BIOFerm - Rosendale



Quick Facts

LOCATION: Pickett, WI, USA **INDUSTRY:** Dairy Farm

EQUIPMENT: avus 1426

GAS TYPE: Biogas





The University of Wisconsin Oshkosh, in close cooperation with BioFerm, developed an anaerobic biodigester at Rosendale Dairy in Wisconsin, the state's largest dairy farm located in Pickett. This large plant produces energy from the methane gas produced in the decomposition of dairy cow manure. Operating as a remote UWO biology teaching, learning and research laboratory, the project also features a public education center and some of the revenues from the sale of energy are channeled into student scholarships, campus laboratory enhancement, facility expansion and creation of an innovative center on rural community development.

EQUIPMENT DETAILS



MODULE: avus 1426

TOTAL ELECTRICAL POWER: 1426 kW

CONFIGURATION: Container module

EXTRAS: Biogas Treatment System

For this application 2G Energy Inc. has supplied a complete biogas CHP module consiting of a 50' sound attenuated container with fully integrated 2G avus 1426 Jenbacher engine as prime mover. The CHP cogenration system produces Electrical Power of 1,426 ekW/h or 11,836 MW p.a. and Thermal Power of 1,533 kWh/th. 2G also supplied the complete gas treatment, including cooler, dryer / dehumidification, reheating, and the H2S removal system. The customer decided to install the 2G Thermal Heat Distribution System including a Hydronic Junction. It assures that the CHP maintains optimum thermal performance at any time in different load situations. This advanced technology decouples the primary heating source circuit from the secondary consumer circuit. Consistent function is thereby achieved in all operating states. 2G THDA's

provide the most energy efficient heat transfer. The system also allows for tighter temperature control because of the infinite system ability to regulate temperatures gradually. The controls and switchgear, including utility interconnection are also provided by 2G Energy.

2G. Project Profile.