High combined cycle efficiency of 61% net – reliable, flexible, and proven in commercial operation

Compressor
- Variable inlet guide vanes and three stages of fast acting variable-pitch guide vanes (VGV) for improved part load efficiency and high load transients
- High efficiency due to evolutionary 3D blading
- All rotating compressor blades replaceable without rotor lift or rotor de-stacking

Turbine
- High cycling capability due to fully internally air-cooled turbine section
- 3D four stage turbine with advanced materials and thermal barrier coating
- Shorter outages: All turbine vanes and blades replaceable without rotor lift; vane 1, blade 1 & 4 replaceable without cover lift

Bearings
- Active clearance control with Hydraulic Clearance Optimization (HCO) for reduced degradation and clearance losses

Rotor
- Proven rotor design with internal cooling air passages for world-class fast (cold) start and hot restart capability
- Easy rotor de-stacking on site due to disc assembly with Hirth serration and central tie rod

Combustion
- Advanced can annular combustion system

SGT-8000H gas turbine series