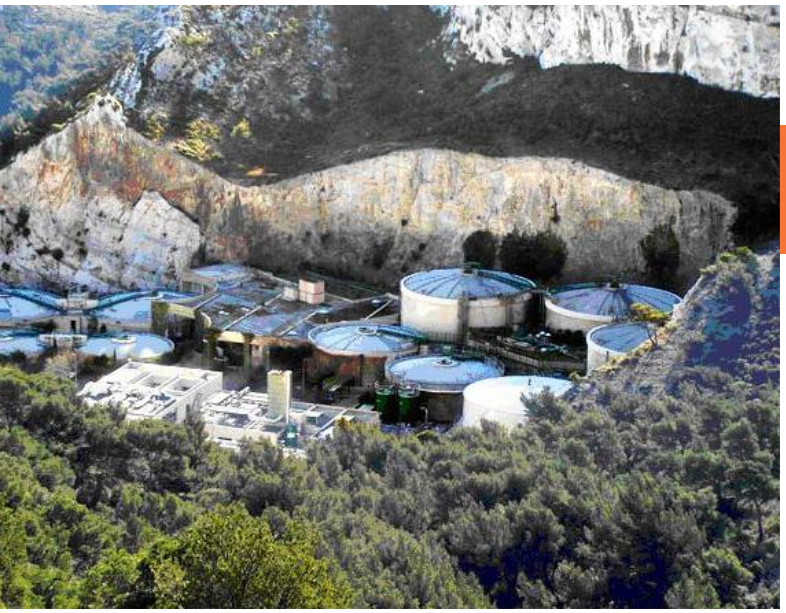
BIOSOLIDS

Digelis® Fast

Optimized process for thermophilic sludge digestion



Reduce the footprint of your digesters while minimizing the energy consumption

⇛ **Performance**

Digestion kinetics two times faster compared to mesophilic conditions

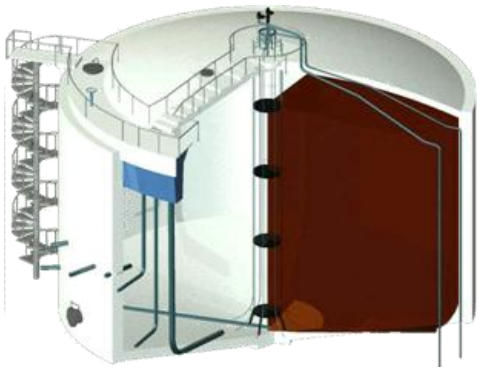
⇛ **Savings**

A reduced footprint

The Digelis® Fast system leverages thermophilic technology combined with energy recovery equipment to expedite the sludge digestion cycle while managing energy consumption efficiently.

This advanced workshop is designed to handle high loads, reduce sludge contact time, and minimize reactor size. Operating on the principle of thermophilic anaerobic digestion, it significantly accelerates the digestion process. A standout feature is its integrated heat recovery unit at the reactor outlet, which prevents excessive energy consumption, ensuring optimal performance and sustainability.

Thermophilic digestion at 55°C



40%

reduction in the **size of digesters**

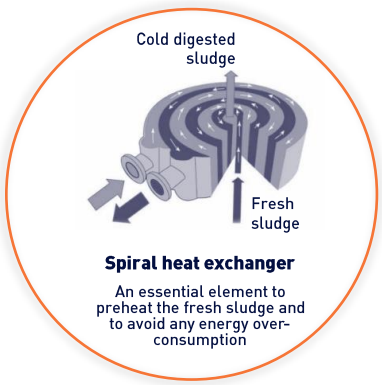
suez

The Digelis® Fast technology ...

In the Digelis® range, designed for wastewater sludge digestion, **Digelis® Fast** integrates the benefits of thermophilic digestion—such as compact design, rapid digestion, and pathogen destruction—while minimizing heat requirements for the process.

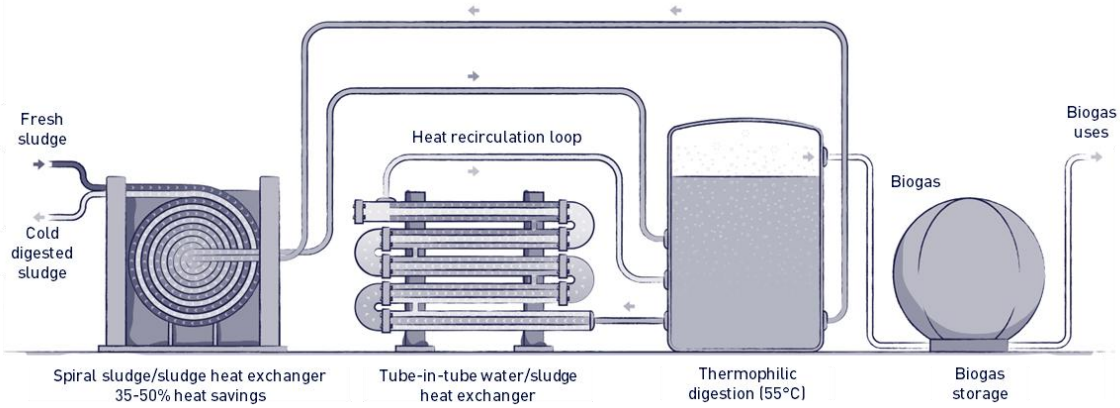
Capable of processing all types of wastewater sludge, Digelis® Fast is equipped with a heat recovery unit. This innovative feature recovers heat from the sludge at the reactor outlet (~55°C) to preheat the incoming sludge.

Digelis® Fast is designed to handle high loads, processing over 4 $kg_{VS}/m^3/d$. With digestion kinetics that are twice as fast, it reduces the sludge contact time within the tank to just 12 days, compared to 20 days for conventional mesophilic processes. This efficiency allows for a reduction of the digester size by 40% and an optimized footprint.



Spiral heat exchanger

An essential element to preheat the fresh sludge and to avoid any energy over-consumption



. . . what it can do for you

Savings

- Minimised energy consumption through integrated energy recovery

Compactness and flexibility

- Achieves a 40% reduction in digester size and overall site footprint due to accelerated digestion kinetics
- Suitable for both greenfield and brownfield projects
- Enables capacity expansion of existing digesters during refurbishment without major equipment modifications

Performances

- Digestion reaction kinetics are doubled
- Sludge contact time within the tank is reduced by up to 40% compared to conventional mesophilic processes

Among our references

Marseille, France
Capacity: 1,800,000 PE

Annecy, France
Capacity : 230,000 PE

Seine Aval, Achères, France
Capacity: 6,300,000 PE

SUEZ
Engineering & Construction

wwww.suez.com
eng.construction.water.solutions.fr@suez.com

P-B-013-EN-26-01-09