

Natural Gas Engine Testing

Intertek

Including CNG

Valued Quality. Delivered.



For many reasons, Natural Gas and CNG (Compressed Natural Gas) engines are seeing an increased use in the industrial and transportation sectors. As a result, many companies from OEMs to the Tiered Suppliers are in need of development testing.

Intertek has made substantial investments in our San Antonio engine lab to support such programs, including endurance and emissions certification. In total, we have 22 test cells capable of running CNG engines ranging in power from 5 through 1200 horsepower.

Future additions will include real-time gas monitoring, blending (including Nitrogen and propane), and higher horsepower engines.

Remote Oversight:

Intertek Automotive Research offers an off-site portal presence giving our customers the ability to view their testing anywhere in the world in real time via a web link.

We assign a test engineer to each program and offer continuous operation (24/7/365) with trained technicians staffing each shift.

Quick Intertek Facts

- Intertek test experts are able to design, develop and fabricate specialty, one-of-a-kind test stands
- Elevation testing is available with emissions up to 900 hp
- We provide a variety of testing available for both standard and accelerated engine aging studies



Our Solutions

Our customers include many of the automotive and heavy duty engine manufacturers, along with their suppliers. Intertek Automotive Research has expertise in testing a variety of engine configurations ranging from a single cylinder to multi-cylinder research, prototype and production engines. A variety of fuels are used, including gasoline/gasoline blends, diesel, and alternative fuels.

Engines, and engine components, are constantly evolving to meet the governmental regulations and consumer demands. They are becoming more sophisticated and developed at a greater pace and lower cost than ever before. Our facilities in San Antonio allow our customers to meet these challenges.

Engine Test Facilities

- 22 engine development test cells
- Compressed Natural Gas up to 250 psi
- Dynamometers down to 5 hp

- Transient dynamometers up to 900 hp
- Eddy current dynamometers up to 1200 hp
- EPA Part 1065 CVS Emissions
- Combustion air control (temp & humidity)
- Exhaust back pressure control
- Chilled fluids system for thermal shock testing
- Altitude simulation up to 15,000 feet
- Oil consumption measurement (manual and automatic)
- Engine Fluids (fuel, coolant and oil) temperature control
- Cooling water is available in each cell at a mean temperature of 27C (80F)
- Chilled water is available in each cell at a temperature of 10C (50F)
- Automated data acquisition and control (various systems and speeds)
- Flight recorder monitoring
- OEM diagnostic equipment utilized
- Various test fuels used (i.e. gasoline/gasoline blends, diesel, alt fuels)
- Hybrid-electric powertrain test facility

Testing Experience

- Complete engine durability
- Emissions certification
- OBD functionality
- Diesel aftertreatment
- CNG engine endurance
- Combustion performance
- Fuel economy studies
- Engine power uprate
- Aftertreatment endurance
- Engine lubricant development
- Marine engine programs
- Engine deposit evaluations
- Engine deposit evaluations
- Fuel, lubricant evaluations
- Octane requirement increase evaluations
- Crankcase ventilation evaluations
- Oil consumption evaluations
- Emissions
- Failure analysis
- Test development
- OEM specific tests
- Industry standard tests
- Test Cycles (Industry specified, proprietary or custom designed cycles)
- Test facility evaluations

The Intertek Advantage

Intertek Automotive Research is one of the largest independent automotive testing organizations in the world and has provided quality services since 1953 to the transportation and petrochemical industries. Based in San Antonio, Texas, our customer-focused staff has a proved record of being responsive to our client's needs and special testing requirements. Our customer base is worldwide and consists of the automotive OEMs, the heavy-duty engine OEMs, the OEM suppliers, and the fuel and lubricant companies.

Intertek is a leading quality solutions provider to industries worldwide. From auditing and inspection, to testing, training, advisory, quality assurance and certification, Intertek adds value for its customers by helping improve the quality and safety of their products, assets and processes. With a network of more than 1,000 laboratories and offices and over 36,000 people in more than 100 countries, Intertek supports companies' success in the global marketplace, by helping customers to meet end users' expectations for safety, sustainability, performance, integrity and desirability in virtually any market worldwide.

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