

Biogas Plant Falkenstein



Location	Falkenstein, Saxony-Anhalt, Germany
Construction Period:	2008
Input substrat:	Corn silage, whole crop silage, sweet sorghum silage
Fermenter:	Steel tanks 2 x 3.031 m ³
CHP	Gas engine 2 x 716 kW _e
Special Features:	Two digester, gas holder above secondary digester, thermophilic operation, separation of digestate, thickening of liquid phase, satellite CHP, heating network

The FALKENSTEIN biogas plant was built and operated by Dalkia Energy Service GmbH. Today the plant is owned by Danpower Energie Service GmbH. The two steel tanks operate as digester. Each is equipped with a top mounted mixer. The secondary digester is equipped with a double membrane gasholder roof. Each year a total of 30,000t energy crops is fed into two digesters by a solid input device. The produced digestate is separated and the liquid phase is additionally treated in a thickener for further volume reduction. The digestate is stored in an open lagoon and is used as fertilizer. The biogas is used in two gas engines (CHP), which each have a capacity of 716 kW_e. In the generator, the mechanical energy is converted to electrical power and heat, the electricity is fed to the public grid. One of the CHP is located in a distance of 2 km as satellite CHP. The heat generated in cogeneration is distributed in a local heat network and is used by private- and industrial customers. The start-up of the biogas plant took place in 2008.

Krieg & Fischer Ingenieure GmbH

Bertha-von Suttner-Str. 9
D-37085 Göttingen – Germany
Tel.,: +49 551 90 03 63 – 0
Fax.,: +49 551 90 03 63 – 29
contact@KriegFischer.de
www.KriegFischer.de

Responsibility of Krieg & Fischer Ingenieure GmbH:

Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up