



Efficient biogas plant fitted with SIMONA® PE 100



Top: view of the fermenter and secondary fermenter; bottom left: diagram of how the biogas plant works; bottom right: biogas plant completed

Operating throughout Europe, agriKomp GmbH is a company specialising in the development and manufacture of biogas plants. All the major components of the plants are manufactured in-house. Owing to their modular design, they can be added to at any time, providing a very high level of flexibility. The digestion process uses liquid manure, dung, green material, silage and cereal. The key components of the biogas plants have to be made of a material with maximum corrosion resistance. Therefore, agriKomp GmbH opted for SIMONA® PE 100.

The project at a glance

Project

Construction of a biogas plant for efficient conversion of biogas to electricity

Size of the biogas plant

420 kW

Requirement

Excellent corrosion resistance

Contractor

agriKomp GmbH, Merkendorf

Technical support

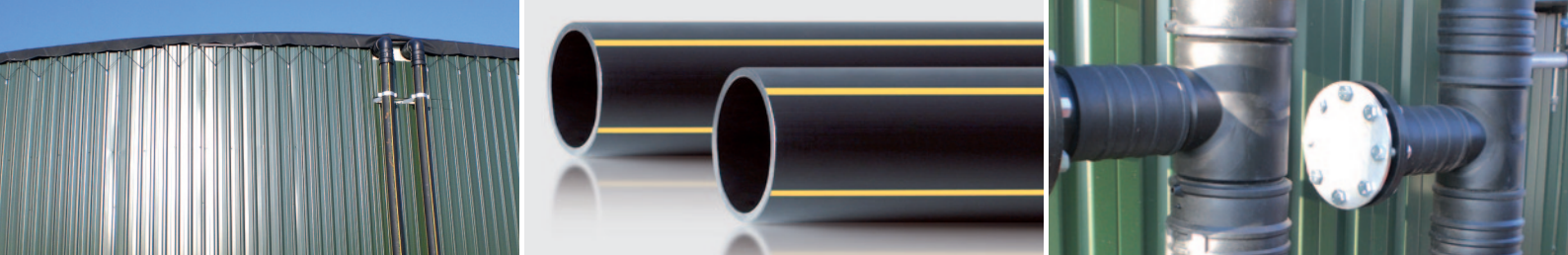
Piping Systems Business Unit,
SIMONA AG, Kirn

Products used

SIMONA® PE 100 pipes
SIMONA® PE 100 fittings

Time of project

2009 / 4 weeks



From left to right: SIMONA® PE 100 pipes on the fermenter; SIMONA® PE 100 gas pipes; SIMONA® PE 100 fittings installed on the tank wall

SIMONA® PE 100 – the proven material for eco-friendly energy production

Initial situation

As a renewable and versatile source of electricity, biogas helps to make energy supply both safe and climate-friendly, which is very much in demand at present. In the light of this, the construction of biogas plants for energy production is becoming more and more important. The plants supplied by agriKomp GmbH have been running successfully for 15 years now. They require pipes and fittings that meet the highest standards.

Task

Exposed to special conditions 24/7, biogas plants are dependent on specific construction materials to safeguard ongoing operations. For biogas plants the components have to meet the following requirements:

- Excellent corrosion resistance
- Chemical resistance
- High toughness and rigidity
- Long service life

Solution

In contrast to steel, SIMONA® PE 100 pipes and fittings combine excellent corrosion resistance with a high level of UV stability, which makes them the perfect choice when it comes to the construction of high-end biogas plants. Impact strength at low temperatures and the high surface quality of the thermoplastic piping components are other key advantages for agriKomp and its facilities.

agriKomp GmbH is acknowledged as a leading specialist in biogas plant engineering and production. Their plants ensure efficient conversion of biogas into electricity and heat, making them an important contributor to the energy industry.

SIMONA® PE 100

Properties

- Notch resistance
- Long service life
- Strong, integral and permanently leakproof welded joints
- No incrustation
- Excellent hydraulic properties due to very smooth walls
- High abrasion resistance
- High corrosion resistance
- Good chemical resistance
- Fracture resistance due to a high level of flexibility (proof of impact resistance down to -20°C)
- High flexibility
- Good storage properties due to insensitivity to frost and ultraviolet radiation

Range of products

- Pipes
- Fittings
- Electrofusion fittings
- Flanges
- Sheets
- Solid rods
- Profiles and welding rods

Further information:

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