

VIDA Webinar 22 January '19



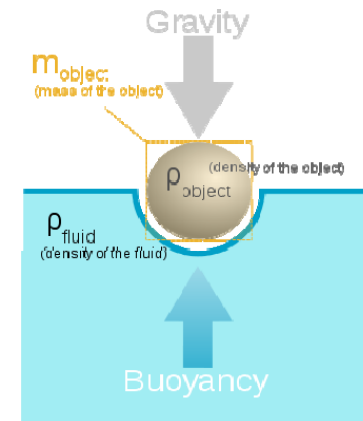
STEEL
NORDIC
FOR A **GREEN** FUTURE

Waste Management Green Energy to have and Protect Natural Environment using State of the Art Green-technologies produced by our Selected International Partners

Separation

SEDIMENTATION:

- Suspended solids with specific gravity greater than that of water tend to settle down by gravity.
- **force of gravity:** $F_g = \rho_p g V_p$
- **buoyant force:** $F_b = \rho_f g V_p$
- Low rate laminar flow $\approx 0.05\text{m/sec}$

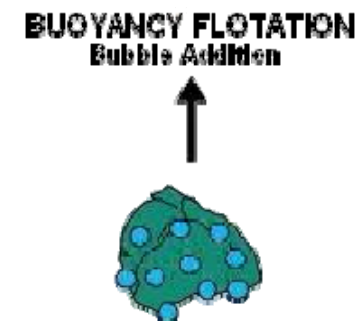


BUBBLE ADDITION:

- Micro bubbles nucleation on particle surface to increase the buoyant force of light materials;
- Higher separation rate;
- Optimizing separation performance.

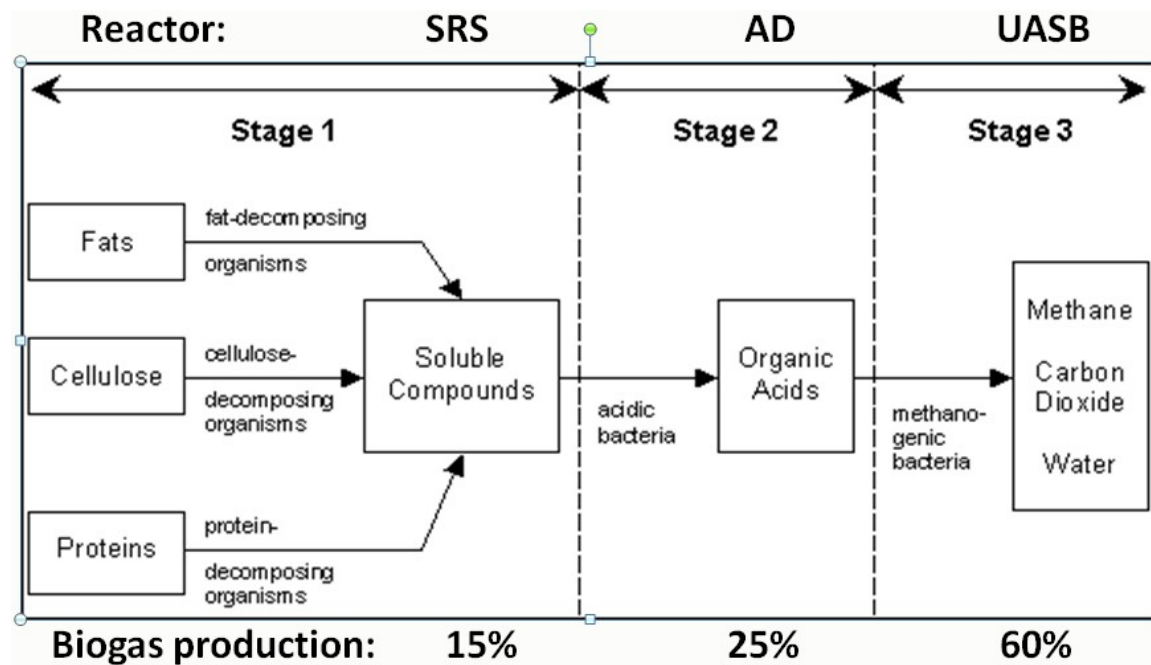
— **Assumptions:**

- Fine bubble - 20 to 50 micron;
- Non turbulence flow.



Multistage anaerobic system

- A single anaerobic element is not sufficient to address the task;
- Therefore, an inline multi-reactors design is needed, each stage not only acts as a digester/separator but also prepares the material for the following treatment;
- Maximize organic usage (about 90% utilisation to produce biogas).



Steel Nordic - Propose our MWS Biological Treatment that totally works in the circular economy

Our System use an Organic Separator attached to a Smart Reactor that works all the process using water in its BioMechanical environment.

The machine can be customize in a 60 ft container easy to transport and it requires only 1 worker to make the system work.

Naturally our technology can be customize according to the final utilizer requests and needs.

The advantage of this technology:

- 1) The production of both Thermal and Electric Energy**
- 2) Energy produced can be sold in the market, Profits from Selling,**
- 3) Energy obtained can be send in the Production system reducing the Energy costs.**
- 4) The final product obtained by the BioMechanical Process is Compost that can be Sold in the Farm Market.**

Our MSW Technology is Brand New and had almost 3 years tests done and is in Full Service in North East Italy and Israel.



STEEL NORDIC

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