HUBER TECHNOLOGY sp. z o.o.

Energy-Efficient Sludge Thickening

Thickening consumes far less energy than it saves during further sludge treatment.

Primary and secondary sludge should be thickened separately to save power and polymer.

Primary sludge can be gravity thickened to 4 – 6 % DS without flocculation. Sludge and supernatant removal should be automatically controlled.

Secondary sludge should be mechanically thickened to 5 – 7 % DS.

- Gravity thickening consumes very little energy, but is effective only for primary or stabilized sludge.
- Dissolved air flotation can be operated with no or little polymer, but achieves only concentrations of 3 – 5 % DS. Its power consumption is very high (0.8 – 1.6 kWh/m³)
- Thickening centrifuges require polymer and consume much power (0.5 – 1.3 kWh/m³).
- Thickening filters (such as our Belt, Disc, Drum or Screw Thickeners) need polymer, but only 0.2 – 0.4 kWh/m³ power.