

DAF Sludge Dewatering



Case Study Details

A Dissolved Air Flootation (DAF) based wastewater treatment system used in a food production facility was producing a high volume of sludge. For efficiency and cost savings, an SD dewatering screwpress was installed to reduce the volume of sludge hauled away. A DAF typically produces a sludge in the 3-5% solids range. A properly functioning screwpress can produce sludge with 20% or more solids. For this particular application, the sludge volume was reduced by approximately 75%.

The screw press can be operated by the main DAF PLC, but can also have a local control panel. The SD screwpress operates continuously but is not affected by intermittent feeding. In this application, there was no requirement for a liquid sludge tank. The sludge was pumped directly from the DAF to the screwpress and the dry cake then discharged to a solids bin (a sludge tank was on site as a backup only).

Start-up: November 2019
Industry: Egg Processing