



# Waste-to-Energy





Your Partner for flue gas cleaning

**Waste-to-Energy : more than 400 references in flue gas treatment**

**A large portfolio of processes**



Dry/Semi-dry system: **SecoLAB® – VapoLAB®**



SCR DeNOx: **CataLAB®**

Wet system: **GraniLAB®**



Your Partner for flue gas cleaning

## VapoLAB® : an innovative high performance dry system developed and patented by LAB

**25 LINES BUILT IN  
THE LAST 7 YEARS**

VapoLAB® is a conditioned dry sorption process comprising 3 steps:

### Flue gas cooling

A steam generator / water heater is located in the flue gas ducts upstream the **LAB-loop** reactor and bag house filter

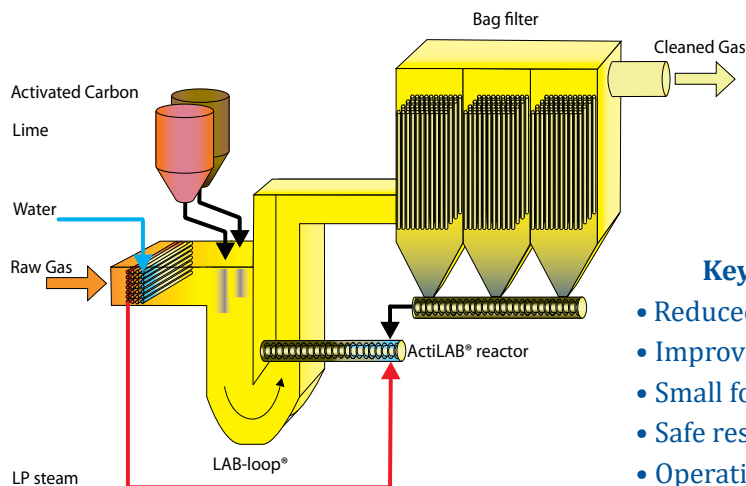
### Residues reactivation

The generated steam is put in contact with the recirculated unused reagent in the ActiLAB® reactor boosting the reagent activity

### Residues recycling

Reactivated residues are reinjected in the LABLoop® reactor

BEDDINGTON / Viridor - UK	2 x 18 tph
LEUNA / MVV Umwelt - GE	2 x 25 tph
WILTON / Suez - UK	2 x 31 tph
SHROPSHIRE / Veolia - UK	1 x 12 tph
HELSINKI / Vantaan Energia Oy - FI	2 x 20 tph
BRIVE / Syctom 19 - FR	3 x 3 tph
TEESSIDE / Sita - UK	2 x 10 tph



### Key benefits of VapoLAB®

- Reduced operating cost (low stoichiometric ratio)
- Improved energy recovery
- Small footprint
- Safe respect of emission limits
- Operation with quick or hydrated lime



Your Partner for flue gas cleaning

For over sixty years LAB has been designing and building **turnkey Flue Gas Cleaning (FGC)** covering three main activities : **Waste, Power / Biomass** and **Marine Industry**.

Offering state-of-the-art turnkey solutions, LAB has joined the Environment Division of **CNIM** in 2001. **200** highly skilled specialists & engineers work all over the world, and LAB is **ISO** and **OHSAS** quality certified.

LAB devotes considerable efforts in **R&D** offering the complete portofolio of advanced **Flue Gas Cleaning (FGC)** systems from dry to semi-dry and wet technologies including catalytic systems and condensation units, thanks to numerous patents.

LAB **Air Pollution Control (APC)** expertise is backed up by more than **400 lines in Waste to Energy** application being **number 1 in Europe** for the Flue Gas Treatment with more than **20 % of the market share**.

LAB is very active in the **most stringent countries** like Scandinavia, Switzerland, the Netherlands and well implemented in large countries like Germany, France, and UK.

Waste-to-Energy lines fitted with LAB FGC represent an equivalent of waste coming from more than **150 Million** inhabitants.

Address : LAB - 259 Avenue Jean Jaures – 69007 LYON - FRANCE

Phone : + 33 (0)4 26 23 36 00    [www.lab.fr](http://www.lab.fr)    

Contact : [lab@lab.fr](mailto:lab@lab.fr)