150,000 LBF
CERTIFICATION TEST FACILITY
CUSTOMER
Rolls-Royce
Mississippi, USA

FACILITY TYPE
150,000 lbf Turbofan Outdoor Gas Turbine Engine Certification Test Facility

ENGINE TYPES
Trent Series (1700, 1000, 900, 800, etc.)
Rolls-Royce Deutschland BR 700 Series
MDS was responsible for all aspects of this turnkey project, including supply of test systems, project management, architectural design, facility construction, dismantling and refurbishment of existing Rolls-Royce equipment.

Located in the NASA complex, the Rolls-Royce Outdoor Jet Engine Test Facility is recognized as a globally-unique self-contained facility. As Rolls-Royce’s Gold Standard engine test certification site, the facility is capable of a wide range of tests, and provides for the outdoor location of the development testing of Rolls-Royce’s latest family of high thrust jet engines.

**SCOPE OF WORK**

- 150,000 lbf Test Stand
- Thrust Measurement System
- Ground Plane Simulation
- Acoustic Certification: Noise Arena, Turbulence Control Structure, and Noise Measurement System
- Performance Testing: Cross-wind Certification, Ground Plane Simulation, Reverse Thrust and Anti-Reingestion
- Static and Dynamic Data Acquisition System (above 5000 channels)
- Engine Handling
- Engine Adapters and Transportation Carts
- Mechanical Support Systems (Fuel, Air Start)
- Cross Wind Blower
- Modular Ground Plane & Re-Ingestion Screens