

Biogas plants made by EISENMANN

With more than 50 years of experience in plant engineering and as an international systems supplier for process, thermoprocess and environmental engineering, EISENMANN is your partner for complete turnkey biogas plants.

Standard biogas plants from EISENMANN comprise a horizontal main fermenter, a thermal disintegration stage and a vertical secondary fermenter. The plants operate automatically and are equipped with process control systems, which manage the measurement and control processes. The biogas plant is monitored remotely and you are constantly kept up-to-date using modern communication channels.

In addition to standard biogas plants, EISENMANN also builds plants which are individually tailored to your specific needs. We build biogas plants for energy-yielding crops and liquid manure, as well as for by-products from food production or waste disposal.

We can provide a system that is optimized for the highest level of efficiency for your particular application.



The EISENMANN
Technology Center
in Holzgerlingen
near Stuttgart

Main fermenter

The first fermentation stage in the EISENMANN process is a heat-insulated steel pipe reactor with horizontal mixer shaft, sand and suspended layer discharge.



Solid substrates are introduced into the fermenter via a separate inlet, while the liquid substrates are delivered by a pump. In the main fermenter, these substrates are fermented at a constant temperature of between 30 and 55 °C. (86 and 131 °F). Between 60% and 70% of the usual gas yield is already liberated at this stage.

The main fermenter is pre-assembled prior to delivery. Its compact design ensures short construction periods. The steel fermenter can also be dismantled and recommissioned elsewhere.

Advantages of the horizontal steel fermenter

- Continuous mixing prevents the substrates from settling or floating on the surface
- Sand and gravel collect at the bottom and are discharged from the fermenter without difficulty
- Wall heating maximizes the area available for heat transfer and ensures a uniform temperature distribution

