

SLG skid

Sludge Conditioning



A revolution in the conditioning, treatment and reuse of municipal and industrial sludge



The SLG solution improves the overall performances of Waste Water Treatment Plants, providing an unparalleled economic and environmental benefits.

Working principle

- The **SLG (Solid Liquid Gas) conditioning** uses air and energy exchange to modify the physico-chemical and rheological properties of the sludge. The SLG creates an emulsion which floats naturally, inducing a rapid separation of sludge and water.
- Polymer is added during the **flocculation** stage to stabilize and facilitate a clean water/sludge separation and a **degassing** stage evacuates excess air.
- The SLG flocculated sludge is then treated by the **dewatering equipment already in use** in the plant.



Flocculated
sludge



Sludge
after SLG



Filtrate
after SLG

Main benefits

- Increase final dewatered cake dryness by minimum +2%DS
- Reduce sludge transport and elimination costs
- Reduce CO2 & GHG emissions
- Reduce polymer consumption
- Improve sludge rheological properties: the "SLG sludge" remains pumpable up to 7% or 8%DS
- Improve filtrate quality (P and N concentrations are reduced in comparison with conventional equipment)

Additional benefits

- Increase existing sludge equipment treatment capacity
- Reduce odours and corrosive gas emissions
- Reduce energy consumption

Design & Equipment overview

The SLG solution is composed in 3 parts, allowing quick and easy integration into the sludge treatment line.

1. SLG Skid
2. Air compressor Skid
3. Degasser

The SLG solution is designed and built with safety in mind and in accordance with current best practice. High corrosion resistance materials ensure durability and long product life



SLG Skid

	SLG 10	SLG 20	SLG 30	SLG 40	SLG 80
Processing capacity	5-15 m ³ /h	15-25 m ³ /h	25-35 m ³ /h	35-45 m ³ /h	75-85 m ³ /h
Dimension (mm)	L1450 x W750 x H2300	L1450 x W750 x H2300	L1450 x W750 x H2300	L1450 x W750 x H2300	L2160 x W850 x H2660
Weight (kg)	300	310	310	410	650

Features

- Compact solution that can be easily integrated with existing thickening & dewatering equipment at Waste Water Treatment Plants
- 4G enabling for remote monitoring and diagnostics
- Low Operational & Maintenance costs
- Easy operating mode thanks to its automatic and smart control system
- 3 versions are available for control panel and HMI : Phoenix, Siemens or Rockwell Alan Bradley