

function description AquaMix - metering controller for chamber filter presses

The AquaMix is a single stage, continuously operating polymer dissolution unit for liquid polymer. The core of the unit is a Mixing Pump that dynamically supplies the required mixing energy to the solution during the pumping process. By changing the pump geometry it is possible to change the output in the range of 1 : 8 without changing the mixing energy and the solution concentration.

Chamber filter presses are filled with sludge in the range of 1 : 10 to 1 : 20. During the final pressing phase even when using frequency driven excenter pumps, polymers are overdosed. Dewatering results are deteriorating in this final phase.

The metering controller for chamber filter presses with the AquaMix does allow to reduce the concentration of the solution when feeding with minimum solution volume. The polymer commodity and not the solution is controlled proportionally to the sludge volume.

The reduced solution concentration in the pressing phase has the additional advantage, that the flocculant is better mixed with the sludge. The dewatering result can further be improved.

For applications with sludge that do require increased polymer dosage at higher pressures, the controller can adjust the dosage rate depending on the actual pressure.

The combination of the HEG station and the metering controller allows an effective operation of chamber filter presses with polymer dosage. Installation requirements are reduced to mounting the dissolution station, connecting the dosage points and wiring the sludge flow meter and the pressure sensor. No further containers or sensors are needed for a successful operation.

Option:

- dry substance - proportional dosage of solution