

IEPER - Belgium



Selected BTA References

Final Client:

I.V.V.O.

Type of Waste:

Biowaste

(with a high amount of garden waste)

Commercial waste

Capacity:

• 50.000 tons/year

Start-up:

• 2003

Plant selections:

• Waste reception

Mechanical pre-treatment

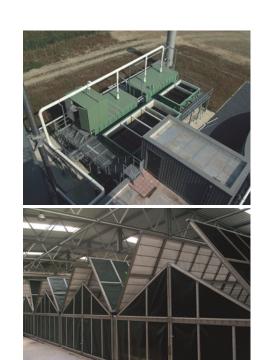
BTA® Hydromechanical Pre-treatment
One-stage wet anaerobic digestion

Solid-liquid separation

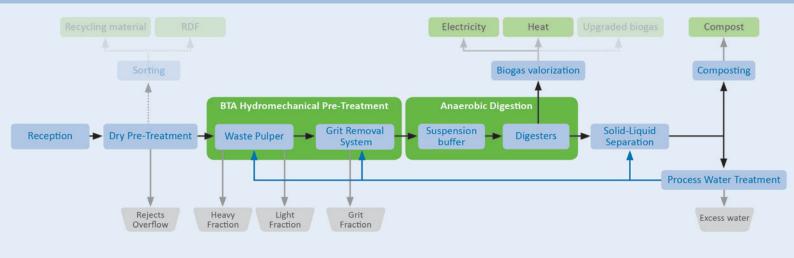
Composting

• Internal process water management

• Effluent treatment plant



The BTA Process



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Description

The digestion plant in leper, started-up almost 10 years ago, is a well-known reference in Belgium for the successful operation of a biowaste methanization plant.

The waste is fed to a shredder unit, which opens and roughly chops the delivered garbage bags and the green waste for its further separation in a **trommel sieve** with 150 mm sieve size. The overflow, rich in plastic contaminants, goes to disposal, while the sieve underflow is led to the **BTA® Hydromechanical Pre-treatment** for the removal of the impurities.

The cleaned organic suspension is processed in a **mesophilic**, **wet anaerobic digestion step with full mixing** of the two digesters with compressed biogas. The produced biogas is treated in 4 CHP units with a total capacity of **1.200** kW_{el}.

The dewatered **digestate** is treated for its sanitation in an intensive and first composting step with forced aeration in compost boxes covered with membranes. Then the material is moved into the curing building, where the material is further stabilized on forced-aerated windrows and then refined with a mobile trommel screen. Due to its very low content of impurities, the final compost meets the quality criteria from VLACO and is sold as **high quality compost**.

