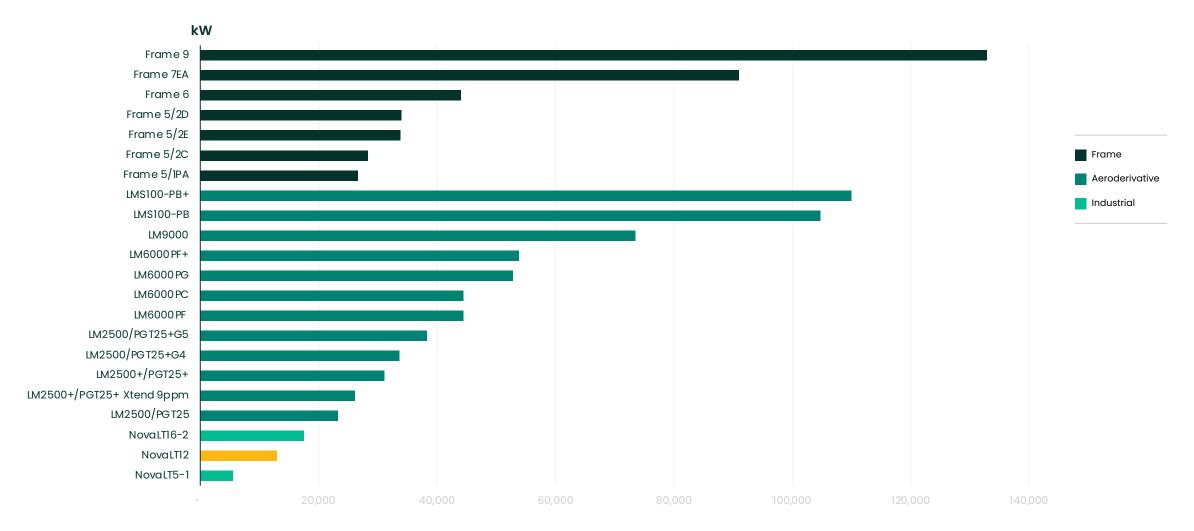


## Industry leader in gas turbine technology





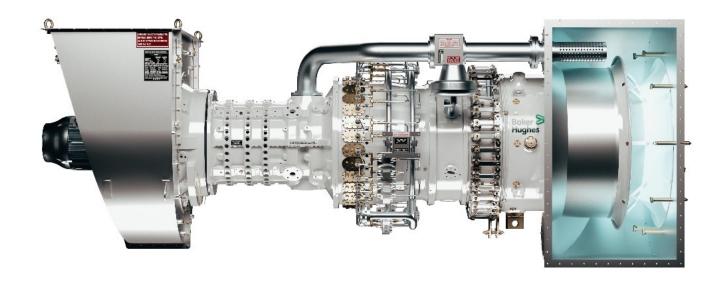
### NovaLT12

Maximum availability and lowest total cost

NovaLT™12 combines innovation with the best technology of our gas turbine experience with more than 900 units installed and ~80 millions fleet hours.

Designed to minimize environmental impact, the combustion system is capable of reducing CO<sub>2</sub> and NOx emissions down to 15 ppm—and single-digit NOx emissions are available on request.

The engine architecture is equipped with variable nozzle guide vanes, which eliminates bleeding and enables the highest efficiency at part load, reducing CO<sub>2</sub> footprint.



#### Key features

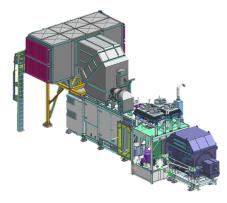
- 36.8% efficiency in mechanical drive; up to 84% thermal efficiency in combined heat and power
- Flexible operation to 50% of rated speed; ideal in mechanical drive

   can start with fully pressurized compressor
- 35,000 hours maintenance interval drives lower costs—automapping eliminates seasonal DLN tuning and intermediate boroscopic inspections



## Package

# Power generation



#### Main skids

- · Gas turbine and main auxiliary systems
- Lube oil system
- Electric generator
- Total footprint: 15.7 x 2.5 m

#### **Upper deck**

- Filter house, ventilation system and ducting above gas turbine skid
- Mineral oil cooler and oil mist separator on lube oil skid
- Negative-pressure ventilation:1 x 100% fan

# Mechanical drive



#### Main skids

- · Gas turbine and main auxiliary systems
- Centrifugal compressor and seal gas panel
  - Total footprint: 18.2 x 3.15 m

#### **Upper deck**

- Filter house, ventilation system and ducting
- Positive pressure ventilation: 2 x 100% AC motor-driven axial fans (1 main + 1 standby)

#### **Applications**

- · Onshore and offshore
- Pipeline, gas storage
- Industrial, and combined heat and power
- Referenced in
  - Extreme environments (artic and desert)
  - Pipeline, industrial power generation, gas compression

## Fast installation and commissioning

- Single-lift package
- Train loop-checks and flushing performed at factory (with UCS job software)
- · Shipping standard
- Multi-skills on site



### **Datasheet**

#### **Power generation**

Power	MWe	12.5
Efficiency	%	35.3
NOx	ppm	15
Exhaust	°C	496
Speed	RPM	8,900

#### **Mechanical drive**

Power	MWe	13
Efficiency	%	36.8
NOx	ppm	15
Exhaust	°C	496
Speed	RPM	8,900

- · Single annular combustor technology
- Dry low emission combustion system, capable of <15 ppm NOX at 15%  $O_2$ , from 50% to 100% load
- Max availability: engine swap in less than 3 days, no intermediate boroscope inspections
- No seasonal DLN tuning: initial DLN tuning during commissioning (90% shorter than traditional system) and on a four-year basis thereafter (via remote connection)
- No need for gas composition analysis system
- 44-57 MWI fuel flexibility, experience recorded outside these limits
- Up to 100% vol H<sub>2</sub> capability, tested on combustion chamber

#### Package-power gen

LxWxH	m	14.3x2.5x6.4
Weight	tons	113

#### Package—mech drive

LxWxH	m	7.2x2.5x3.5
Weight	tons	37.9

#### **Main inspections**

HGP	hrs	35,000	
Major insp.	hrs	70,000	

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.

