

Siljan Allards AB

Functions of the computerized control system for sludge thickening, Siljan PolySave

Indirect measurement of the DS-content of incoming sludge;
Closes down the sludge and polymer pumps, the flocculation reactor and the sludge thickener if the DS-content of the incoming sludge is too low;
Starts up the thickening process when the DS-content is higher.



Indirect control of the DS-content of sludge from thickener

Direct control of the speed of the polymer pump

Direct measurement of the DS content of the filtrate

Installation of *Siljan PolySave* gives the following advantages:

- Decreased costs due to a lowered polymer consumption. In particular, this is valid when the following factors vary:
 - The DS content of incoming sludge
 - The composition of the sludge
 - The temperature of the sludge
 - The efficiency of the polymer blending and mixing
- The aimed interval of the DS content of the thickened sludge can more easily be reached or, as an alternative, a higher DS-content than without the use of PolySave, can be reached. The thickening process is continuously corrected for variations as per above.
- The thickening system is closed down when the DS-content of incoming sludge is less than say 0.8 %; This saves polymer, electricity and water. The process is started again, when the DS content of the sludge has increased.
- Minimizes the need for operators' attention.
- Makes unmanned 24 hour/day thickening more efficient and reliable.
- Can be connected to the control room via a modem.