



# Aircraft Ground Equipment



## Technical specifications

The AHT25.3DE is an AC motor-driven, compact, mobile, dual system, manually controlled aircraft hydraulics tester.

<i>Capacity</i>	2 x 95 l/min (25 gpm) up to 220 bar (3200 psi), reduced flow up to 350 bar (5000 psi)
<i>High-pressure pump drive</i>	AC motor, 74 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, axial 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 &amp; 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 ¾" supply pressure hoses, length 10 m and 2 x 1¼" 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 1.8 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 de-aeration 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 de aeration, degassing, dehydration and filtration. This system supersedes 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 hydraulic system and controls for functional and operational tests without the necessity of starting the aircraft engines.
- Test the aircraft hydraulic system for function checks, for indication of malfunctions, for flow and pressure checks leakage, etc.
- Filter, de-aerate and dehydrate the aircraft hydraulic fluid.
- Drain, flush and refill the aircraft hydraulic system.

### 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