AERO ENGINE & COMPONENT TEST FACILITIES



Aerotest Limited

Consultants & Specialists in Aero Engine Test Facilities & Ground Support Equipment

Adaptable High Speed Multi-Engine & Helicopter Production Test Systems

For Multi-Purpose Repair and Overhaul Capabilities



Aerotest Limited have designed, developed and supplied Turnkey Multi-Purpose Adaptable High Speed Engine Test Trolleys and Facilities.

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

The Aerotest range of Multi-Purpose Adaptable High Speed Engine Test Trolleys and Facilities provide inherent flexibility as a pre-requisite at the design stage.

A Turnkey Multi-purpose adaptable High Speed Engine Test Trolley and Facility

Our multi engine variant test system designed for all marks of the Allied Signal (Honeywell) TPE 331, with optional high speed real time data acquisition systems for production versatility and improved quality of test recording.

By applying high speed data acquisition systems and performance correction software, engine 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.

The Aerotest system is the ONLY known system, excluding that of the OEM, which has the testing capability of a single production test trolley which can accommodate more than fifty variants of the TPE 331 aero engine.

A Turnkey Multi-purpose adaptable High Speed Engine Test Trolley and Facility provides the following:

- Clockwise and anti clockwise propeller shaft rotation.
- Air Inlet up and down.
- Wide and narrow reduction gearboxes.
- Dry sump and engine integral oil systems.
- Conventional FCUs.
- Cost effective multi engine test pallets for engine inlet down and inlet up configurations.
- An efficient method of engine predressing 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.
- High accuracy torquemeter, eliminating dynamometer errors, thus reducing performance test rejects saving valuable production time.
- 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 latest MS Windows 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 nstrument calibration equipment.



AERO ENGINE & COMPONENT TEST FACILITIES



A Turnkey Multi-purpose adaptable High Speed Helicopter Engine Test Trolley and Facility

This test system is the ONLY known system, with the testing flexibility of a single production test trolley for all medium size helicopter engine test permutations.

Our high speed, multi engine variant test system, designed for all the marks of the GE CT58/RR Gnome and Turbomeca Makila demonstrate the quality, experience and flexibility of Aerotest design.

A Turnkey Multi-purpose adaptable High Speed Engine Test Trolley and Facility provides the following:

- Port and starboard helicopter engine exhaust configurations.
- Rearwards drive and forward drive engines ie RTM 322 and GE T700.
- Clockwise and anti clockwise power turbine shaft rotation.
- Dry sump and engine integral oil systems.
- Conventional FCUs and locally remote FADEC fuel systems providing total flexibility in the test planning operation.
- Full rigidity essential for repeatable output shaft alignment, no cumbersome flexing test pallets.
- Quick installation pre-aligned engine mounting modules to suit the test application.
- 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.
- High accuracy torquemeter, eliminating dynamometer errors, thus reducing performance test rejects saving valuable production time.
- Integral test trolley oil systems for bi-directional dynamometer and phase displacement torquemeter lubrication.
- Minimum test cell installation time by multi-pin automatic instrumentation and engine control harness coupling.
- Ease of access for test trolley adaptations.
- 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 latest MS Windows operating environment.
- The software code at the heart of the system is designed for any customer specified engine test procedures.
- The universal test trolley integrates to our high speed data acquisition module.
- 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 produce best suited to Turnkey multipurpose Engine Test Facilities and aerospace related applications.

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

Ordering Information:

Aerotest Limited

Consultants & Specialists in Aero Engine Test Facilities & Ground Support Equipment

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