

Data Sheet

Machine: Gas Turbine

Manufacturer: Nuovo Pignone (GE)

Model: MS9001E

PG 9171E

Serial number:

Year: 2001

GT Type: Frame 9

stages axial compressor: 17

Combustion chambers: 14

System Nox reduction: DLN 1.0

Stages turbine: 3

Stage 1 and 2 (buckets and nozzles) with cooling

Single shaft Velocity: 3000 rpm

Bearings: elliptic journal (#1 and #2) tilting pad (#3)

Fuel: Natural gas

with Compressor Inlet conditions:

Temperature: 15°C

Rel Humidity: 60%

Pressure: 1.013 bar

Emissions at 93 MW (average)

Nox: 23 mg/Nm³

CO: 20 mg/Nm³

Design Output: 123400 kW

Design heat rate (LHV): 10660 kJ/kWh

Design heat cons (LHV): 1325.4 kJ/h

Design exhaust flow: 1477 kg/h

exhaust temperature: 515°C

Efficiency: 30%

Materials

Casing: cast iron

Rotor: steel Cr-Mo-V

Compressor blades: AISI 403 (with Ni-Cd stages 1-8)

first stage nozzles: FSX 414

second and third stage nozzles: GTD 222

first stage buckets: GTD 111 with Plasmaguard GT29 plus

second stage buckets: GTD 111

third stage buckets: IN 738

Exhaust diffuser: AISI 304

Operating hours: 70000

Last major overhaul: 2009