

Digelis Simplex

metal digester

- in partnership with Lipp GmbH
- biosolids



metal construction: durable and simple

- durable**
Verinox patented reactor
- simple**
to design and operate

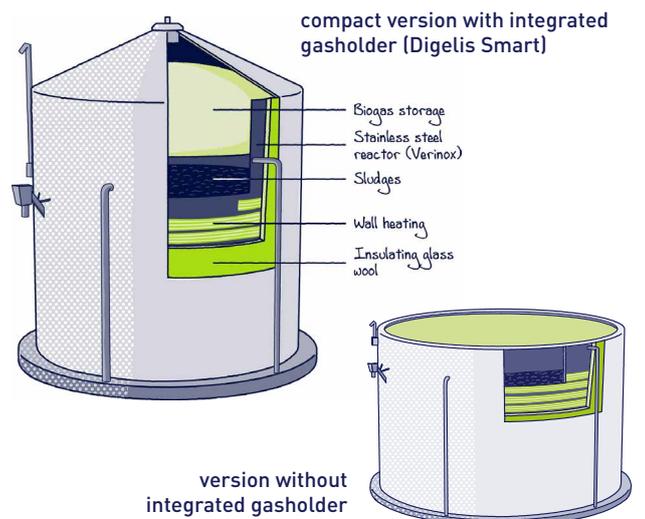
a unique construction method
fast, efficient and flexible
spiral steel bands are assembled
automatically

Digelis Simplex is a method of construction without welding or bolting applicable to mesophilic and thermophilic anaerobic digesters with or without integrated gasholder.

Digelis Simplex has been implemented for over 70 years by our partner.

key figures

more than
500 units
built with
this method



Digelis Simplex technology . . .

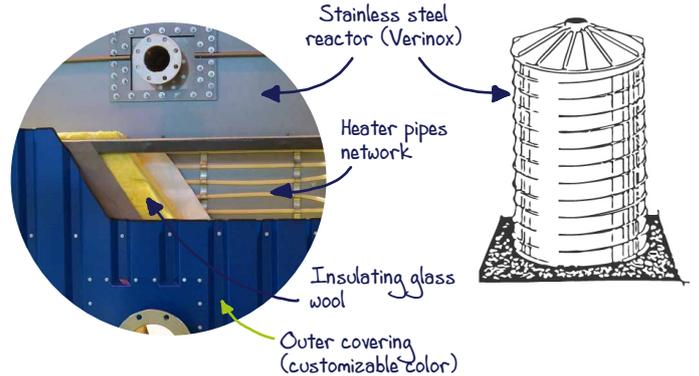
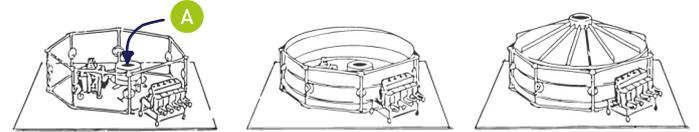
The construction of the reactor is carried out directly on site on concrete slab foundation by rolling around a circular structure of stainless steel Verinox strips (A). To ensure sealing the reactor, the steel strips are joined by folding (Double Seam Lipp system). This method of quick and effective construction is comparable to an advancing screw: as every rounds completed, the reactor rises and takes shape.

The sludge mixing inside the reactor requires few energy. It is mechanically provided and limits the ATEX inherent constraints of conventional biogas mixing systems. Coupled with a recirculation pump, this patented system allows to sweep regularly the top level avoiding the crust formation.

The external panel heating and insulation guarantee uniform temperature distribution in the digester.

This configuration:

- improves the durability of the system
- maintains the heat transfer rates
- allows to dispense with an upstream heat exchanger
- an outer covering protects all



. . . what it can do for you

competitiveness

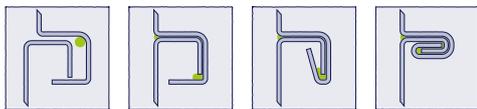


- construction time reduced through in-situ reactor design (patented)
- civil engineering limited to a simple concrete slab
- sludge heating system to replace an upstream exchanger

maximum strength and sealing



- construction of reactor in patented Verinox stainless steel
- folded steel with the patented Lipp Double-Seam



security

- metal reactor to avoid aggressive constraints on concrete
- mechanical mixing: no biogas compressor thus limiting ATEX constraints



operability

- mixing system can be serviced without emptying the reactor
- heating system built into the exterior walls outside the reactor is easily accessible

among our references



Weyersheim, Bas-Rhin (67)

30,000 PE

- 900 m³ digester with gasholder integrated (Digelis Smart)



Folschviller, Moselle (57)

29,000 PE

- 600 m³ digester with gasholder integrated (Digelis Smart)



Les Mureaux, Yvelines (78)

120,000 PE

- 3,000 m³ digester and biogas storage in a dedicated 340 m³ gasholder