

Aircraft Ground Equipment



Technical specifications

The AHT30.4DE is an AC motor-driven, compact, mobile, dual system, manually controlled aircraft hydraulics tester.

<i>Capacity</i>	2 x 110 l/min up to 280 bar (4000psi), reduced flow up to 350 bar (5000 psi)
<i>High-pressure pump drive</i>	AC motor, 110 kW at 1500 rpm, 400 V, 50 Hz, triple phase
<i>Fluid specification</i>	MIL-H-5606, MIL-H-83282 or MIL-H-87257
<i>High-pressure pumps</i>	2 x variable, pressure-controlled, piston pumps
<i>Boost pumps</i>	2 x direct-driven, fixed displacement pumps
<i>Cooler</i>	dual oil-to-air cooler
<i>Operating temperature</i>	-32 °C up to +55 °C
<i>Pressure & flow control</i>	manual control of valves and pumps for each system
<i>Filtration:</i>	
<i>High-pressure filter</i>	2 x outlet filters, replaceable 2-micron element, no bypass.
<i>Boost system filter</i>	2 x boost filters, replaceable 3-micron element, no bypass.
<i>Piping</i>	Cleanliness level according to NAS 1638, Class 4 high-pressure lines: stainless steel low-pressure lines: anodized aluminium
<i>Outlet system</i>	2 x pressure- and flow-controlled outlets
<i>Return system</i>	2 x pressure-controlled inlets
<i>External connections</i>	2 x 3/4" supply pressure hoses, length 10 m and 2 x 1 1/4" return pressure hoses, length 10 m storage on hose reels
<i>Average noise level</i>	80 dB(A) at maximum supply (measured at a distance of 1 m from the test stand)
<i>Dimensions (L x W x H)</i>	3.3 x 2.0 x 1.9 m (11 x 6.5 x 6 ft)
<i>Weight</i>	3600 kg (8600 lbs)

Vacuum system

0.65 bar (absolute) pressure in fluid reservoir for deaeration and dehydration of hydraulic fluid.

SIRLC

The AHT is equipped with the **Sun Internal Reservoir Level Control** system. This system controls the level of hydraulic fluid in the tester reservoir while running the tests, enabling continuous deaeration, degassing, dehydration and filtration. This system outperforms a "closed loop" system.

Operation

Easy, manually controlled operation, gauges for supply and return pressures, digital displays for flow and temperature.

Functions

The tester is designed to perform the following functions on two hydraulic systems simultaneously:

- Provide a source of hydraulic power to operate the aircraft's hydraulic systems and controls for functional and operational tests without the necessity of starting the aircraft engines.
- Test aircraft's hydraulic system for function checks, for indication of malfunctions, for flow and pressure checks leakage, etc.
- Filter, deaerate and dehydrate the aircraft's hydraulic fluid.
- Drain, flush and refill the aircraft's hydraulic systems.

Options

- Patented SUN-GiO system, option '-G', measurement of the amount of undissolved gas in the high- and low-pressure systems of the aircraft (closed systems only)
- Computer control
- ECMU interface for use on EF2000 aircraft
- Oil contamination measurement
- Measuring solved air / water