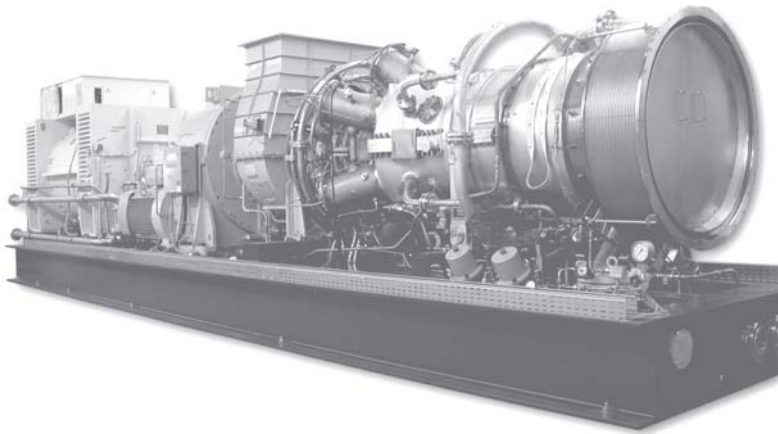


GPB70D Gas Turbine

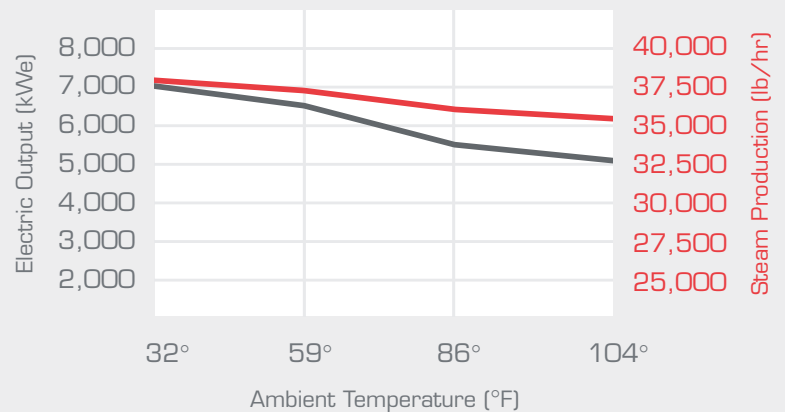


- // PROVEN INDUSTRIAL DESIGN
- // HIGH EFFICIENCY
- // IMPROVED RAM
- // DRY LOW EMISSIONS
- // PROVEN RELIABILITY
- // LOW MAINTENANCE

A CLOSER LOOK

- // Ideal for installation in hospitals, universities, institutions, district heating and cooling, pharmaceutical, and other facilities with significant thermal and electrical loads
- // Offers electrical efficiency of 30% and an overall efficiency of 80%
- // Excellent overall heat rate
- // Design assures better RAM (reliability, availability, maintainability) and greater durability with 30,000HRS TBO (Time Between Overhauls)
- // NOx emissions of 25 ppmv and CO emissions of 50 ppmv (O₂=15%)
- // Split case design allows for ease of inspection and maintenance on site, minimizing costly downtime
- // Cold end drive optimized for cogeneration applications
- // Dual fuel capability allows flexibility for installations where natural gas is not available
- // Includes multi-fuel capabilities
- // Exhaust gas temperature of 961° F for optimum heat recovery

GPB70D Performance



(**K**W)

GPB70D

CHP								Gas Turbine			
Amb. Temp	Electric Output	Fuel Consumption	Steam Production*		Electrical Efficiency	Recovery Efficiency	Overall Efficiency	Gas Flow	Air Flow	Exhaust Flow	Exhaust Temp
°F	kWe	MMBtu/hr	lb/hr	MMBtu/hr	%	%	%	scfh	lb/s	lb/s	°F
32	7,070	80.5	37,900	37.9	30.0	47.0	77.0	88,994	60.81	61.13	952
59	6,530	74.9	37,100	37.1	29.8	49.5	79.3	82,731	58.42	58.70	961
86	5,670	67.9	35,900	35.9	28.5	52.9	81.4	74,998	54.81	55.03	981
104	5,040	63.2	35,200	35.2	27.2	55.8	83.0	69,792	52.17	52.36	999

Fuel: Gas (905 BTU/scf), NOx Reduction: Dry Low Emission, NOx: 25 ppm, CO: 50 ppm, VOC: 2.0 ppm

Note:

4/14" intake/exhaust pressure loss

DLE is available from 50–100% load

Sea level

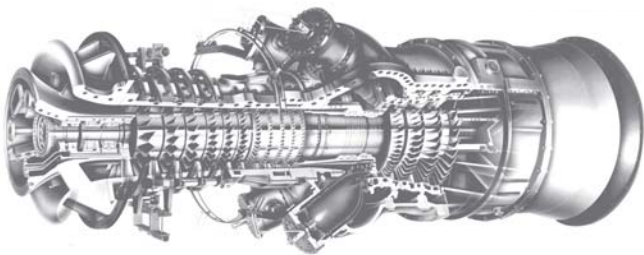
Generator efficiency: 97%

Required gas pressure: 300 psig

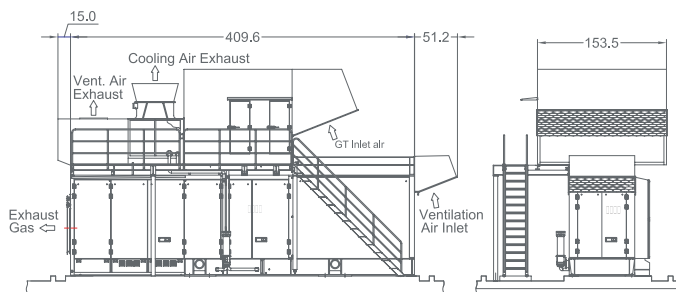
* Contact Kawasaki Application Engineering for site-specific performance

* Not for guarantee

TYPICAL PLANT LAYOUT



Engine Configuration



Generator Set Package

STANDARD EQUIPMENT

- // M7A-02 single-shaft gas turbine engine with eleven compressor stages and four-stage air-cooled turbine – cold end drive
- // Dry low emissions system
- // Reduction gearbox with main lube oil pump and turning motor
- // VFD starting system
- // Indoor enclosure, sound attenuated to 85 dBA, with lighting, ventilation, chain block, and rail for maintenance
- // 4160 V generator
- // Heavy-duty steel base-frame, primed and painted
- // Lube oil tank integrated into the base-frame with oil heater, lube oil filter, and lube oil cooler
- // Fuel gas system
- // Fire and gas detection and suppression systems
- // State-of-the-art PLC control
- // Exhaust gas flexible joint

FOR MORE INFORMATION:

Kawasaki Gas Turbines–Americas
 8829 North Sam Houston Parkway West
 Houston, Tx 77064
 P 281 970 3255
 F 281 970 6465
www.kawasakigasturbines.com