

JENBACHER SCR & OXIDATION CATALYST

We can help you comply with emission regulations for pipeline gas and biogas-fueled engines¹ of series 3, 4 and 6

The Jenbacher selective catalytic reduction (SCR) & oxidation catalyst by INNIO now makes it even easier to comply with your country's emissions regulations.

Benefit from the space-saving modular design that enables custom configuration for your plant. Our OEM solution – designed for engines series 3, 4 and 6 – has a fully integrated and optimized control function for monitoring and reporting in our DIA.NE XT4 engine control system. This gives our customers a clear overview of engine data via our myPlant Performance Software².

INNIO makes it easier to comply with your country's emissions regulations for carbon monoxide (CO), formaldehyde (CH₂O), nitrogen oxides (NOx) and noise with full integration of exhaust gas aftertreatment control into the Jenbacher DIA.NE XT4 engine control system.

A range of different sizes (1.0, 1.4 and 2.0 m in diameter), tailored for the Jenbacher products, flexible connections (radial/axial, 0-360° positioning), featuring an integrated primary silencer specifically for new plants or the space-saving box version, which is optimized for retrofitting, allow flexible adaptation to the specific plant requirements.

The Jenbacher SCR & oxidation catalyst, which generally consists of a urea supply, a urea dosing system, a catalyst system and corresponding sensors and control elements, is available in various space-saving configurations.

Catalyst chamber (SCR & oxidation catalyst)

Exhaust gas

Exhaust gas

Exhaust gas

Urea

Urea tank

Urea

The term SCR refers to a technique for nitrogen oxide reduction in exhaust gases with the addition of a reducing agent. For this purpose, a urea solution is injected into the exhaust tract and evaporated, producing the required ammonia. The ammonia reacts with the nitrogen monoxide and nitrogen dioxide contained in the exhaust gas (collective term: nitrogen oxides, or NOx for short) at the SCR catalyst honeycombs to form nitrogen and water vapor. By regulating the metered amount of urea solution, a desired NOx conversion rate or target NOx emissions can be achieved.

An oxidation catalyst is often installed downstream of the SCR catalyst. This converts carbon monoxide, formaldehyde, and unreacted ammonia without a reactant.

¹ Acc. to TA 1000 – 0300; other gas types on request

² Requires Jenbacher NOx sensors



Extensive customer benefits

Major advantage is the integrated control and reporting function, which makes it easy to prove emission compliance.

Our technology

- Reduces CO, CH₂O, NOx and noise emissions
- Offers a complete OEM solution for engine and exhaust gas aftertreatment from a single source:
 - Control and monitoring/reporting function integrated in INNIO's Jenbacher proven DIA.NE XT 4 engine control system
 - Automated emission report generation and measurement data storage (e.g. according to VDMA standard sheet 6299)
 - Remote access via INNIO's myPlant Performance Software² for continuous real-time monitoring/reporting function
- Provides high flexibility in system integration



DIA.NEXT 4: Control and monitoring of emissions, easy export as PDF

SCR & oxidation catalyst with silencer (Ø2.0 m): Integrated solution for emission and noise reduction

Step by step expansion and upgrading of existing installations possible

Our scope of supply

- Housing with or without integrated silencer
- SCR catalyst elements
- Oxidation catalyst elements
- Urea dosing equipment
- Urea injection pipe
- Monitoring $(T, \Delta p, NOx)$
- Controls (hardware and software)



SCR & oxidation catalyst Box (Ø1.0 m):
This configuration without a silencer is ideal for retrofitting and for limited space

Optional scope of supply

Container with urea tank and dosing equipment, urea tank, trace heating, pre-cooler, insulation, secondary silencer, cabling and installation etc. per your requirements.

INNIO is a leading energy solution and service provider that empowers industries and communities to make sustainable energy work today. With our product brands Jenbacher and Waukesha and our digital platform myPlant, INNIO offers innovative solutions for the power generation and compression segments that help industries and communities generate and manage energy sustainably while navigating the fast-changing landscape of traditional and green energy sources. We are individual in scope, but global in scale. With our flexible, scalable, and resilient energy solutions and services, we are enabling our customers to manage the energy transition along the energy value chain wherever they are in their transition journey.

INNIO is headquartered in Jenbach (Austria), with other primary operations in Waukesha (Wisconsin, U.S.) and Welland (Ontario, Canada). A team of more than 4,000 experts provides life-cycle support to the more than 55,000 delivered engines globally through a service network in more than 100 countries.

INNIO's ESG Risk Rating places it number one of more than 500 worldwide companies in the machinery industry assessed by Sustainalytics.

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