

# Digelis™ Turbo

enhanced digestion of biological or mixed sludge

○ biosolids



reduce the volume of sludge by 50% with boosting digestion

○ performance

digester volume reduced by half, biogas production increased and a 5 to 10 point gain in sludge dryness

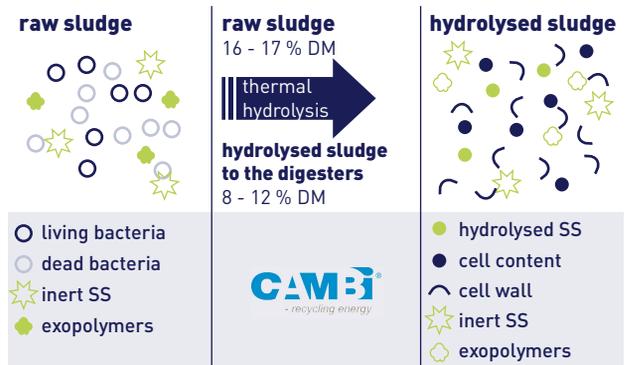
○ environment

production of reusable biogas

## innovation

thermal hydrolysis disintegrates the cell structure of bacteria into an easily digestible and dewaterable product

Digelis™ Turbo is SUEZ's boosted digestion technology that reduces sludge quantity by half after dewatering utilizing a preliminary process of thermal hydrolysis of biological or mixed sludge.



## key figure

sludge volume is reduced by

**50%**

compared to a treatment line without digestion



## Digelis™ Turbo technology . . .

For new facilities, Digelis™ Turbo allows a reduction in sludge disposal costs and an increase in the production of reusable biogas. In the case of plant extensions, Digelis™ Turbo can be integrated into the system to double the existing digester capacity without investing in new drying or incineration facilities.

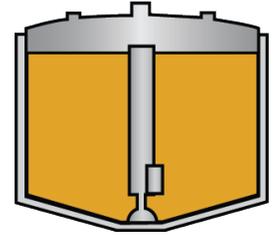
**A process producing reusable biogas:** first the sludge undergoes thermal hydrolysis (in a reactor at 165 °C for 20 to 30 minutes). In other words where, after being thickened and homogenized, the sludge is subjected to high pressure and high temperature. The sanitized sludge is then sent to a pressure-reducing reactor where the drop in pressure causes the destruction of cells, before being cooled by thermal exchange. The gases produced during these different phases are sent into the digester without generating any odor problems.

Finally, the anaerobic digestion converts the volatile matter into biogas (primarily methane), which is used to feed the boiler that produces the steam necessary to complete the process and / or for cogeneration. After dewatering, sanitized digested sludge has dryness around 30% and can be used as fertilizer.

1 thermal hydrolysis of the Cambi company



2 mesophilic digestion



## . . . what it can do for you

### performance



- increased dryness from 4 to 8 points compared to a conventional digestion
- production of reusable biogas increased by 50% from biological sludge
- auto-thermal reforming of biologically treated sludge



### savings

- 50% reduction of sludge evacuation costs for a new facility
- ability to double digester capacity in existing installations

### operating ease and advantages



- digestion and dewatering sludge facility
- fully automated operating cycles

### SUEZ treatment infrastructure

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www.degremont.com

## among our references

**Santiago, Chile**  
capacity: 2,500,000 PE

**Adaje, Spain**  
capacity: 420,000 PE

**Ourense, Spain**  
capacity: 300,000 PE