



BIO SOLIDS



BIO WASTE



BIO REFINERIES

PLANT
SHEETS



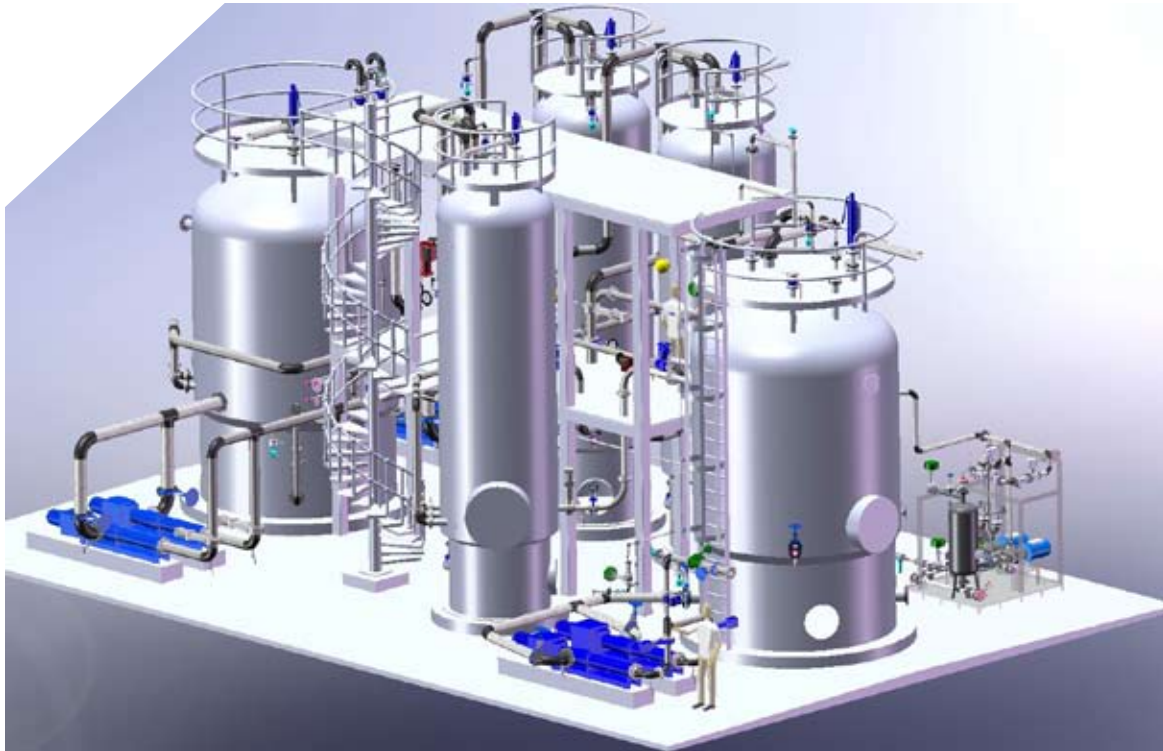
Under construction Aug. - 08

BIOVAKKA

Turku, Finland

Plant capacity and performance:

- 14,000 metric tonnes DS/year
- High dry solids loading (>10%DS)
- 2 x 3,500 m³ digester volume
- High biogas production
- Pasteurized cake



Biovakka, Finland

On 21 December 2007 Biovakka Suomi Oy awarded Cambi a 3-reactor Thermal Hydrolysis plant for the pre-treatment of sludge prior to anaerobic digestion for a sludge treatment centre located in Turku, Finland.

Cambi THP was chosen from various alternatives, incl. pre-pasteurization, investigated by the client. The main reasons for choosing Cambi THP were guaranteed sterilization, higher yield of biogas, higher VS-reduction, lower amount of remaining sludge and better over all energy balance.

The plant will have enough capacity to treat the sludge from the city of Turku and the neighbour-

ing communities. The biogas plant will process mixed primary and secondary sludge produced at the Turku regional wastewater treatment plant, currently under construction.

The WWTP will start operating 1 September 2008, and the biogas plant including the THP will start to receive sludge at the same time. The construction site is close to the landfill in Turku, about 10 km away from the wastewater treatment plant. The biogas will be utilized as renewable energy in the most efficient way in accordance with the latest trends within EU.

The benefits of the Cambi process are:

- Compact digestion plant with high loading rates and biogas production
- Cambi was chosen because of highest return on capital of competing technologies
- Pasteurized cake with high dry solids content (i.e. low volume) gives the plant flexibility whether to dry or to apply directly on agricultural land.
- Stable digestion process with high availability reduces client's risk (a private developer).