energy consumption. The efficient dewatering is achieved through the use of ultra-fine filters with a diameter of 0.1 mm, low processing speed and the vacuum effect.

How it works: Wet sludges are pumped into the feed container, are taken up by a spiral and conveyed upwardly. Meanwhile the liquid content of the wet sludges is drawn through the perforated filter pipe by vacuum. The suction effect is increased by a drain pump. The solids are thickened and dehydrated on their way up in the filter column. At the upper end the solids are ejected and drawn off via a chute conveyor or a screw conveyor.

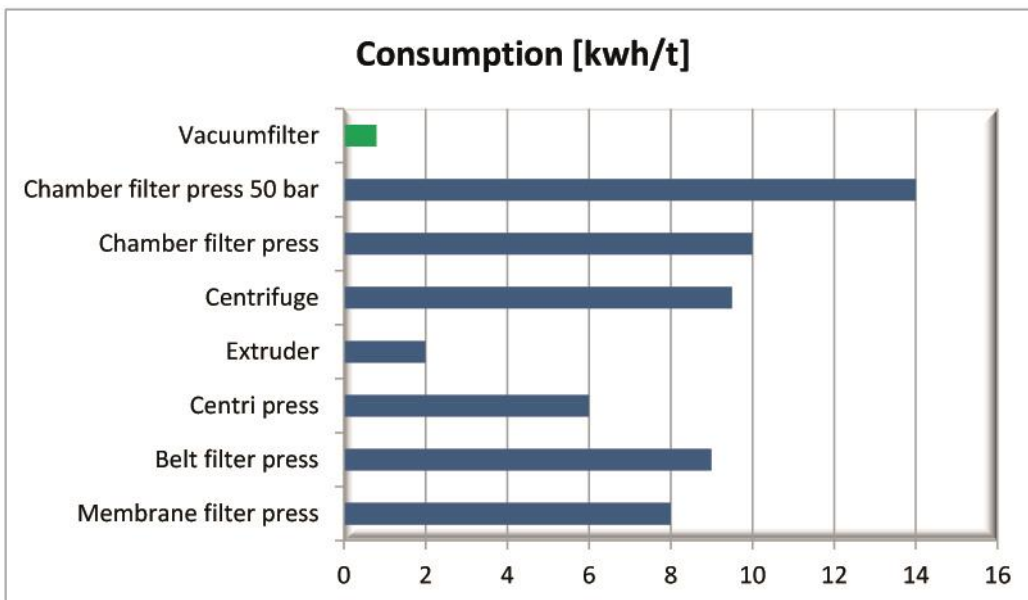
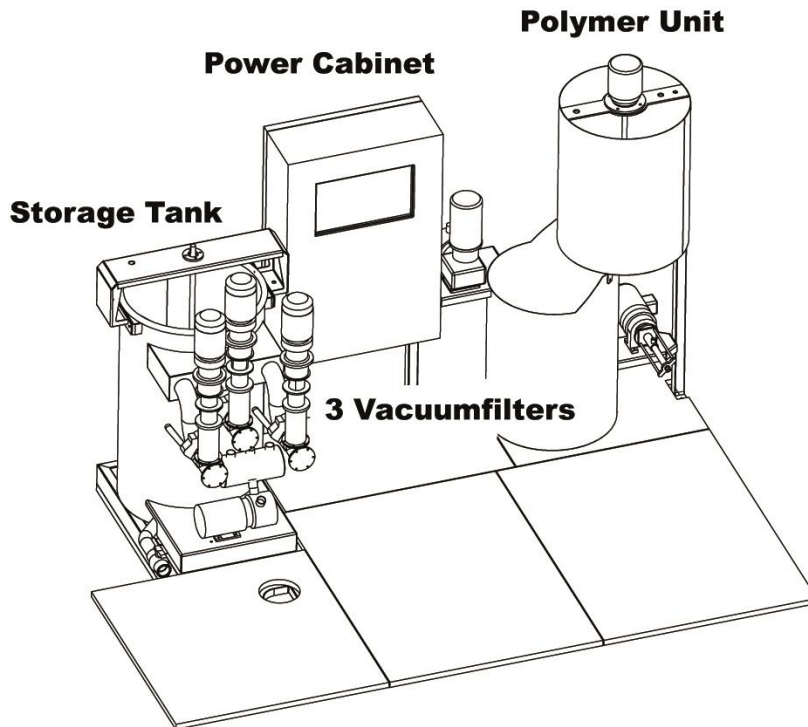
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- Less than 1 kWh/m³
- High dry matter content
- Less operating costs
- 30 m³ per day
- Easy maintenance

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Dewatering system in container construction, interior view



Dewatering system in container construction, standard (left) and special design