PLANT SHEETS

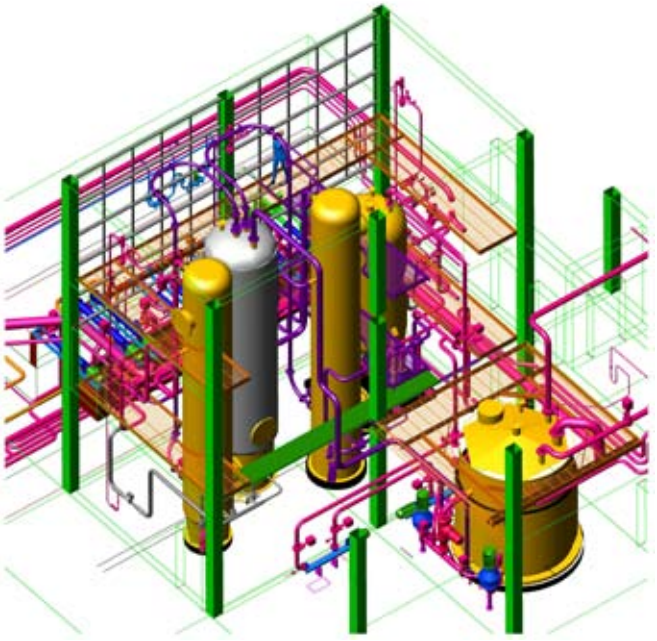
HIAS Plant

Hamar, Norway

Plant capacity and performance:

- 3,600 tonnes DS/year
- 2 x 1300 m³ digesters
- x kW electricity + steam
- 2-reactor Cambi THP
- ~65% volatile solids reduction
- Half the original cake volume
- Meets highest biosolids standards

CAMBI™ - recycling energy



HIAS Plant, Hamar

The HIAS wastewater treatment plant serves the city of Hamar and several smaller towns in the surrounding area and treats a population equivalent of 90,000

In 1995 Cambi built its first full-scale thermal hydrolysis installation at HIAS as part of a new sludge treatment process including thermal hydrolysis, digestion, dewatering and gas engine co-generation.

It has since been in successful operation since that time The sludge treatment process has a capacity of 3,600 tonnes/year dry solids (DS) at 16% DS.

The HIAS WWTP produces approx. 2,650 tonnes dry solids/year, but because of the popularity of the process and the end product HIAS has progressively imported more sludge from neighbouring communities.

Thus, on 19 January 2005 Cambi AS was awarded a contract to supply an additional anaerobic digester in order to increase capacity. This was followed by an order in September 2006 to supply and install a new THP reactor and a flash tank, including associated piping and instruments, into the existing THP room.

This expansion was commissioned at the end of 2007.

The benefits of the Cambi process are:

- 65% volatile solids reduction and maximised biogas production.
- Half the cake volume from before THP and digestion
- Integrated combined heat and power with steam production
- The biosolids product meets highest standards in Norway and can be used without any restriction
- Plant now has income from importing sludge from other plants that cannot reat sludge successfully