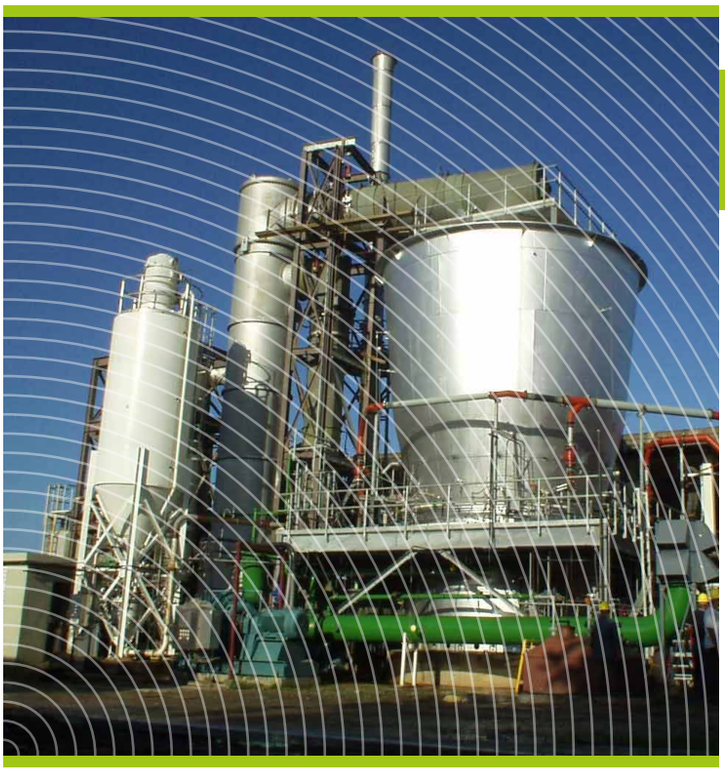
Thermylis™

sludge incineration with a fluidized bed

biosolids



a proven technology for dewatered sludge treatment

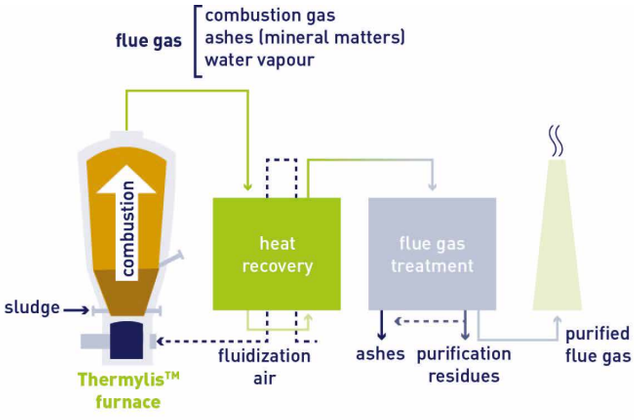
savings

an optimal use of energy consumption
a low investment cost

flexibility of exploitation and safety

Thermylis™ transforms sludge into a mineral product that is not harmful and that can be recycled. It is preferentially fed with dewatered sludge (dryness between 15 and 40%) from urban or industrial wastewater.

Thermylis™ is particularly suited to wastewater treatment plants with capacity greater than 100,000 PE or to household refuse incineration units that can produce more than 2,000 tMS/year of sludge.



key figure

final Reduction of sludge volume between

7 to 10%

suez

Thermylis™ technology . . .

Thermylis™ makes use of a sand bed heated to high temperatures, and subjected to expansion through an air supply coming from the wind box. The sludge is pumped into it. Homogeneity and turbulence (similar to that of a boiling liquid) that prevail in this fluidized sand bed, contribute to the combustion of the sludge. The post combustion / expansion chamber, top part of the furnace ensures that there are no combustion residues.

In its normal configuration, Thermylis™ is fitted with a wind box with a refractory arch that can be fed with air at 650°C.

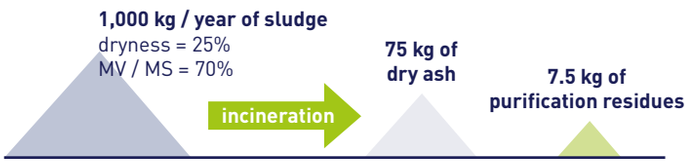
range / performances

→ **there are 9 furnace sizes in the hot wind box version**

screen diameter (m)	1.23	1.75	2.34	2.93	3.51	4.09	4.68	5.26	5.85
treatment capacity (kg MS/h)*	150	300	500	1,000	1,500	2,250	2,800	3,600	4,800

*can vary as per characteristics of the sludge

→ **a drastic reduction in the tonnage to be disposed off**



→ **intensive treatment of fumes**

pollutants	concentration in treated fumes	disposal efficiency
Chlorine	< 10 mg/Nm³	> 97.5 %
Sulphur	< 25 mg/Nm³	> 97 %
Dioxins / Furans		> 97.5 %

values calculated with respect to average quantities present in the sludge at inlet feed

. . . what it can do for you

a safe technology

- combustion quality within regulatory limits

savings

- hot wind box reduces energy costs

flexible of use

- intermittent running possible

fiability

- installations built since 1985 are still in working order

among our references

Elbeuf, France
capacity: 100,000 PE

Béziers, France
capacity: 200,000 PE

Le Havre, France
capacity: 415,000 PE

Valenton, France
capacity: 3,500,000 PE

P-B-004-EN-1603

Conception & Realisation: O. Barbier (SUEZ) - Photos credits: SUEZ