



Advanced Total Aircraft Wash System

Hydroblaster model ATAWS/GHO

Built to meet UL1776, CSA and CEC certifications

GENERAL SPECIFICATIONS AND USE

This fully self-contained ATAWS (Advanced Total Aircraft Wash System) is the complete integration of Hydro Engineering's AWS, Aircraft Wash System and TEWS, Turbine Engine Wash System. Designed for aircraft wash, flight line ground support decontamination and cleaning in the aircraft wash system (AWS) operating mode. In the turbine engine wash system (TEWS) operation, the system is designed for dual engine washing on dual engine aircraft. The following airframes and engines have been certified for TEWS operations;



UH-60, T-700 & T-701D engines
AH-64, T701D engines
CH-47, T55-L-712 & 714 engines
OH-58D, 250-C30R/3 engines

ENGINE:

- Diesel engine (Tier IV Final Compliant)
- 14 gallon fuel tank
- Isolation mounted base plate mounted on 3/8" plate steel
- 12 volt electric starting system with key switch
- Spiral cell battery
- High energy charging system capable provides power to the engine, battery and burner system

PUMP:

- Dual gun operation with operator controlled variable pressure wands
- Each gun produces 5 GPM when in dual gun operation
- Factory preset system pressure to meet;
 - General-MIM-2005-005 Proper Low Pressure Cleaning of Army Rotary Wing Aircraft
 - TM1-1500-344-23 Cleaning & Corrosion Control, Volume II, Aircraft 15 Apr 09, CH 1 31 Mar 10, NAVAIR 01-1A-509-2; 15 AUG 2014
- 4 main bearing, oil bath, hardened steel crank shaft
- Industrial triplex ceramic plunger pump
- Oil level eye and dipstick for maintenance
- Belt drive
- Pressure safety relief valve

1. Specifications are effective 2018. 2. Specifications are subject to change without notice



Certified Systems Available



PUMP (continued):

- Foaming soap application during wash operation can be operated with cold or hot water
- Air compressor and surge tank for bleed band closure during TEWS operation

INSTANTANEOUS WATER HEATER:

- Modulating stabilized water heater coil rated 140 degrees
- Water heater is thermostatically controlled from 0 to 140 degrees and stabilized to maintain + or – 2 degrees of requested temperature
- Horizontal draft full steel housing
- 12 volt burner system (no separate generator used to power the burner)
- Set to not exceed 140 degrees F
- On-demand auto ignition electronic pilot and flame monitor
- Forced air system with fuel solenoid control valve and spin on fuel filter
- Temperature high limit switch
- Burner control assure constant temperatures
- Shared 14 gallon fuel tank

CONTROLS:

- Complete control panels for both AWS and TEWS operation which includes engine start/stop, adjustable temperature control, hour meter, wash/rinse selection
- A fully hinged and locking steel enclosure features cross flow air ducting into and out of enclosure to cool components to manufactures specifications
- An air purge system is incorporated along with an antifreeze recirculation system to maintain freeze protection. The ATAWS is also designed to operate as an De-Icing system as required

SAFETY:

- Fully integrated design includes aircraft wash system with foaming soap system, turbine engine wash system with CH-47 bleed band closure ability and hand held air driven vacuum.
- Electric trailer brakes standard on front and rear axle
- Manual park brake, lever controlled
- Non-adjustable operational parameters when in TEWS operation. All pressures and flows are factory set
- Flow and/or pressure switches
- Hi-temperature by-pass valve
- Flow or pressure actuated unloader valve
- 2 each trigger shut-off guns with variable pressure wands in AWS operation
- Over pressure relief valve
- Safety burst disk

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Certified Systems Available



SAFETY (continued):

- Both AWS and TEWS are authorized by AGSE for use on U.S. Army aircraft
- TEWS fluid performance is 2.5 GPM @ 45 PSI

INTEGRATED TRAILER:

- Control panel for aircraft wash system (AWS) operation
- Control panel for turbine engine wash system (TEWS) operation
- Constructed of 3, 4 and 6 inch steel "C" channel
- DUAL 3500 LB. AXLES FOR 7000 GVW
- Extended leaf springs for soft ride
- Adjustable height lunette eye hitch
- Trailer wiring; MS75020-1 (NATO 24 volt wiring)
- Puncture resistant tires with full size spare tire and wheel mounted on welded channel steel bracket
- 525 gallon UV protected poly water tank integrated and mounted on 6" channel iron frame
- Dump valve and fittings, all plumbed to control panel
- 2 each 30 gallon soap tanks mounted on 6" channel integrated into trailer. (soap & gas path cleaner)
- 5 each hose reels. Two for foaming soap and hot and cold rinse hoses, one for inlet water supply, pre-spray soap, and TEWS fluid delivery
- 4 corner tie downs

SPRAY AND AIR HANDLING SYSTEM:

- 2 each 50' 3/8 inch high-pressure hoses mounted on hose reels
- 2 each 50' 3/8" foaming soap application hose mounted on hose reel
 - Foaming wand and nozzle
- 50' 1/2" pre-spray soap hose, mounted on hose reel (AWS)
- 50' 5/8" rubber inlet water hose mounted on hose reel (AWS)
- 50' 1/4" air delivery hose with connectors (TEWS)
- 50' 3/8" water/gas path cleaner hose mounted on hose reel and connectors (TEWS)
- Variable pressure control at the wand with fixed 40 degree nozzles
- 2 each approved hot section harness, wash probes, compressor wash adapter and manifold
- Storage for TEWS probes, dual engine wash operation hoses, air vacuum

DIMENSIONS:

- 190" long x 90" wide x 75" high (ships in sea-land container)
- Weight: 2965 LBS

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Certified Systems Available