

GE Frame 6FA Complete Gas Turbine Package

No.	Equipment Details	
GAS TURBINE		
1	Gas Turbine OEM	GE
2	Type	Simple open cycle 1 axle gas turbine
3	Model	6FA
4	Year of operation start	Sep, 2011
5	Operation hour	1,000h
6	Number of start & stop	140 times
7	Operation situation	Peaking
8	Number of no-load operation	-
9	Fuel	Town gas
10	Inspection cycle	Major inspection: Unexecuted. Daily inspection only.
11	Most recent inspection	Daily inspection only
12	Sales features	Power generation equipment set (Electricity control parts included.)
13	Spare parts	N/A
14	Current condition	Being stored
15	Remodelling / Modification	Stock
16	Generating power	81MW
17	Manufacturer	HITACHI
18	Thermal efficiency	35.40%
19	Combustion temperature	1,300°C
20	How to activate	Thyristor starting
21	NO x measure	Latest premixed combustion equipment

22	Entrance pressure	1.47Mpa
23	Exit pressure	1.25kPa
24	Entrance temperature	1431°C
25	Exit temperature	589°C
26	Design of outside temperature	5°C
27	Rotation speed	5,231 min ⁻¹
28	Critical speed of a driven machine 1st	1,768 min ⁻¹
29	Critical speed of a driven machine 2nd	3,996 min ⁻¹
30	Critical speed of a driven machine 3rd	6,294 min ⁻¹
31	Amount of exhaust gas	650,000m ³ N/h
32	Amount of smoke & soot (Sulfur oxides)	0m ³ N/h
33	Smoke concentration (Nitrogen oxide)	50ppm
34	Smoke concentration (dust)	0.00 g/m ³ N

AIR COMPRESSOR

1	Type	Axial flow compressor
2	Entrance pressure	-0.65kPa
3	Exit pressure	1.47MPa
4	Entrance temperature	5°C
5	Exit temperature	383°C
6	Rotation speed	5231min ⁻¹

Chimney

1	Type	Single cylinder
2	Gas speed at exit	48.5m/sec
3	Gas temperature at exit	589°C
4	Diameter	3.86m

5	Height	40m
6	Effective height	346m
7	Quantity	1
Burner		
1	Type	Pressure injection type
2	Capacity	$3.5 \times 10^3 \text{ m}^3\text{N/h/Unit}$
3	Quantity	6
Type of gas and etc.		
1	Type	Natural gas
2	Calorific value	$40,530 \text{ kJ/m}^3\text{N}$
3	Sulfur content	0.0%
4	Nitrogen content	Below 0.0%
5	Ash content	0.0%



