

## Operation excellence based on well proven technology

Built on the evolution of several generations of proven technology and the GT26 excellence, the GT36 gas turbine offers high efficiency at full and part load, low emissions, a high turn-down capability and high fuel flexibility. Entering in the very large class, the GT36 has been designed to serve evolving customer needs by reducing cost of electricity and CO<sub>2</sub> emissions, increasing operational flexibility and offering outstanding serviceability.

## Simple to operate and maintain

The GT36 has been designed for easy constructability, operation and maintenance with a specific attention to increased inspection intervals and reduced outage time and duration.

Ansaldo Energia offers a full and flexible range of service solutions, from Transactional Services to Operation & Maintenance contracts.

Customized service agreements allow customers to choose the best solution to fit their needs.

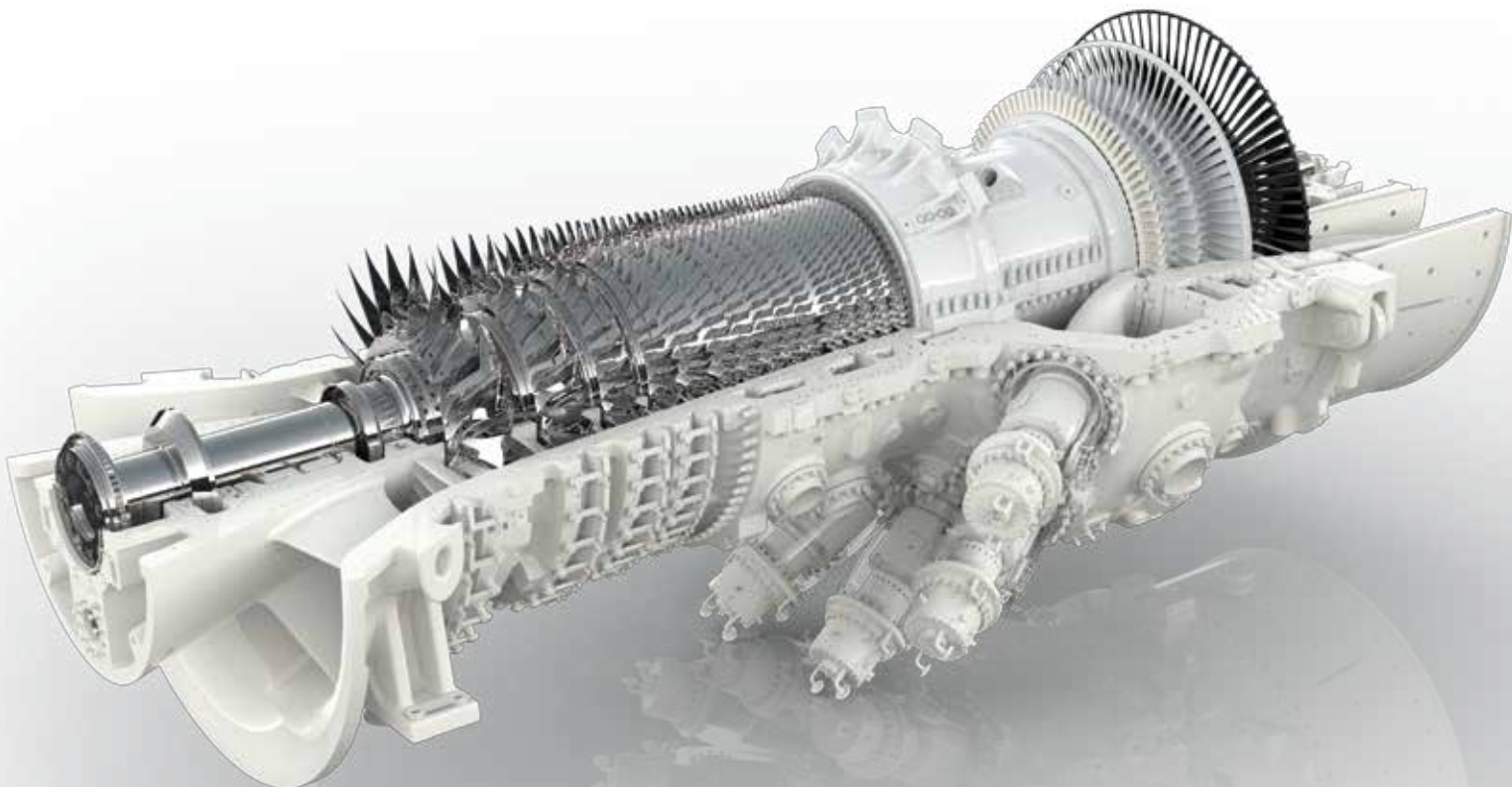
## Balancing performance with cost

In addition to its large load range, the GT36 gas turbine can switch between two operational modes: Performance Optimized Mode and XL (eXtended Lifetime) Operation Mode.

The first produces maximum performance and output, while the second allows for longer service intervals reducing the maintenance cost. Gas power plant operators can switch between the two operation modes online during operation.

By either optimizing power and efficiency or improving availability and lowering maintenance costs, the choice of mode offers power providers an unmatched opportunity to balance power needs with cost savings.

The efficiency, low emissions and versatility of the GT36 helps power plant operators to meet today's increasing need for flexible and environmentally friendly gas power solutions.



## GT36-S5 Performance

Natural gas ISO conditions		
Power Output (*)	MW	538
Frequency	Hz	50
Efficiency (*)	%	42.8
Exhaust Mass Flow	kg/s	1,020
Exhaust Temperature	°C	621
NOx Emissions	mg/Nm <sup>3</sup>	≤ 50/30
CO Emissions	mg/Nm <sup>3</sup>	≤ 10

(\*) including OTC contribution

Power Plant Configuration		1+1	2+1
CC Net Output	MW	760	1,525
CC Net Efficiency	%	62.6	62.8
CC Net Heat Rate	kJ/kWh	5,751	5,732
Plant Turndown MEL	%	30	15
Low Load Operation	%	10-15	5-8

## GT36-S6 Performance

Natural gas ISO conditions		
Power Output (*)	MW	369
Frequency	Hz	60
Efficiency (*)	%	42.3
Exhaust Mass Flow	kg/s	710
Exhaust Temperature	°C	630
NOx Emissions	mg/Nm <sup>3</sup>	≤ 50/30
CO Emissions	mg/Nm <sup>3</sup>	≤ 10

(\*) including OTC contribution

Power Plant Configuration		1+1	2+1
CC Net Output	MW	520	1,046
CC Net Efficiency	%	62.3	62.6
CC Net Heat Rate	kJ/kWh	5,778	5,751
Plant Turndown MEL	%	30	15
Low Load Operation	%	10-15	5-8

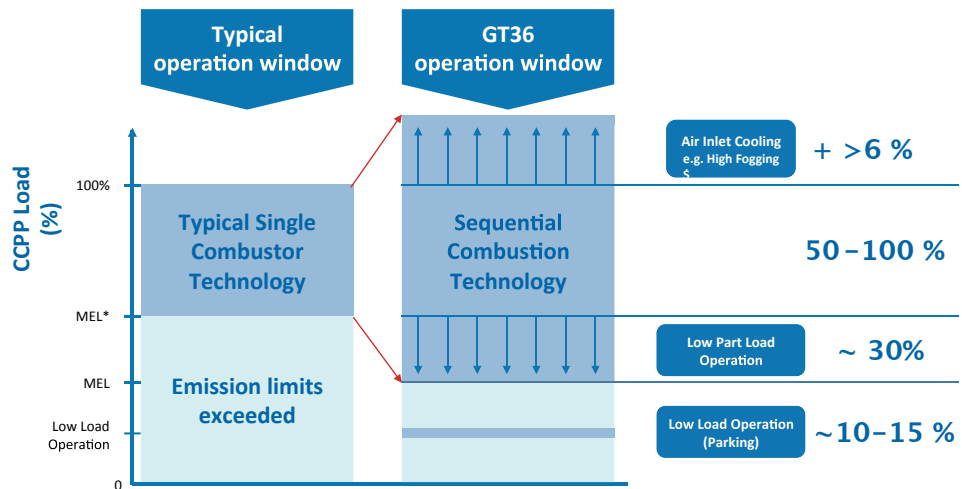
**General note:** Performance data are calculated with 100% methane (LHV) at ISO conditions, direct cooling.  
**MEL:** Minimum Environmental Load (depending on allowed emission limits)

## Operational flexibility

The GT36 offers an unmatched operation flexibility in its class: its unique sequential combustion technology allows a high turndown. This enlarges the emission-compliant operation window compared to other combustor technologies and consequently the options for the power plant operator - thus offering a clear advantage in today's and future power generation markets.

The GT36 flexibility features include:

- Fast start and fast ramp
- High part load efficiency
- High turndown with low fuel consumption, providing high reserve power
- High fuel flexibility
- Performance Optimized and eXtended Lifetime Operation Mode



\* MEL = Minimum Environmental Load subject to allowed emission limits

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