

THE JENBACHER EMISSIONS REDUCTION PACKAGE

for full control over your exhaust gas levels

Background

STAWAG (Stadt- und Städteregionswerke Aachen AG) is a municipal energy service provider that supplies the city of Aachen and the surrounding region with power, local and district heating, gas, and drinking water. The sustainability-oriented company, regarded throughout Germany as a pioneer in the use of renewables, focuses on increasing efficiency, decentralization, and applying innovative technologies. One of STAWAG's targets is to provide Aachen with climate-neutral energy by 2030. INNIO Group's Jenbacher cogeneration unit with a total output of 22 MW is playing a key role in achieving this goal at STAWAG's Schwarzer Weg site. The five J624 engines used here enable flexible and highly efficient generation of power and heat. To keep its exhaust gas levels under control, STAWAG opted for the Jenbacher emissions reduction package, an SCR and oxidation catalyst silencer system that includes measuring and maintenance service¹.

Solution

The Jenbacher cogeneration unit at the Schwarzer Weg site is equipped with an SCR and oxidation catalyst silencer system specially adapted to the plant to reduce emissions to a preset level². The emission control system incorporates the urea supply, urea dosing, a catalyzer system, and the corresponding sensors and controls. Nitrogen emissions are lowered by adding a urea and water solution to the SCR catalyzer, and downstream oxidation catalysts reduce other exhaust gas components, such as carbon monoxide and formaldehyde. With a control and reporting function integrated into the Jenbacher DIA.NE XT4 engine control system, STAWAG can transparently view the engine and emission data in INNIO Group's myPlant Performance software. System monitoring is rounded off with the Jenbacher emissions measuring and maintenance service³, which provides all the necessary data and recommendations for action to help ensure compliance with emissions regulations.

»As a municipal energy supplier, we rely on partners who offer both innovative and dependable solutions. With INNIO Group at our side, we have a strong company to help us navigate the energy transition with solutions and services that are already in use today, helping us achieve a clean future.«

Manuel Kirfel
Project Development/Sales Heat,
STAWAG – Stadt- und Städteregionswerke Aachen AG



STAWAG customer video:
Scan the QR code for more information on the SCR and oxidation catalyst system.

¹ Measuring and maintenance service incl. measurement bus currently only available in Germany

² Within the limits of the system/product technology

Results

The Jenbacher emissions reduction package provides STAWAG with a tailor-made OEM solution that combines all engine-specific and complementary technologies from a single source. This tool from INNIO Group helps municipal utilities reduce their CO, CH₂O, NO_x, and noise emissions according to their specifications and in compliance with statutory emission levels. The fully integrated control and reporting function enables the verification of compliance with limits through automatic emission report generation and measurement data storage, with remote access for real-time monitoring provided by the myPlant Performance software. Thanks to its space-saving configuration, STAWAG was able to integrate the SCR and oxidation catalyst system into its plant without any issues.

Key technical data

Installed engines	5 x J624
Electrical output	22.1 MW
Thermal output	23.6 MW
Energy source	Pipeline gas
Year of commissioning	2022
Emissions reduction package	SCR and oxidation catalyst silencer system

Customer benefits with the Jenbacher emissions reduction package

- CO, CH₂O, NO_x and noise emissions reduced to preset limits
- Complete OEM solution for engine and emissions control from a single source
- High degree of flexibility with systems integration
- Minimal space required due to modular configuration
- Efficient calibration with engine operation
- Automated emissions reporting and storage of measurement data with integrated control and reporting function
- Intuitive remote emissions monitoring
- Available for new and existing plants (upgrade solution)

»The Jenbacher OEM solution for emissions reduction offers engine-specific and complementary technologies from a single source. As a result, INNIO Group is helping us in our efforts to achieve a climate-neutral energy supply and at the same time making it easier for us to comply with the prescribed emission limits.«

Manuel Kirfel
Development/Sales Heat,
STAWAG – Stadt- und Städteregionswerke Aachen AG



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jenbacher.com/en/contact

For more information, visit INNIO Group's website at innio.com or the Jenbacher website at jenbacher.com/en

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