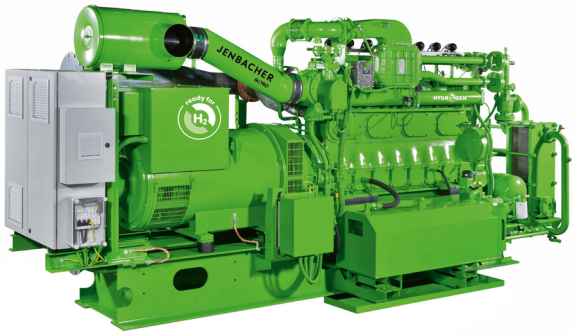
JENBACHER

JENBACHER TYPE 2

Continuous development for more than 40 years

Introduced in 1976 and continuously improved, the Jenbacher type 2 engine offers extremely high efficiency in the 250 to 350 kW power range. Its robust design and stationary engine concept result in excellent component durability and a service life of 80,000 operating hours before the first major overhaul. Enhanced components and a proven control and monitoring concept give this engine outstanding reliability.



Reference installations

J208 Abwasserverband Obere Iller, Germany

Energy source	Engine type	Electrical output	Thermal output	Commissioning
Sewage gas	1 x J208	290 kW	371 kW	2016

Every year, the Abwasserverband Obere Iller wastewater treatment plant cleans 13.7 million cubic meters of wastewater from 11 municipalities in the Oberallgäu district. Since 2016, the plant has been able to cover 65% of its power demand and 95% of its heat demand using a high-efficiency Jenbacher J208 engine.

J208 Biogas plant in Schlitters, Austria

Energy source	Engine type	Electrical output	Thermal output	Commissioning
Biogas	1 x J208	350 kW	370 kW	2015

A single J208 engine at the combined heat and power (CHP) station in Schlitters annually transforms about 12,000 tons of leftover food and biowaste into electricity and heat. The residual digested biowaste then is compressed into compost or turned into liquid manure to fertilize agricultural fields in the region.

J208 ARA Pustertal, Italy

Energy source	Engine type	Electrical output	Thermal output	Commissioning
Sewage gas	3 x J208	991 kW	669 kW	2016, 2018, 2019

ARA Pustertal's plant Tobl treats the wastewater of about 158,000 people in the Pflarenz/Tobl region of St. Lorenzen annually. In 2022, more than 2.15 million cubic meters of sewage gas was produced and used to power three Jenbacher J208 combined heat and power (CHP) units—meeting 83% of the plant's annual electricity demand. Exhaust gas heat also is put to use to dry sewage sludge at the plant.

J208 Endress+Hauser Maulburg II, Germany

Energy source	Engine type	Electrical output	Thermal output	Commissioning
Pipeline gas	1 x J208 1 x J412	1,145 kW	1,261 kW	2014 2020

In Maulburg, two Jenbacher gensets with a total of 1,145 kWel supply the Endress+Hauser SE+Co. KG plant. After the first Jenbacher genset with 845 kWel went into operation in 2014, the Jenbacher J208 genset was installed in 2020.
The Jenbacher CHP solution reliably supplies the company site with electricity and heat.

Technical data

Configuration	In line
Bore (mm)	135
Stroke (mm)	145
Displacement / cylinder (lit)	2.08
Speed (rpm)	1,500 (50 Hz) 1,800 (60 Hz)
Mean piston speed (m/s)	7.3 (1.500 1/min) 8.7 (1.800 1/min)
Scope of supply	Generator set, cogeneration system, generator set / cogeneration in container
Applicable gas types	Natural gas, flare gas, propane, biogas, landfill gas, sewage gas
Engine type **No. of cylinders** **Total displacement (lit)**	J208 8 16.6

Dimensions l x w x h (mm)	
Generator set	4,900 x 1,700 x 2,000
Cogeneration system	4,900 x 1,700 x 2,000
Container 40-foot	12,200 x 2,500 x 2,600

Weights empty (kg)	
Generator set	6,000
Cogeneration system	6,700

Outputs and efficiencies

Natural gas		**1,500 1/min | 50 Hz**					**1,800 1/min | 60 Hz**				
NO_x <	**Type**	**Pel (kW)[1]**	**Pth (kW)[2]**	**ηel (%)[1]**	**ηth (%)[2]**	**ηtot (%)**	**Pel (kW)[1]**	**Pth (kW)[2]**	**ηel (%)[1]**	**ηth (%)[2]**	**ηtot (%)**
500 mg/m^3_N	J208	300	391	39.1	50.9	90.0					
	J208	330	352	39.4	42.1	81.5	335	393	37.4	43.9	81.3
250 mg/m^3_N	J208	294	363	37.6	46.4	84.1	335	410	36.5	44.6	81.1

Biogas		**1,500 1/min | 50 Hz**					**1,800 1/min | 60 Hz**				
NO_x <	**Type**	**Pel (kW)[1]**	**Pth (kW)[2]**	**ηel (%)[1]**	**ηth (%)[2]**	**ηtot (%)**	**Pel (kW)[1]**	**Pth (kW)[2]**	**ηel (%)[1]**	**ηth (%)[2]**	**ηtot (%)**
500 mg/m^3_N	J208	330	394	39.2	46.8	86.1	335	388	36.5	42.2	78.7
	J208	249	289	39.7	46.1	85.8					
250 mg/m^3_N	J208	330	414	38.2	47.9	86.0					

[1] Technical data according to ISO 3046
[2] Total heat output with a tolerance of +/- 8%, exhaust gas outlet temperature 120°C, for biogas gas outlet temperature 180°C
All data according to full load and subject to technical development and modification.
Further engine versions available on request.

Contact us:
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In general, "Ready for H_2" Jenbacher units can be converted to operate on up to 100% hydrogen in the future. Details on the cost and timeline for a future conversion may vary and need to be clarified individually.

Jenbacher is part of the INNIO Group

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