NORTHERST - WESTERN

ENERGY SYSTEMS

Power Systems Specialists

Jenbacher type 2

Continuous development for 30 years

Introduced in 1976 and continuously improved, the Jenbacher type 2 engine offers extremely high efficiency at 335 kW. 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 Wastewater Treatment Plant; Chico, CA

Fuel	Engine type	Electrical output	Thermal output	Commissioning
Sewage gas	1 x J208	335 kW	1,399 MBTU/hr	December 2010

J208 containerized engine generator produces more than 2.7MWh of electricity per year, which offsets the plant's electricity demand. In addition, the engine's heat is used for waste processing providing additional gas production and benefiting waste management operations. This is a fuel blending unit with natural gas so that continuous energy production can be maintained despite the typically uneven production of biogas. Whenever the digester pressure falls below a set point, natural gas is seamlessly blended as necessary to maintain full engine output.



J208 GSA Building; Long Beach, CA

Fuel	Engine type	Electrical output	Thermal output	Commissioning
Natural gas	1 x J208	335 kW	1,443 MBTU/hr	July 2009

This containerized gas engine operates on natural gas to provide electricity, heat and cooling to the GSA Building in Long Beach, CA. SCR emissions control meets SCAQMD Rule 1110.2 emissions requirements.

Technical data

Configuration	In line	
Bore (inch)	5.31	
Stroke (inch)	5.71	
Displacement / cylinder (cu.in)	126.6	
Speed (rpm)	1,800 (60 Hz)	
Mean piston speed (f/s)	28.5 (1,800 rpm)	
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)	
Generator set	193 x 67 x 79
Cogeneration system	193 x 67 x 79
Container 40-foot (cogeneration)	480 x 99 x 110
Weights empty (lbs)	
Generator set	10,803
Cogeneration system	12,346

Outputs and efficiencies *

Natural gas		1,800 rpm 60 Hz				
NOx <	Туре	kW	Elec Eff	MBtu	Thermal Eff	Total Eff
1.0 g/bhp.hr	J208	335	37.2	1,388	47.1	84.3
0.5 g/bhp.hr	J208	335	35.9	1,426	45.3	81.2
Biogas 1,800 rpm 60 Hz						
NOx <	Туре	kW	Elec Eff	MBtu	Thermal Eff	Total Eff
1.0 g/bhp.hr	J208	335	36.3	1,372	44.4	80.6

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 $^{^{\}ast}$ Subject to site conditions and established tolerances. Contact us for specific detail.