SUN TEST SYSTEMS
FOR SAFETY

AHT82

Aircraft Ground Equipment

Technical specifications

The AHT 82 is an electrically driven, compact, mobile, single pump dual system aircraft hydraulics tester.

Capacity	0-220 l/min up to 280 bar, reduced flow up to 350 bar
High-pressure pump drive	AC motor, nom. 90 kW, 400 V, 50 Hz, 3 phase
Fluid specification	MIL-H-5606 (NATO code H-515) or alternatives
High-pressure pump	Axial piston, variable stroke, pressure controlled
Boost pump	Direct-driven G-rotor pump
Cooler	Oil-to-air cooler
Operating temperature	-32 °C up to +49 °C
Pressure & flow control	Computer-controlled valves / pump
Indication	Display of flow, temperature and pressures, plus other relevant information on a portable, colour LCD display
Fluid reservoir	240 l; de-aeration with 0.7 bar abs. reservoir pressure
High-pressure filter	3-micron outlet filtration, replaceable element
Boost system filter	3-micron filtration, replaceable element Cleanliness level according to NAS 1638, Class 5
Piping	High-pressure lines: stainless steel Low-pressure lines: aluminium
Hoses	Non-elastomer hoses (except for ext. and HP hoses)
Outlet system	Two pressure- and flow-controlled outlets
Return system	Two pressure-controlled inlets
SARLC	Sun Aircraft Reservoir Level Control System
External connections	Two 1" supply pressure hoses, length 10 m and two 1½" return pressure hoses, length 10 m on motor-driven hose reels. Power supply cable: length 12 m, on a spring-loaded cable reel. Connector: min. 125 A, max. overload according to IEC34-1.
Average noise level	75 dB(A) at a distance of 3.65 m from the test stand
Dimensions (L x W x H)	3150 x 1760 x 1470 mm
Weight	3400 kg

Operation

Easy, safe and reliable operation complying with military and civil aircraft specifications and low-level maintenance requirement. Automatic test sequences possible.

Reservoir selection

The AHT is equipped with the Sun Aircraft reservoir selection system, enabling continuous de aeration, degassing, dehydration and filtration. This system supersedes a "closed loop" system.

Functions

The tester is designed to perform the following functions and test procedures:

- Provide a source of hydraulic power to operate the aircraft hydraulics system and controls for functional and operational tests without the necessity of starting the aircraft engines.
- Test the aircraft hydraulics 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 hydraulics system.

Options

- Automatic calibration
- Patented GiO system, option '-G', measurement of the amount of undissolved gas in the high- and low-pressure systems of the aircraft (closed systems only), and measurement of piston friction of bootstrap reservoirs
- ECMU interface for use on EF2000 aircraft
- Parallel operation of two units
- Oil contamination measurement

Nijverheidslaan 17, 1382 LG, Weesp, The Netherlands
Phone +31 294 465500
Fax +31 294 465575
aerospace@suntestsystems.nl
www.suntestsystems.nl