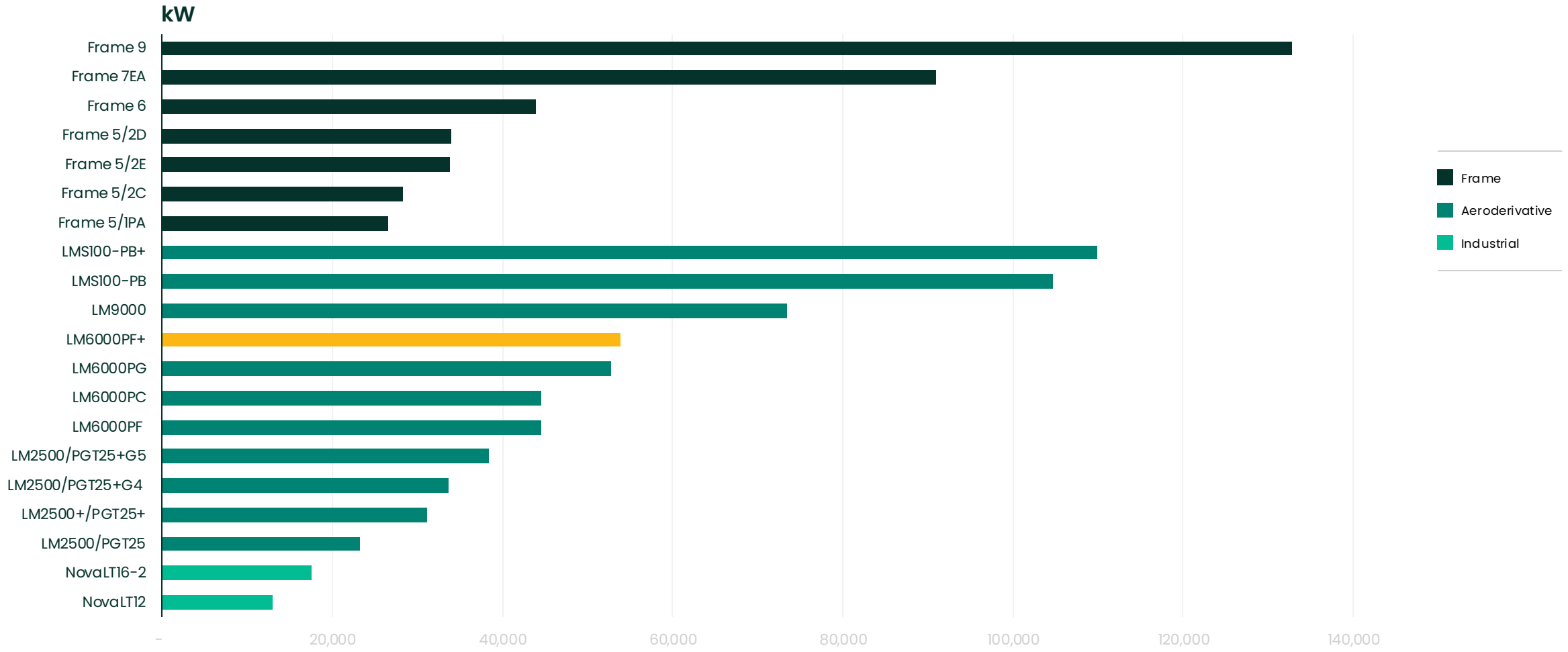
LM6000PF+ aeroderivative gas turbine

30-year heritage of success

Industry leader in gas turbine technology



Baker Hughes

LM6000PF+

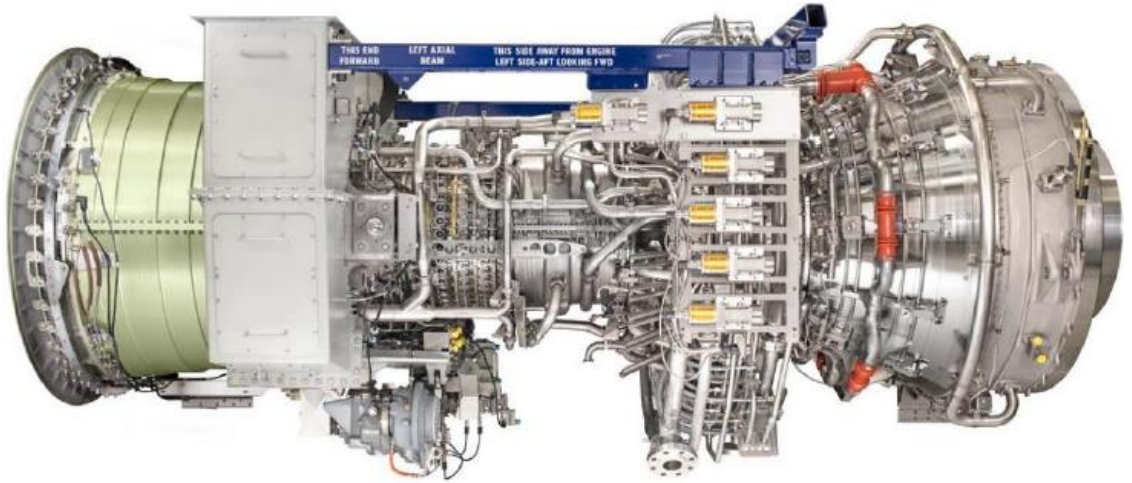
High performance, flexibility and best cost per kW in its power class

With a long, successful history, the LM6000PF+ aeroderivative gas turbine combines our latest innovations with the best proven technologies and operating experience from more than 5,000 aircraft engines with over 450 million flight hours, and over 1,400 LM6000 units with 55+ million operating hours in the last 30 years.

With 53.8 MW shaft power and over 42% simple-cycle efficiency, this turbine can quickly ramp up and down to match demanding operating requirements.

Key features

- Double co-axial shafts for loaded startup capability
- Compressor has 5 low-pressure and 14 high-pressure stages for outstanding efficiency, and adjustable vanes for best operating flexibility
- Well-proven dry low emissions (DLE 1.5) combustion system
- 2-stage high-pressure turbine and 5-stage low-pressure turbine with optimized airfoils for high efficiency and reduced CO_2 emissions

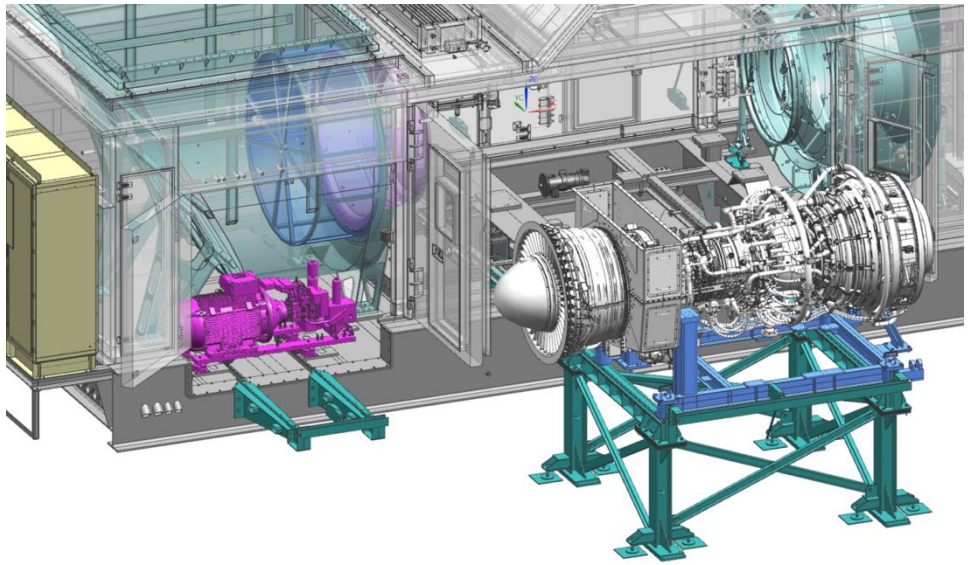


Courtesy of GE

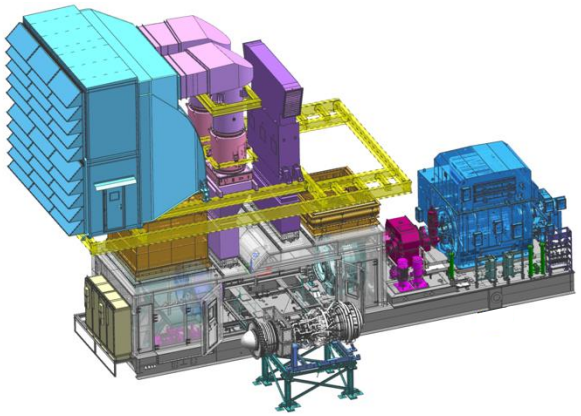
Package

Onshore and offshore solutions

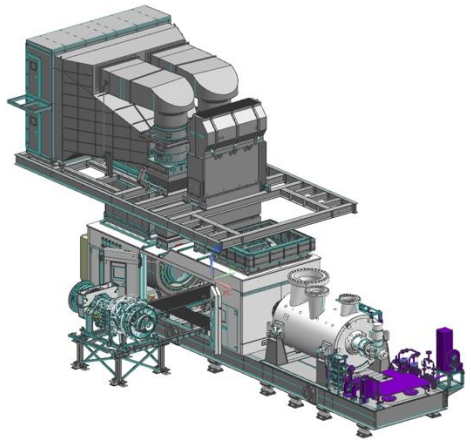
- Optimized slide-off turbine design with mini-skid concept for a quick engine swap to maximize availability
- Integrated starting skid inside GTBox
- Multipoint AVM for lightweight single-lift design and uniformly distributed load
- Available with Remote I/O panel
- On Shore applications available with Aerosol fire-protection system to minimize footprint and weight by eliminating interconnecting piping and cables



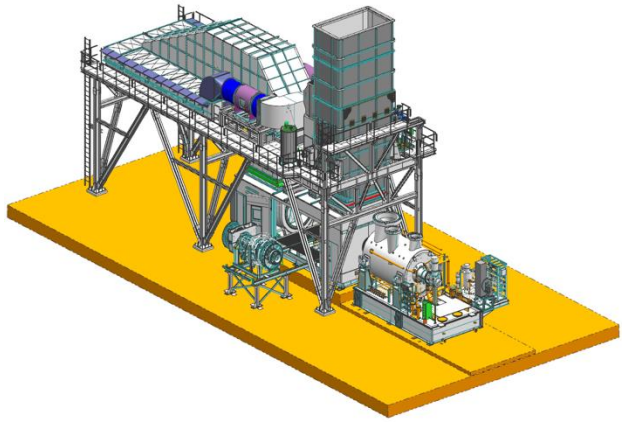
Mini-skid for engine swap



Offshore single-lift power generation



Offshore single lift mechanical drive



Onshore mechanical drive

LM6000 PF+ datasheet

Mechanical drive

Power	MW	53.8
Efficiency	%	42
NOx	ppm	25
Exhaust	°C	498
Speed	rpm	3,930

Power generation

Power	MWe	52.5
Efficiency	%	41
NOx	ppm	25
Exhaust	°C	496
Speed	rpm	3,930

Single-lift power generation package

LxWxH	m	20x5
Weight	ton	280

Gas turbine package

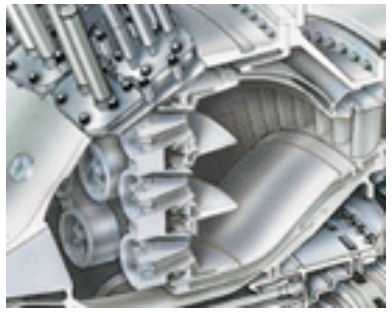
LxWxH	m	12x4.8
Weight	ton	160

Main inspections

HGP	hr	25,000
Major insp.	hr	50,000

Capability highlights

- Ideal for LNG mechanical drive application thanks to start-up capability with pressurized LNG compressor, without helper motor assistance
- Reduced CO_2 emissions thanks to the high simple-cycle efficiency
- Dry low emission (DLE 1.5) technology fore less than 25 ppm NOx emissions at 75% to 100% load
- 40 to 60 MWI fuel flexibility with more than 10%/min rate of change
- Experienced burning 9% vol H_2



DLE technology

Image courtesy of GE

Performances @ ISO conditions with natural gas fuel, ambient temperature 15°C, no inlet or exhaust losses, sea level, 60% relative humidity. Mechanical package dimensions driven equipment excluded.

Baker Hughes

Projects

LNG mechanical drive

Australia onshore, USA Floating LNG and onshore

Petrochemical power generation

South Korea onshore, UK onshore