



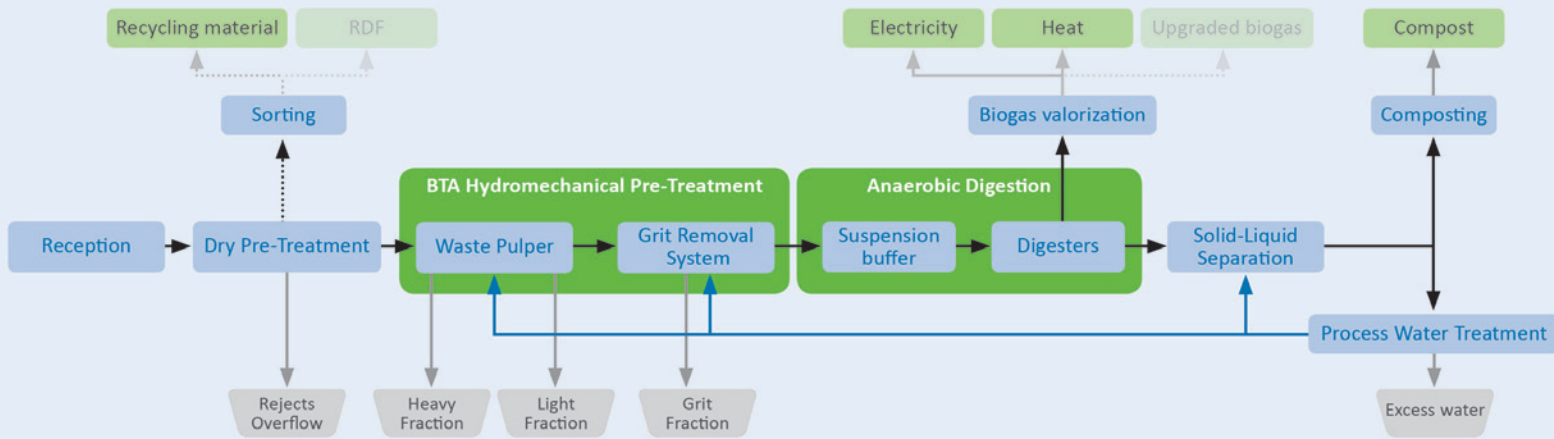
VALORLIS - Portugal



Selected BTA References

- Final Client:**
- VALORLIS – Valorização e Tratamento de Resíduos Sólidos, S.A.
- Consortial Partners from BTA:**
- EFACEC Engenharia, S.A.
 - EFACEC Ambiente, S.A.
 - MONTEADRIANO – Engenharia e Construção
- Type of Waste:**
- Municipal Solid Waste
- Capacity:**
- 50.000 tons/year input to the plant
 - 30.000 tons/year into hydromechanical pre-treatment
- Start up:**
- 2010
- Plant sections:**
- Waste reception
 - Mechanical pre-treatment and sorting
 - BTA® Hydromechanical Pre-treatment
 - One-stage wet anaerobic digestion
 - Solid-liquid separation
 - Composting
 - Internal process water management
 - Effluent treatment plant





VALORLIS - Portugal

Description

The MBT Valorlis is designed and constructed according to the BTA® Process. The MSW is separated in two fractions in a sieve drum with 80 mm mesh size. By a magnetic separator and a manual sorting line **recyclable materials** are recovered from the sieve overflow. The sieve underflow is led to the **BTA® Hydromechanical Pre-treatment** to remove the impurities from the organic fraction prior digestion. The anaerobic digestion is executed in mesophilic **wet stage** in two fully agitated digesters (compressed gas) of 2.000 m³ each.

The digested substrate is dewatered, and the remaining solid phase is stabilized in two-stage **composting**: in the first step it is mixed with structure material and treated in a closed hall with boxes equipped with forced aeration to achieve the sanitation of the material. The further stabilization occurs in piles with forced aeration in a covered, but not closed. After 12 weeks in total the remaining structure material is sieved out to obtain the final compost.

The liquid phase is largely recycled back into the BTA® Process as process water. Only the remaining amount is treated in a proprietary **effluent treatment plant** before its discharge into the canalisation.

In the frame of the consortium, BTA International overtook the **technological leadership and process responsibility** for the complete MBT. Further to the **engineering services** during the design, procurement, installation and start-up phase BTA supplied the **key components** from the hydromechanical pre-treatment, the gas mixing system, the composting and effluent treatment as well as the **control system** for the complete installation.