

Herhof Stabilat[®] Plant Fact Sheet Venice

Production of Stabilat[®] fuel

Annual throughput: 150,000 metric tons MSW



Name and Location

Name: Impianto VESTA c/o Herhof
Location: Via della Geologia 31
30030 Fusina, VE, Italy
Phone: +39 041- 547 - 0631
FAX: +39 041- 547 - 9021

Client

Adress: A.M.A.V.
Palazzo Bonfadini
Cannaregio, 462
30121 Venezia, Italy
Phone: +39 041 - 521 - 7866
Fax: +39 041 - 521 - 7873

Operator

Name: Ladurner Umwelttechnik
Adress: Industriezone 11
39011 Lana, Italy
Phone: +39 047 - 356 - 7800
Fax: +39 047 - 356 - 7805

General technology description

The Stabilat® technology is a biological-mechanical waste treatment process with the target of creating a high quality fuel (trade name: Stabilat®) plus a high recycling rate.

By means of a computerized biodrying process plus a subsequent fully automatic separation system the MSW is completely split into:

- ✓ Stabilat® fuel fraction for industrial use (e.g. energy production),
- ✓ minerals e.g. for use in road construction,
- ✓ metals and batteries (reduces concentration of heavy metals up to 95%)
- ✓ process water is cleaned and reused as cooling water,
- ✓ exhaust air is cleaned in RTO system

Technology utilized

Machinery

- Reception bunker with negative pressure for air cleaning
- Fully automated grab crane for bunker management and charging the shredder
- Pre-treatment shredder
- 15 Herhof Boxes with air and liquid tide lids with feeding / discharge by automated crane
- Completely enclosed conveyor system / machinery
- 6-7 day biodrying process with the Herhof technique
- Ventilation to assist the biological processes by heat exchangers and cooling towers
- Separation into light / heavy materials with air-tables and air-separators
- Eddie current separators and magnets remove ferrous and non-ferrous metals from the fuel fraction
- Second crushing 35 mm
- Dust removal with baghouse filters
- Internal water treatment plant for condensate cleaning
- Exhaust air treatment with LARA® thermal oxidizer

Investment Cost

The cost of the plant was around 30 million €. Office building, weighbridge and other infrastructure are shared with composting plant and the mass burn incinerator on the same site.

Throughput

The Venice installation handles the MSW produced in the "Region of Venice". The average amount of MSW going into the plant is 150,000 Mg/a, delivered on 5 days a week.

Types and approx. Quantities of products produced

Stabilat [®] fuel	80,000 Mg/a
Metals	6,000 Mg/a ferrous and non ferrous metals
Inerts	26,000 Mg/a

Experience with facility breakdowns, maintenance and operability

The plant is operated 5 days a week in 3 shifts with 15 employees.

The plant has scheduled times for maintenance (per day, per week, per month, per year) which are usually handled by the employees. Maintenance for the bigger machines of other manufacturers like cranes, shredders, air-tables etc are handled by the subcontracting companies in case of failure.

General Herhof policy is to integrate as much of backup capacity as possible in the systems, like two post-shredders, two air treatment lines, two cooling towers, etc.



General data of the facility

Time schedules

Construction time	15 months
Status	in full scale operation since February 2002
Contract duration	20 years

Size

Height of buildings	14 m
Height of stacks	30 m

Operating data

Workdays per week	5
Employees	15
Number of shifts	3



