



Hydrogen-Ready Gas Turbine Solutions

Delivering cleaner and greener energy through integrated products, systems, and support



ENGINEERING YOUR SUCCESS.

COUNT ON PARKER

when shifting to more fuel-flexible gas turbines to reduce carbon emissions

As a carbon-free fuel, hydrogen is becoming an increasingly attractive alternative to natural gas in energy production. Today, worldwide policy shifts to carbon neutrality – achieving net zero carbon emissions – are driving the adoption of decarbonization in the power generation industry.

Whether creating hydrogen by reforming natural gas, through electrolysis or gasification, advanced products and technologies are needed to raise efficiency, reduce cost, and ensure safety. As the world's leading original equipment manufacturer of advanced motion and control products to all segments of the power market for 75 years, Parker has the capability to support the newest applications of hydrogen as a high-volume gas turbine fuel when blended with natural gas to refine combustion technology.

Together, we can create a greener energy future.

The promise of hydrogen as an attractive energy source

- Most abundant and lightest of the elements
- Carbon-free status, odorless, and nontoxic
- Highest energy content of common fuels, making it an ideal energy carrier
- Its production through electrolysis (using electricity to split water into hydrogen and oxygen) allows for renewable hydrogen to be stored and used later in a combined cycle gas turbine (CCGT)
- When hydrogen burns and combines with oxygen, it produces electricity with zero CO₂ emissions
- Helps meet long-term CO₂ emission-reduction targets
- Emerging technologies are increasing the likelihood of burning 100% hydrogen within the next decade

Parker on today's fuel-flexible gas turbine

