TECHNOLOGY REFERENCE

Thickening poultry digestate before dewatering

Anaerobic digestion · Nutrient recovery

Approximate capacity	Module	Commissioned
30 m³/d	UltraFlux™ V8	2019

01

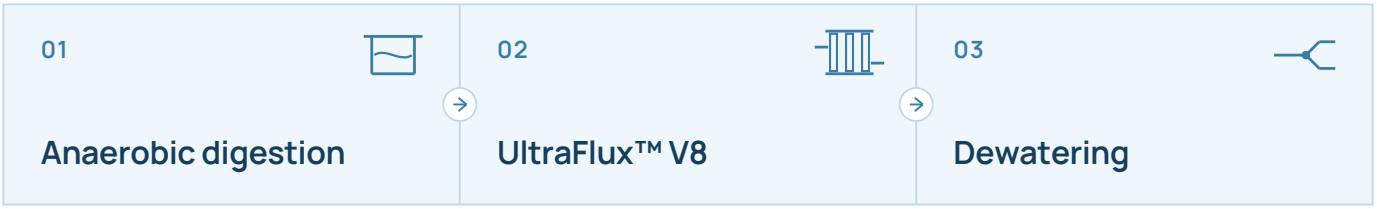
The challenge

Dewatering the entire digestate also sent its water on to drying. The process needed a lower hydraulic load and a liquid stream suitable for algae cultivation.

02

The solution

UltraFlux™ V8 took digestate directly from the digester. Concentrate went to dewatering, leaving a separate permeate stream for nutrient recovery.



03 / RESULTS

Over 4.5% suspended solids in the sludge

Sludge exceeded 4.5% suspended solids at the inlet to mechanical dewatering. Removing water at the UF stage reduced the volume handled by the dewatering equipment.

- Lower hydraulic load on dewatering
- Nutrient-rich permeate

Outlet streams

→ Permeate
Algae cultivation

→ Sludge
Dewatering