

FlexEfficiency* 50 Combined Cycle Power Plant

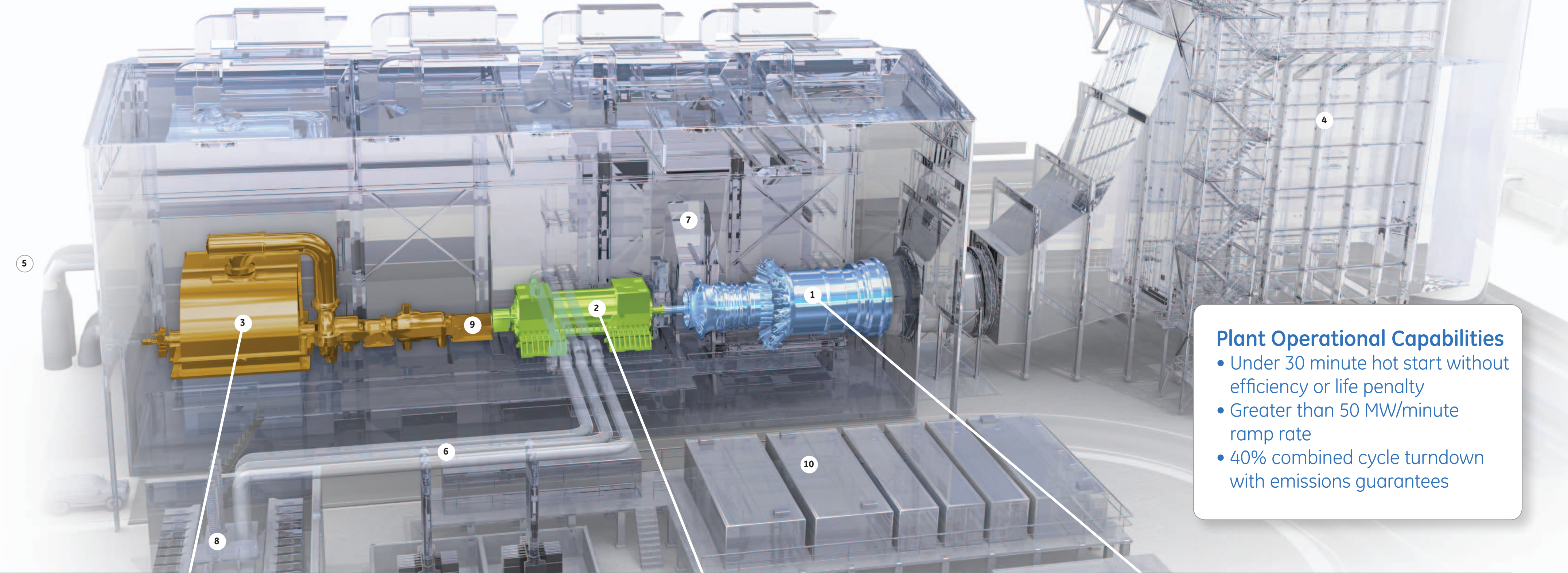
- A new standard in operational flexibility
- Innovative total plant design
- Industry leading baseload efficiency
- Full-load gas turbine validation prior to first fire

KEY

- 1 Gas Turbine
- 2 Generator
- 3 Steam Turbine
- 4 Heat Recovery Steam Generator
- 5 Circulating water to condenser
- 6 Bus duct
- 7 Air inlet
- 8 Step-up transformer
- 9 Clutch
- 10 Power Distribution Centers

Technical Data (50 Hz)

Overall Plant	
Net Power Output (MW)	510
Combined Cycle Efficiency	Greater than 61%
NO _x emissions (at 15% O ₂)	30 to 50 mg/Nm ³
CO emissions	30 mg/Nm ³
Fuel	Natural gas and distillate oil
Gas Turbine	
Type	9FB
Net ISO rating in simple cycle (MW)	338 ¹
Exhaust gas flow (kg/s)	745 ¹
Exhaust gas temperature (C)	623 ¹
Combustor type	DLN 2.6+
¹ Introductory offering	
Steam Turbine	
Type	109D-14, triple pressure reheat, triple casing
HP turbine steam pressure/temp (bar/C)	152/585
Generator	
Type	W28
Output (MVA)	650
Voltage (kV)	21
Heat Recovery Steam Generator	
Type	Triple pressure, reheat drum
Control System	
Type	Mark* Vle plant control with OpFlex* software

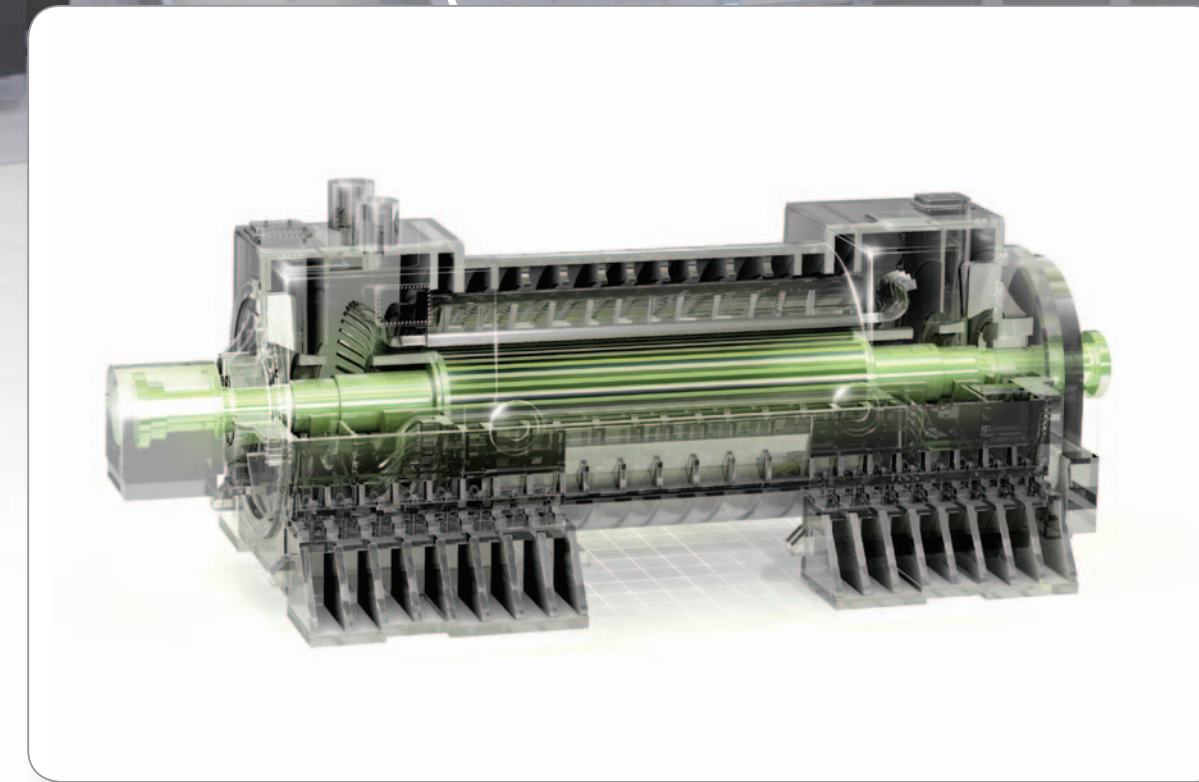


Plant Operational Capabilities

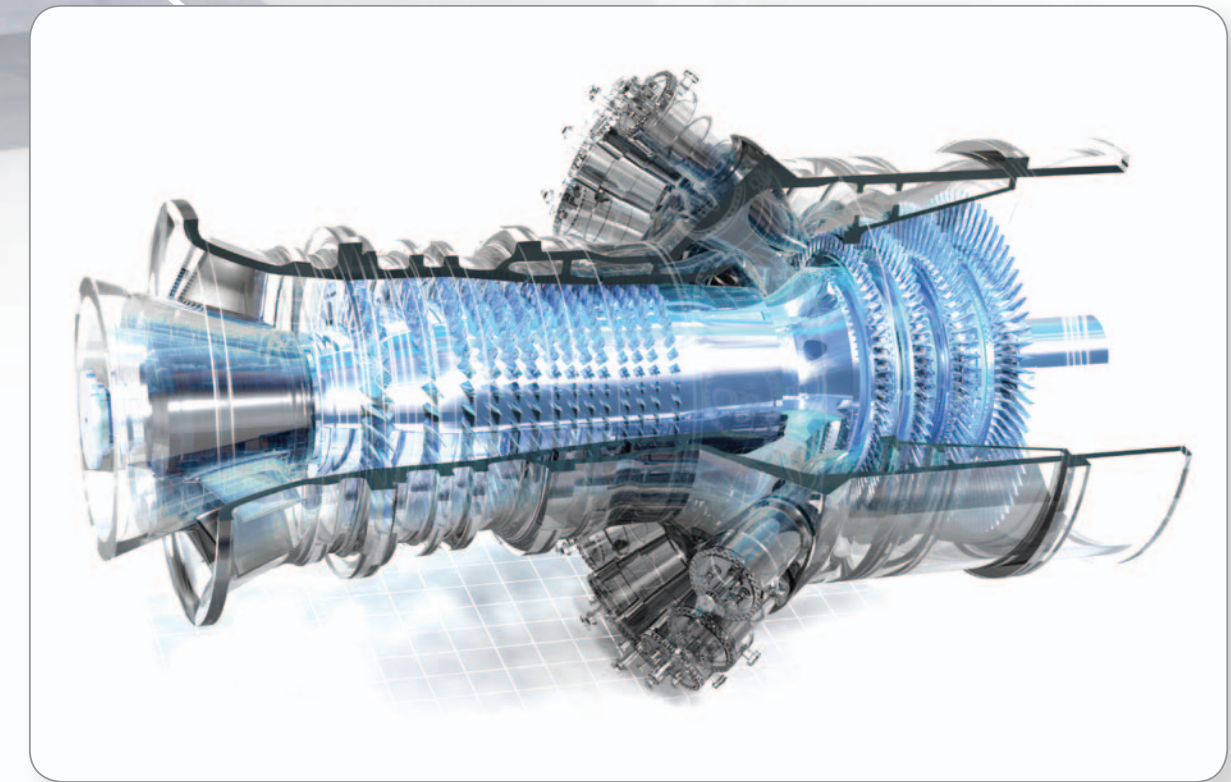
- Under 30 minute hot start without efficiency or life penalty
- Greater than 50 MW/minute ramp rate
- 40% combined cycle turndown with emissions guarantees



109D-14 Steam Turbine



W28 Generator



9FB Heavy Duty Gas Turbine