



## **Aero Jet Wash, LLC** presents new on-wing washing using injected water or detergent which penetrates deep into the engine, cleaning performance stealing contaminants.

The Aero Jet Wash cleaning process is superior in terms of its cleaning efficiency and matchless environmentally friendliness. With the Aero Jet Wash process there are no harsh effluents blown out into the atmosphere. The newly developed Jet Wet Suit [patent pending] recovers all the fluids used in the wash, along with the poisonous effluents they clean from the engine. Best of all, this is accomplished in a fraction of the time taken for traditional engine washes.



"The Aero Jet Wash's Jet Wet Suit has been carefully designed and tested to be used in all U.S. and international airports and maintenance facilities with the environmental concerns in mind." declared. Mike Vahedy, President of Aero Jet Wash, LLC.

It is the revolutionary Aero Jet Wash's Jet Wet Suit that has changed the face of engine washing in the industry. Accomplishing engine washing in a fraction of the time traditional engine washes take, this new method can be accomplished virtually anywhere the aircraft is parked.

"We not only bring the wash to the aircraft, but we do so in the hangar (for most engines), on the ramp or at the gate." reports Shawn Tadayon, Managing Director for Aero Jet Wash, LLC.

## **ENGINE WASHING MADE FAST AND EASY**

Engines can be washed in as little as one quarter the traditional wash time (approximately 30-45 minutes) using as little as 5-10 gallons/minute, depending on the size and make of the engine. With multiple-engine cleaning capability, a commercial twinjet can be cleaned in approximately 1 hour at the end of the flight day. Even more convenient this can be done virtually anywhere; even inside the hangar for most engines. The service is typically offered overnight, while the aircraft is parked at the gate. Another benefit is that the wash procedure only requires one technician.

## HOW IS THIS ACCOMPLISHED?

Initially maintenance personnel perform the pre-wash preparation procedures as instructed in the appropriate engine manuals. The engine lines are disconnected, capped off and prepared by maintenance crew according to manufactures' specifications manual(s). Once the preparation is completed the Aero Jet Wash equipment is brought to the aircraft.

The injection cart contains everything needed to wash the engines. The Aero Jet Wash Jet Wet Suit is placed over the engine, and the J-Hooks, which inject the water/detergent straight into the core of the engine, are attached. The injection cart that features storage tanks for de-ionized water/detergent and expelled effluent provide water for cleaning and a collection/recycling system. The entire procedure is completely controlled from fluid injection into the engine to recovery as the effluent is discharged.

The system consists of the injection cart, nozzles, and the Jet Wet Suit (collection system) and the waste water recycle unit. The AJW-115 (Green Jet Wash) injection cart is a completely self contained system for supplying de-ionized water/detergent (hot or cold) for the cleaning procedure, and a recycling collection system that is designed to capture and contain the effluent. This injection system is able to supply cold or hot water/detergent upon demand. The unique J-Hook design permits washes to take place regardless of wind or weather. The J-Hook installation makes it possible for the personnel washing the engine to deliver water/detergent into the engine without losing any to the bypass. For areas where power is not readily available, an auxiliary generator is used to power the cart.



The Jet Wet Suit is a one piece special fabric enclosure that fits over any aircraft engine. The enclosure is water proof, and when installed it becomes water tight. Once the suit is in place the collection system is connected and the Aero Jet Wash system is ready to be used.

Aero Jet Wash asserts that because pure water is used in place of the previous harsh chemicals used by the industry, there are no adverse effects to the engine gas path coatings and sealants. This is an especially important consideration for hot section components that may have expensive thermal barrier and corrosion resistant coatings.

Additionally, there are no poisonous mists sprayed into the atmosphere, and the technicians are subjected to no hazardous environment.

The engine is rotated, using the electric starter motor, to about 20% of its idle speed, and the water is injected through the J-Hook into the engine. Our company stresses that conventional washing methods are not as effective due to the use of denser washing mixtures which, when sprayed in the front of the engine, are partially centrifuged out into the bypass fan duct and never reaches the critical gas-path components.



The effluent is collected during the wash process and then recycled and then disposed of or re-used for the next wash. This engine wash process is applicable to all turbine engines. The adjustable nature of the J-Hook and universal fit of the Jet Wet Suit [patent pending] are designed to fit just about any engine size.

## **Common benefits from Aero Jet Wash Services**

1. Recovered EGT margin
2. Increased Fuel Savings
3. Prolonged Engine life
4. Lower maintenance costs
5. Reduction in pollution
6. No interruption to flight schedules
7. Performed in or out of a hanger environment for most engines
8. 100% environmentally friendly

REDUCING MAINTENANCE COSTS

In the recent past, wet washing engines resulted in the expelling of contaminants indiscriminately upon the ground. Too often this hazardous waste would then find its way into the local water systems.

However, the Jet Wet Suit contains all the contaminants and then recycled for future use or disposal, thus satisfying all EPA requirements for the proper handling of hazardous waste.

## **THREE WAYS TO GET OUR SERVICES / PRODUCTS**

Now you have three convenient ways to obtain these vital services/ products.

- Aero Jet Wash, LLC offers contract services that bring the engine wash equipment to the operator at the site where the airplane is stationed, and trained Aero Jet Wash maintenance personnel perform the needed engine wet wash.
- Realizing the sensitivity of operator scheduling, Aero Jet Wash now offers the ability to lease the engine wash equipment inside of a cargo truck or as a cart unit. This option allows the operator to position the equipment in convenient locations and accomplish engine washes as needed. Aero Jet Wash, LLC would then provide extended support of the equipment and ensure proper operation upon demand.
- For many operators, purchasing the equipment can be the most viable and feasible option. Please ask for quotation.

Please contact an Aero Jet Wash sales representative for more information concerning price structure.



IMPROVING EGT MARGIN  
REDUCING MAINTENANCE COSTS  
CONSERVING THE ENVIRONMENT