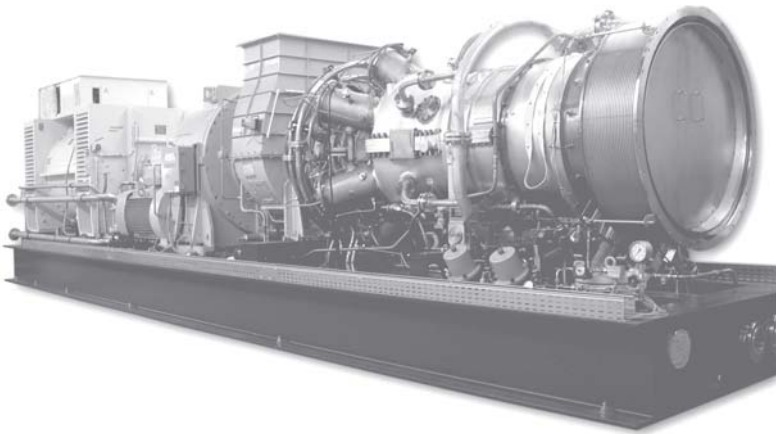


# GPB70D Gas Turbine



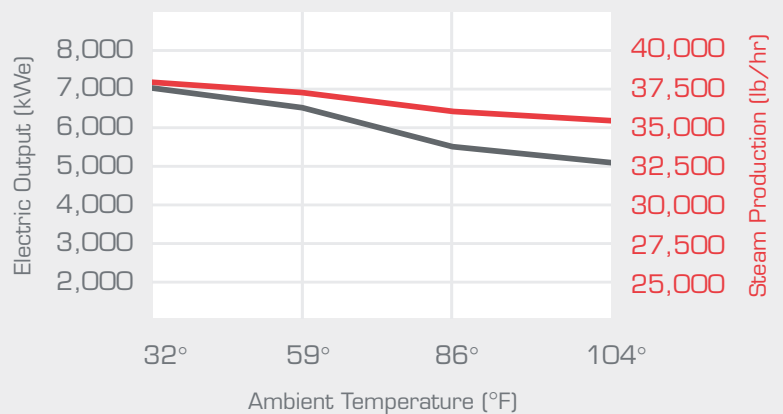
- // HIGH EFFICIENCY
- // DRY LOW EMISSIONS
- // PROVEN RELIABILITY
- // LOW MAINTENANCE

## 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 in its class
- // NO<sub>x</sub> emissions of 25 ppmv and CO emissions of 50 ppmv (O<sub>2</sub>=15%)
- // Split case design allows for ease of inspection and maintenance, minimizing costly downtime
- // System design optimized for cogen applications
- // Dual fuel capability allows flexibility for installations where natural gas is not available
- // Includes multi-fuel capabilities

(KW)

### GPB70D Performance



# 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

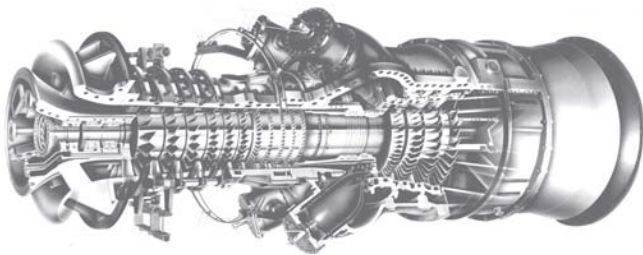
Generator efficiency: 97%

Required gas pressure: 300 psig

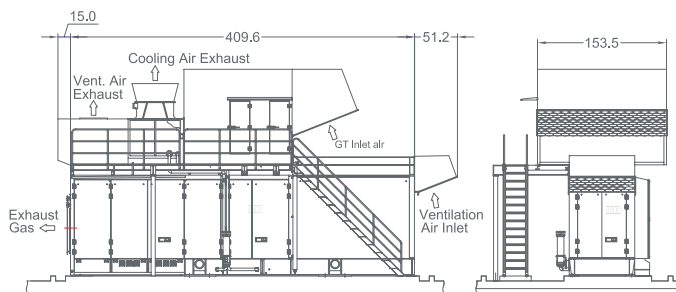
\* Contact Kawasaki Application Engineering for site-specific performance

\* 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:

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