

Introduction to second-hand 9E.03 gas turbine

二手 9E.03 燃机介绍

1. 9E.03 Gas turbine market / 9E.03 燃机的背景

9E.03 is a very mature heavy gas turbine of GE, with about 90 sets in Chinese Mainland and about 1000 in the world;

9E.03 是 GE 公司非常成熟的一款重型燃气轮机，在中国大陆境内约有 90 台，全球约 1000 台；

2. Main performance data of new 9E.03 unit (ISO) /9E.03 新机主要性能数据 (ISO)

单循环出力	SC Net Output	MW	129
单循环热耗率	SC Net Heat Rate	kJ/kWh, LHV	10,403
单循环效率	SC Net Efficiency	%, LHV	34.6%
联合循环出力	CC Net Output	MW	200
联合循环热耗率	CC Net Heat Rate	kJ/kWh, LHV	6,751
联合循环效率	CC Net Efficiency	%, LHV	53.3%
电厂最小负荷率	Plant Turndown-Minimum Load	%	30.0%
加载率	Ramp Rate	MW/min	50
启动时间	Startup Time	RR Hot, Minutes	38

3. 9E.03 Typical power plant layout /9E.03 燃机典型电厂布置



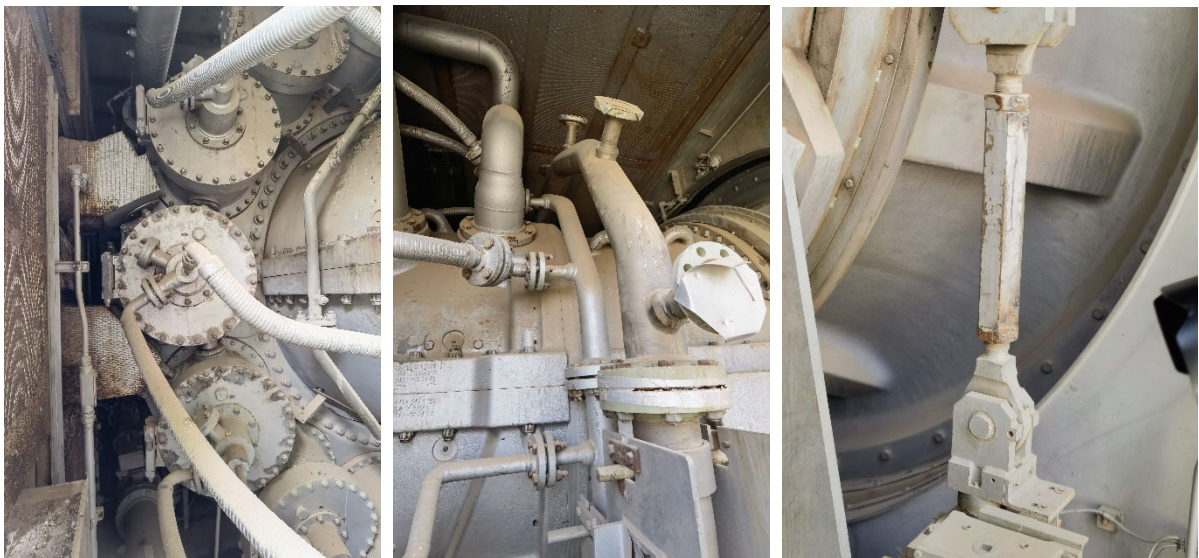
4. Basic information of second-hand 9E unit/二手 9E 燃机的基本信息

- Model: PG9171E;
- Manufacturer: GE-EPE
- Year of manufacture: 1997
- Nameplate output: 123MW (ISO)
- Generator outgoing voltage: 10.5KV, 50Hz
- Total ignition hours: 28200 hrs.
- Fuel: natural gas + light diesel dual-fuel unit
- Combustion chamber type: standard combustion chamber (non DLN)
- Power station type: single cycle, outdoor layout
- Unit status: the equipment operates well
- Production stop time: 2012,
- Location: Chinese Mainland
- Equipment status: all equipment is on the stand
- 机型:PG9171E;
- 制造商: GE-EPE
- 制造年份: 1997
- 铭牌出力: 123MW
- 发电机出线电压: 10.5KV, 50Hz
- 总的点火小时数: 28200 hrs.
- 燃料: 天然气+轻柴油双燃料机组
- 燃烧室类型: 标准燃烧室 (非 DLN)
- 电站类型: 单循环, 室外布置
- 机组状态: 设备运行良好
- 停产时间: 2012 年,
- 位置: 中国大陆
- 设备状态: 全部设备在机位上

5. Pictures of second-hand 9E power plant/二手 9E 电厂的图片



Panorama of power plant/电站全景图片



Flange to flange skid for 9E/ 法兰到法兰模块



Auxiliary system of 9E/9E 的辅机系统



Liquid fuel system and lubricating oil system



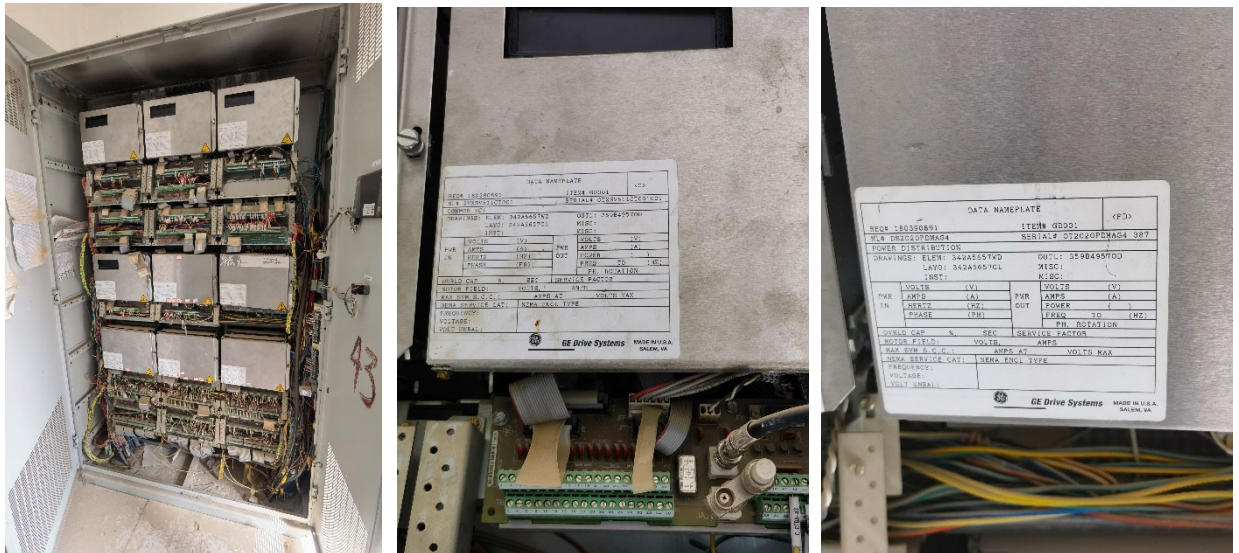
Exhaust system



Generator and exciter



Bearing pedestal and jacking oil system of generator



Gas turbine control system TSI (MARK V)



Electrical control cabinets



Transformer protection system, generator protection system, generator control system, DV power supply



Power station transformer system and fuel oil system