

THE GAS TURBINE: GT26

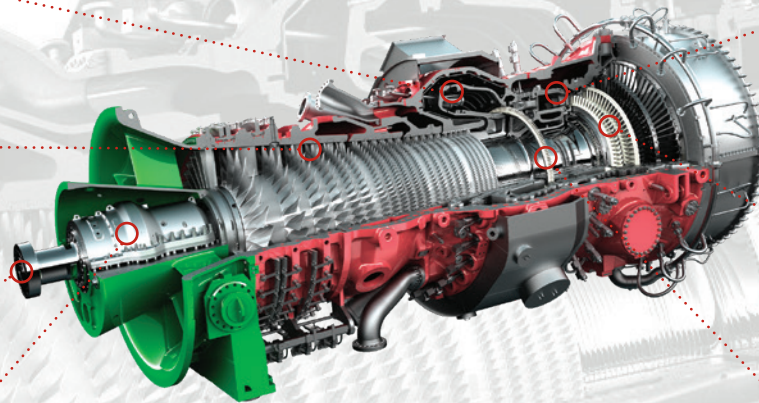
The best value

EnVironmental (EV) annular combustor with 24 burners

22 stages axial compressor with 4 variable guide vanes

Cold-end generator driven

Solid welded rotor



Sequential EnVironmental (SEV) annular combustor with 24 burners

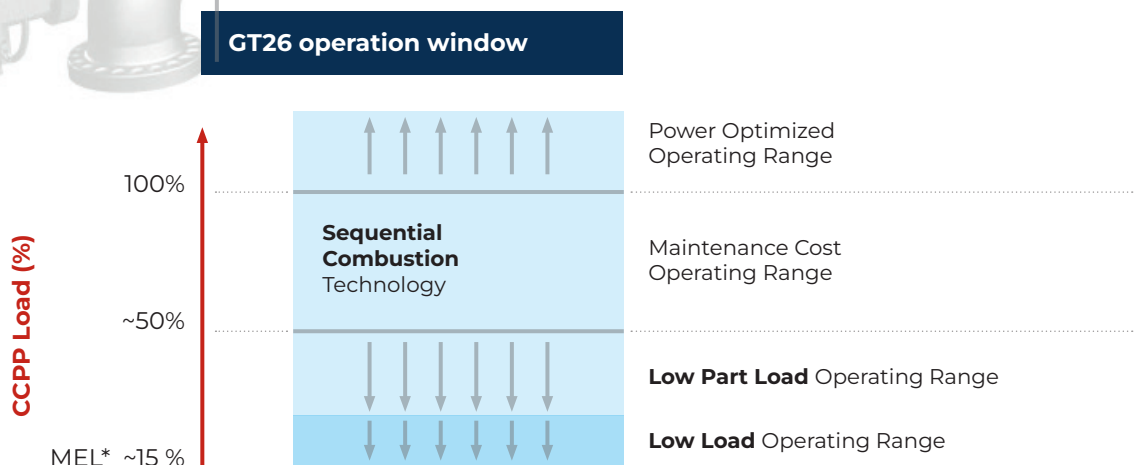
4 stages, air cooled low pressure turbine

1 stage air cooled high pressure turbine

Efficient, flexible and fast

Best all-round plant efficiency over the entire load range with 540 MW at 61% efficiency in combined-cycle operation.

The unique sequential combustion feature enables Customers to maintain lower emissions over a wider emission compliant operation window down to 15% plant load. Superior turndown capability allows parking at 15% combined-cycle load during periods of lower power demand with all components fully online, offering an unmatched operation flexibility for maximum dispatch in today's dynamic power markets.



* **MEL:** Minimum Environmental Load subject to allowed emission limits

Environmentally sustainable

NOx level down to 15 ppm in dry gas mode.

High Hydrogen Capability

Due to the high burning velocity and high flame temperature, standard gas turbine combustion technology struggles at high hydrogen content with high NOx emissions and the risk of flashback. This usually results in the need to derate power in order to comply with required standards. Based on two successive combustion stages, the GT26 recovers the derating of the first stage by shifting the fuel into the second stage. This allows for full operational flexibility, low NOx and no derating.

The GT26 engine represents a future-proof investment, keeping its high efficiency at high hydrogen contents. Currently 45% hydrogen in natural gas blends are released for operation, providing best-in-class hydrogen capability.

Smart maintenance approach

Ability to switch online between two operational modes – Performance Optimized for higher power output or Maintenance Cost Optimized for up to 30% more operation time between scheduled inspections.

Long maintenance intervals with 32,000 hours for hot gas path inspections. Ansaldo Energia offers a full and flexible range of service solutions, from Transactional Services through to Operation & Maintenance contracts. Customized service agreements allow customers to choose the best solution to fit their needs.

Natural gas ISO conditions	GT26 Performance	Power Plant Configuration	1+1	2+1
Power output (*) (MW)	370	CC Net Output (MW)	540	1,083
Efficiency (*) (%)	41	CC Net Efficiency (%)	61	61.2
Exhaust Mass Flow (kg/s)	741	CC Net Heat Rate (kJ/kWh)	5,900	5,882
Exhaust Temperature (°C)	635	Plant Turndown	15	8
		Minimum load (%)		

(*) including OTC contribution

General note: Performance data are calculated with 100% methane (LVV) at ISO conditions, direct cooling.

MEL: Minimum Environmental Load (depending on allowed emission limits)

References:

110 units

total > 9 million EOH (*)

(*) Estimated



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