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	989 MBTU/hr	1,266 MBTU/hr	2016
Every year the Ahwass	erverband Obere Iller wa	astewater treatment plant cl	eans 137 million cubic met	ers of wastewater from

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	1,194 MBTU/hr	1,262 MBTU/hr	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	3,381 MBTU/hr	2,283 MBTU/hr	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	3,907 MBTU/hr	4,303 MBTU/hr	2014 2020

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In Maulburg, two Jenbacher gensets with a total of 3,907 MBTU/hr electrical supply the Endress+Hauser SE+Co. KG plant. After the first Jenbacher genset with 2,883 MBTU/hr electrical output 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 (inch)	5.31
Stroke (inch)	5.71
Displacement / cylinder (cu.in)	126.4
Speed (rpm)	1,800 (60 Hz)
Mean piston speed (in/s)	343
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 (cu.in)	J208 8 1,013

Dimensions I x w x h (inch)
200 x 70 x 80
200 x 70 x 80
480 x 100 x 110
Weights empty (lbs)
12,570
14,110
41,000

Outputs and efficiencies

Natural gas 1,800 rpm 60 Hz						
NO _x <	Туре	Pel (kW) ¹	Pth (MBTU/hr)²	ηel (%)¹	ηth (%)²	ηtot (%)
1.1 g/bhp.hr	J208	335	1,342	37.4	43.9	81.4
0.6 g/bhpr	J208	335	1,398	36.5	44.6	81.0

Biogas	1,800 rpm 60 Hz					
NO _x <	Туре	Pel (kW) ¹	Pth (MBTU/hr) ²	ηel (%) ¹	ηth (%) ²	ηtot (%)
1.1 g/bhp.hr	J208	335	1,324	36.5	42.2	78.7

¹ Technical data according to ISO 3046



Contact us: jenbacher.com/en/contact jenbacher.us I JB-1 23 002-EN-US

In general, "Ready for ${\rm H_2}$ " 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.

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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.