NG 150 NATURAL GAS GENERATOR

Features & Benefits

- 480 volt output
- Trailer mounted
- Dual fuel capability
- Parallel capable
- Remote monitoring
- Less emissions than diesel
- Less road impact

Applications

- Drilling
- Completions
- Production
- Water disposal
- Artificial lift
- ESP's
- Backup power

The Gravity NG 150 Natural Gas Generator is a cost-effective portable power source for use in remote locations where pole power is not yet available, or as reliable back-up power.

Natural Gas Generators use produced well head gas, flare gas or liquid propane as its fuel source. Generators switch seamlessly between field gas and propane in the event of an interruption in field gas, to keep operations continuous.

As part of the Gravity service model, all equipment goes through a multi-point inspection to ensure optimal performance. We also perform regular preventive maintenance to ensure consistent performance . Generators can also be monitored remotely using the Gravity asset management tool. Remote monitoring reduces response and down time. Performance issues can be identified prior to an engine going down.

A Natural Gas Generator expert will work with the client to provide the right unit for, or units, for the particular application. 150 kVA generators can be paralleled to create redundancy and ensure adequate power is available to power the job.

NG 150 SPECIFICATIONS

Genset Ratings

Voltage L-N/L-L	Phase	Hertz	Natural Gas 105° Rise Prime Rating	
			kW/kVA	Amps
277/480	3	60	120/150	180

General Engine Data

Type	In-Line 4 Cycle
# of Cylinders	6
Aspiration	Turbo Charged Air Cooled
Displacement	8.1 (L)/ 492.0 (in.^{3})
Gross Prime Power Rating (HP)	199
RPM	1800

Weight (including trailer)

Total Weight with 3% added for Miscellaneous Items (lbs.)	12,070

0-Hour Non-Deteriorated Emmissions*

Rated Power (hp) @ 1800 RPM[1,2,&3]	236
BSCO g/hp-hr	0.13
BSTHC g/hp-hr	0.63
BSNMHC g/hp-hr[2]	0.02
BSNOx g/hp-hr	0.00
BSTHC+Nox g/hp-hr	NA
BSNMHC+Nox g/hp-hr	0.02
BSFC g/hp-hr[5]	0.19

Exhaust

Number of Outlets	1
Outlet Diameter	5"
Stack Height from Ground	9' 5"
Exhaust Flow at Rated Power (lb/hr)	1484
Exhaust Flow at Rated Power at @1350°F (cfm)	1129

Sound Attenuation

Overall Average Sound Pressure(dB(a)) Level @ 23-ft.	69.0

NG Fuel Consumption (MCF per day)

100% Load MCF/day	38.88
75% Load MCF/day	30.12
50% Load MCF/day	21.72
25% Load MCF/day	12.84

Liquid Propane Fuel Consumption (gallon per day)

100% Load gal/day	350.28
75% Load gal/day	265.55
50% Load gal/day	190.82
25% Load gal/day	120.21

Fuel Connection Points

NG Inlet	2" NPT
LP Inlet	½" NPT
Scrubber Outlet	½" NPT

- Heavy-duty 4-cycle industrial gas engine
- Lube service points built into skid limiting spill risk
- Gravity engineered transducer measures customer supplied gas pressure
- Sound attenuated
- Updraft radiator and engine exhaust
- Dual fuel capability allows the unit to run off of well head gas or liquid propane
- Trailer-mounted for cost-efficient delivery and pick up for swap out
- Fuel scrubber device separates the free liquid and debris that may be in the fuel system
- 115% containment base
- Equipped with the Gravity asset management tool for remote monitoring of performance and location, combines cell and satellite communication eliminating blackouts

NOTE: *Emissions shown are certified third-party zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40 CFR Part 1048 & Part 60
1. Rated power is based on ISO3046 and/or ISO 8528.
2. All ratings are gross flywheel horsepower connected to 77°F at an altitude of 328 feet with no cooling fan or alternator losses using heating value for NG of 1015 BTU/SCF.
3. Production tolerances in engines and installed components can account for power variations of +/- 5%. Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations.
4. For NG, NMHC is reported in place of VOC for this report.
5. BSFC is based on 100% gross flywheel power rating and does not include fan or generator losses.