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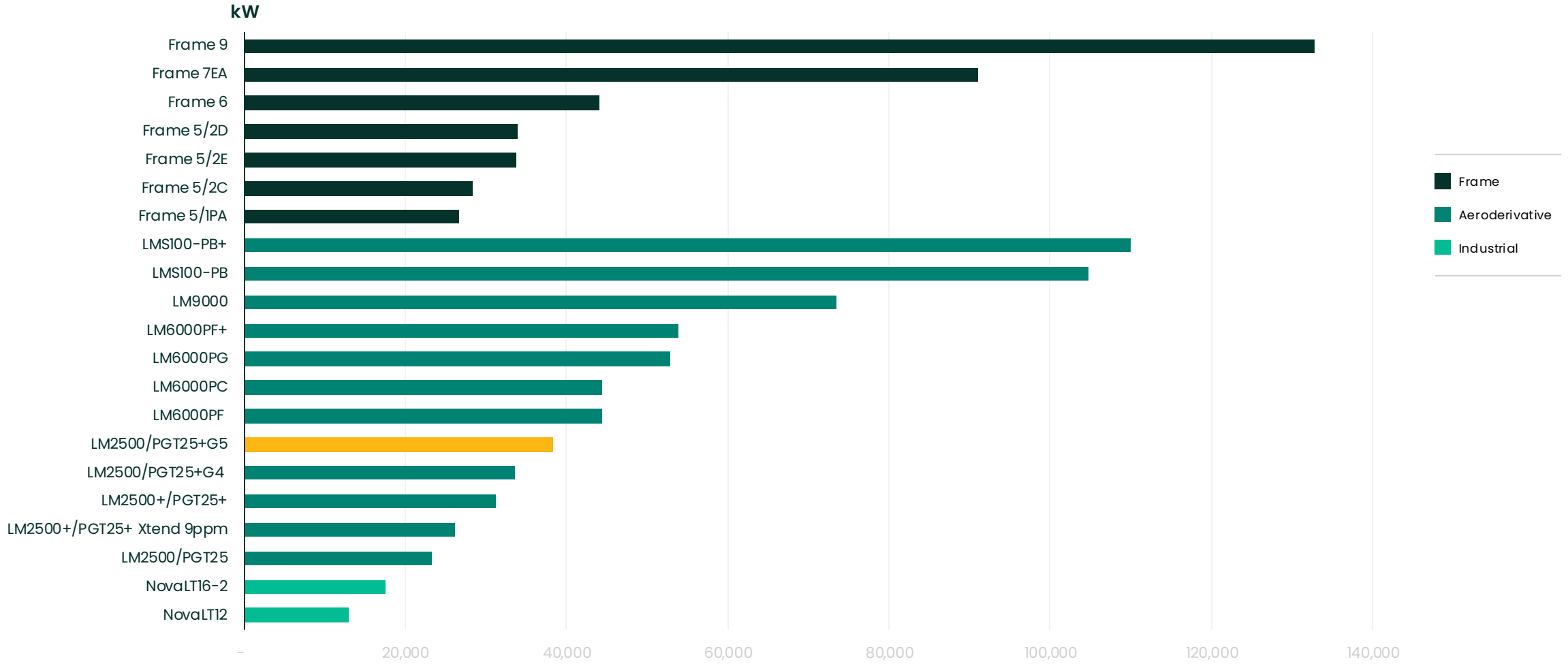
PGT25+G5/LM2500+G5

Highest efficiency and power in the 20–40 MW class, with high-speed and low-speed power turbine options

Industry leader in gas turbine technology



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PGT25+G5/LM2500+G5

Highest efficiency and power in the 20–40 MW class, with high-speed and low-speed power turbine options

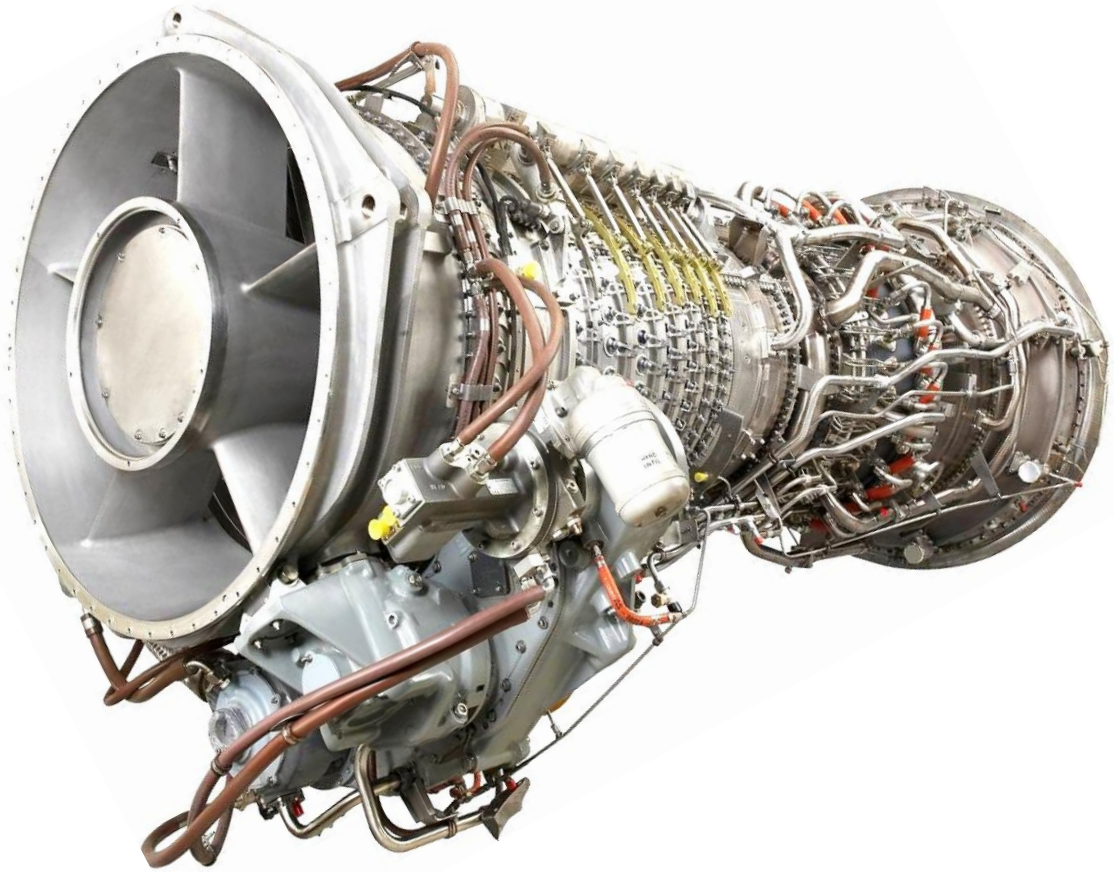
G5 is the latest technology generation of our PGT25/LM2500 aeroderivative gas turbine family that includes over 2,500 engine. with over 100 million combined operating hours in applications around the world.

It's available in two optimized options:

- Max power: 38.3 MW and 41% efficiency
- Xtend: low-emissions (best-in-class NOx emissions <15 ppm) with extended maintenance (up to 36,000-hour inspection interval and 72,000-hour overhaul)

Key design features

- High-pressure compressor inherited from G4 with redesign for enhanced durability
- Combustor leverages latest DLE technologies and capabilities from the LM6000
- Gas generator leverages GE Aviation technologies; high-speed power turbine includes aerodynamic and thermal modifications



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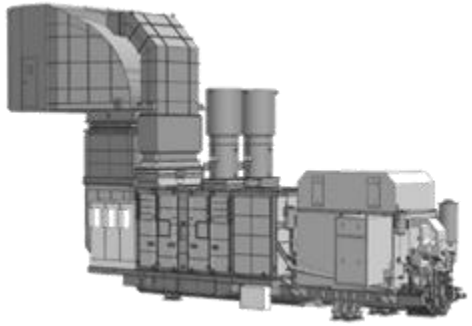
Package

Simplified and flexible solution

- Designed for wide-ranging ambient conditions
- Fully integrated solutions: single-lift GTG/MLO system on CC skid
- Maximized on-board GT auxiliaries
- Compact BoP solution
- Pre-assembled unit (PAU) available as an option

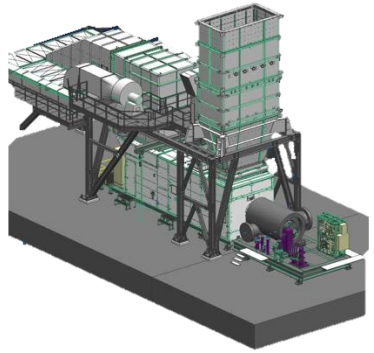
Optimized transportation and shipping

- Boxes and packing optimization, main items modularized, reduced loose items
- Easier transportation: total weight and footprint reduced
- Designed for installation: maximized on-skid auxiliaries for plug-and-play experience



Standard offshore power generation

- Footprint: 16 x 3.4 m
- Weight: 135 tons
- High power density: up to 3 or 4 units in a single module



Standard pipeline GTC

- Footprint: 18.9 x 4.2 m
- Weight: 225 tons (PCL600), 249 tons (PCL800)
- Alternative packages solutions available

Applications

- Onshore and offshore
- LNG, pipeline, gas processing
- Power generation: 50/60 Hz with no need of a gearbox

Key design features

- Plug and play: only 4 skids to ship for offshore GTG, 6 skids to ship for pipeline GTC
- Fast Installation and commissioning: package can be shipped including engine, flushed and with loop-check complete
- Quick to first oil: target 12 months delivery time
- Extended maintenance intervals: 10-30-60k hours
- Fast engine swap: 48 hours, digital connected for AM&D

Datasheet

LM2500+G5
PGT25+G5

Two optimized options available:

Max power: 38.3 MW and 41% efficiency

Xtend: low-emissions (best-in-class NOx emissions as low as 15 to 25 ppm) with extended maintenance (up to 36,000-hour inspection interval and 72,000-hour overhaul)

Xtend 15 ppm

Power generation—LM2500+G5 50 Hz

Power	MWe	32.9
Efficency	%	39.4
Nox	ppm	15
Exhaust	°C	535
Speed	rpm	1,500 to 3,150

Mechanical drive—PGT25+G5

Power	MW	34
Efficency	%	40
Nox	ppm	15
Exhaust	°C	512
Speed	rpm	3,050 to 6,450

Main inspections

Hot gas path	hours	36,000
Major insp.	hours	72,000

Max power

Power generation—LM2500+G5 50 Hz

Power	MWe	36.8
Efficency	%	40
Nox	ppm	25
Exhaust	°C	560
Speed	rpm	1,500 to 3,150

Mechanical drive—PGT25+G5

Power	MW	38.3
Efficency	%	41
Nox	ppm	25
Exhaust	°C	540
Speed	rpm	3,050 to 6,450

Main inspections

Hot gas path	hours	25,000
Major insp.	hours	50,000

Other capabilities highlights

- Single annular combustor technology
- MWI fuel flexibility: 25-63 BTU/scf r^0.5
- Up to 5% vol H_2

Package—power generation

Footprint	m	16 x 3.4 (LxW)

Package—mechanical drive

Footprint	m	18.9 x 4.2 (LxW)

ISO conditions with natural gas fuel, ambient temperature 15°C, no inlet or exhaust losses, sea level, 60% relative humidity. Maintenance intervals adjustable on conditions.

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Product line overview

Other LM2500/PGT25 family solutions

		+G4	Plus	Base
Power generation		**LM2500+G4 50 Hz**	**LM2500+ 50 Hz**	**LM2500 base 50 Hz**
Power	MWe	32.5	30.5	22.6
Efficency	%	37	37.3	35
Nox	ppm	25	15	15
Exhaust	°C	543	528	540
Speed	rpm	1,500 to 3,150	1,500 to 3,150	1,500 to 3,150
Mechanical drive		**PGT25+G4**	**PGT25+**	**PGT25 base**
Power	MWe	33.7	31.1	23.3
Efficency	%	40.5	40.5	36.1
Nox	ppm	25	15	15
Exhaust	°C	510	500	530
Speed	rpm	3,050 to 6,405	3,050 to 6,405	3,050 to 6,405
Main inspections				
Hot gas path	hours	25,000	25,000	25,000
Major insp.	hours	50,000	50,000	50,000

Two-shaft turbines with well-known technology for high efficiency, reliability, availability, and low environmental impact

Other capabilities highlights

- Single annular combustor technology
- Available with both SAC and DLE combustors
- Maximized fuel flexibility: can operate on a wide range of liquid and gas fuels
- Up to 75% vol H_2 in SAC configuration
- Up to 5% vol H_2 in DLE configuration
- Modular exchange philosophy and easy maintenance deliver best-in-class availability and reliability

ISO conditions with natural gas fuel, ambient temperature 15°C, no inlet or exhaust losses, sea level, 60% relative humidity. Maintenance intervals adjustable on conditions.

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