



Auxiliary Power Unit (APU) Test Facilities



Aerotest Limited have designed, developed and supplied Turnkey Multi- purpose Auxiliary Power Unit (APU) Test Facilities inclusive of engine preparation workshops for every variant of Allied signal (Honeywell) APU.

The test facility and testing is critical to safeguard the reliability and functionality of the APU.

Aerotest's main aim is to provide our customers with high quality "state of the art", and easily maintained test solutions.

The Aerotest Auxiliary Power Unit (APU) Test Facilities provide inherent flexibility as a pre-requisite at the design stage.

All Aerotest facilities have been fully correlated and approved by the OEM's.

Our facilities are designed to test the APU at various conditions including a full performance condition with the confidence of producing reliable confirmed data; this will ensure that the APU's operational characteristics are performing correctly.

By applying high speed data acquisition systems and performance correction software, APU manufacturers and overhaul agencies will obtain the maximum return on their investment; by optimising the excellent test cell utilisation gained through Aerotest designed test systems.

Test Facility "Turnkey" project design and construction, comprising of the following:

- Complete project management for major turnkey civil and military aerospace projects.
- All civil ground works, structural steelwork and building design.
- World-class acoustic design and noise reduction performance.
- Mechanical systems and services design.
- Electrical and electronics design.
- Instrumentation systems design.
- Fluid systems design.
- "State of the art" high speed data acquisition systems.
- Engine/ component real time test application software.
- Test facilities maintenance and NAMAS traceable instrumentation calibration equipment.
- Installation and commissioning services.
- Compilation of test facility operation and maintenance manuals.
- Post contract design/ software and maintenance support services.



A Turnkey Multi-purpose Auxiliary Power Unit (APU) Test Facility provides the following:

- Universal Test Trolley
- Universal Test trolley facility docking station
- APU Adapter system
- Exhaust Systems (with Noise Suppression)
- Inlet Systems (with Noise Suppression)
- Acoustically attenuated Test Cell & Control Room using Aerotest 'Aero-Sound' modular high performance acoustic panels.
- Mechanical shaft loading system
- Electrical Load Bank System with power measurement and Control
- Fuel tank, pump and controls
- Fuel module
- Fire Suppression System
- Start System
- Bleed Air Load Measurement
- An efficient method of engine pre-dressing as a result of excellent engine accessibility.
- Well proven, reliable equipment providing low cost of ownership.
- An integral test trolley engine slave oil system for dry sump engine configurations, thus avoiding cell floor safety hazards.
- Minimum test cell installation time by multi-pin automatic instrumentation and engine control harness coupling.
- Ergonomically designed control console, maximising the 'Operator' working space.
- The Aerotest Supervisory Control and Data Acquisition (SCADA) system has been developed using National Instruments globally supported 'LabView' software to run within the well proven and reliable MS Windows-7 operating environment.

- The software code at the heart of the system is designed for any customer specified engine test procedures.
- Provides the maximum return on investments by optimising the facility production output.
- End to end calibrations, over twenty points prior to commissioning and cross correlation, using our NAMAS traceable instrument calibration equipment.

Aerotest have the ability to react to any specific requirements and understand how to produce a product best suited to Turnkey Multi-purpose Engine Test Facilities and aerospace related applications.

Aerotest's main aim is to provide all it's customers with the very best state of the art products and services available and are dedicated to expanding its product range for any existing or new customers.



Ordering Information:

NCAGE Number: KE 160



T: +44 (0) 1442 235557 F: +44 (0) 1442 235547 E: info@aerotest.com W: www.aerotest.com

Unit 5 Sovereign Park, Cleveland Way, Hemel Hempstead, Hertfordshire, HP2 7DA, England

Aerotest Limited is an ISO BS EN 9001: 2008 registered company with a quality approval certificate, number FM66648.



BS EN ISO 9001:2008 Cert FM66648