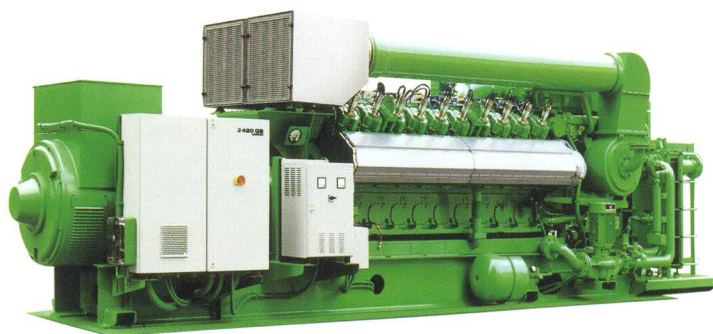


# Jenbacher type 4



## an efficiency milestone

Based on the proven design concepts of types 3 and 6, the modern type 4 engines in the 800 to 1,500 kW power range are characterized by a high power density and outstanding efficiency. The optimized control and monitoring provides easy preventive maintenance and maximum reliability and availability.

## reference installations

### model, plant

**J420 GS**  
**Landfill site**  
**Bootham Lane;**  
**Doncaster, UK**

### key technical data

Fuel ..... Landfill gas  
Engine type ..... 2 x JGC 420 GS-L.L  
Electrical output ..... 2,666 kW  
Commissioning ..... May 2001,  
December 2002

### description

At this landfill site, the methane content of the landfill gas can drop as low as 35%. The fluctuations in the methane content can be handled easily by the Jenbacher engines due to the patented LEANOX® lean mixture combustion system. Thus these variations do not cause any reduction in the high output level of our power systems. The installation is operated by United Utilities Green Energy Limited.



**J420 GS**  
**Hospital;**  
**Padua, Italy**

Fuel ..... Natural gas  
Engine type ..... 2 x JMS 420 GS-N.LC  
Electrical output ..... 2,832 kW  
Thermal output ..... 2,576 kW  
Commissioning ..... February 2002,  
October 2003

Two Jenbacher cogeneration systems help the Padua hospital to control its energy costs by providing power and heat at high efficiency levels. The electrical efficiency of each engine is 42.3%.



**J420 GS**  
**Containerized**  
**solution**  
**Biogas plant SBR;**  
**Kogel, Germany**

Fuel ..... Biogas  
Engine type ..... 1 x JMC 420 GS-B.LC  
Electrical output ..... 1,413 kW  
Thermal output ..... 751 kW  
Steam production ..... 1,037 kg/h at 3 bar  
or 698 kW output  
Commissioning ..... October 2003

This biogas plant utilizes leftover food from hospitals, hotels and canteens as well as organic residual waste from the food industry for producing biogas that fuels our gas engine. The electricity generated is entirely fed into the public grid, and the exhaust gas from the engine is used for steam production. The steam serves for the pasteurization of the waste, which can then be used as sterilized fertilizer.



