

GE Aviation Combustion Test Services: Unmatched facilities, and experience to match.

GE Aviation has extensive gas turbine combustion test cells, supported by unique facilities and a diverse and experienced staff. A central airflow facility can provide up to 250 pps of airflow, at up to 600 psia with vacuum capability down to 2 psia. Moisture can be precisely controlled for low temperature applications to below -40 deg-F. Central and local heaters provide unvitiated heating up to 1500 deg-F, while local boost compressors can provide up to 120 pps of 1000 psia air. Liquid and gas fuels are available, including specialty fuels.

In addition to the depth and breadth of our facilities, the flexibility of our operations is unmatched. A cross-trained workforce, comprehensive on-site services, refined facility design, and deep operational experience contribute to our readiness and our ability to devise and deliver a solution to most any combustion test problem.



Test Capabilities

- Fuel Nozzle Characterization
- **Component Performance**
- Combustion System Efficiency
- Combustion System Operability
- Gaseous and Particulate Emissions
- Altitude Relight with Cold Fuel/Inlet & Real-Time Remote Viewing

Facilities

- Single Cup
- Sector
- Full Annular Rig

GE is the world leader in product combustion testing at full power conditions. With over 60 years of combustion test experience and a variety of test facilities, our ability to deliver the data you need for product development & improvement, certification, or field investigations is unmatched.

Facilities

Cells A18/19: High Flow Full Annular Rig	
Maximum Inlet Pressure	550 psia
Maximum Inlet Temperature	1200 deg-F
Maximum Inlet Airflow (total	220 pps
Maximum Fuel Flow (liquid/gas)	120 gpm/18,000 pph
Minimum Exhaust Pressure	5 psia
Cell A20: High P/T Sector and Full Annular Rig	
Maximum Inlet Pressure	940 psia
Maximum Inlet Temperature	1475 deg-F
Maximum Inlet Airflow (total)	120 pps
Maximum Fuel flow (liquid)	94 gpm
Advanced Combustion Labs: Low Flow/Quick Turn	
Maximum Inlet Pressure	300 psia
Maximum Inlet Temperature	1200 deg-F
Maximum Inlet Airflow (total)	30 pps
Maximum Liquid Fuel flow (gas available)	2400 pph
Minimum Exhaust Pressure	4 psia

Note: Other related facilities can be used to extend these capabilities, as required

Support Capabilities

GE has extensive capabilities for a turnkey test solution to meet your needs:

- Rig assembly & teardown in segregated facilities
- Instrumentation design, application, leadout, and checkout
- Design and build of test rigs & support hardware
- Remote near-real-time test monitoring
- Full customer data segregation





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