



Frequently Asked Questions

Pall PS Series **PURE**services Portable Fluid Purifier

Q: How clean is the purifier getting my fluid? How do you measure?

A: The Pall portable fluid purifier has the following performance:

- Removes 100% of free water and over 80% of dissolved
- Removes 100% of free and entrained gases and up to 80% of dissolved air/gases
- Removes particulate contamination using a 3 micron absolute filter, $\beta_{3[5(c)]} \geq 1000$

The latest purifiers are fitted with an in-line water sensor. This device provides instant feedback on the levels of water contamination and can be used to control the purifier operation.

Pall can also supply a portable particle counter to measure the fluid cleanliness levels.

Q: How long does it take to clean the fluid?

A: Cleaning time will vary upon the system, fluid type, and aircraft type. Users will purify the fluid until it meets the specified cleanliness standard.

Q: How Does it Work?

A: The Pall portable purifier removes water, air and volatile solvents using a vacuum dehydration process. Solid particulate contaminant is removed by a high efficiency filter element.

A brief "How It Works" video is available on the Pall web site:

<http://www.pall.com/main/aerospace-defense-marine/product.page?id=54586>

Q: Will the purifier alter oil composition or properties?

A: Tests at Tindall AFB / Air Force Research Laboratories (AFRL) showed that the Pall purifier did not degrade the working properties of the fluids processed. ^{1,2}

Q: Is hydraulic fluid purification used by the US Army?

A: Yes. It's actually a requirement on the CH47s and highly recommended for the other US Army helicopters as referenced in the following Technical Manuals (TM) and Aviation Safety Action Message (ASAM):

TM 1-1520-240-23-1

TM 1-1520-240-23-6, 7-134.1 Flight Control Hydraulic Purification

TM 55-1730-229-12

CH-47-99-ASAM-02

Q: Is hydraulic fluid purification used by the US Air Force?

A: Yes. Air Force Instruction 21-101, section 14.7 states "All aircraft maintenance organizations shall perform hydraulic fluid purification IAW applicable aircraft guidelines."

Q: Is hydraulic fluid purification approved by Airbus?

A: Yes. Airbus Service Information Letter (SIL) 29-051 recommends the use of the Pall portable fluid purifier

Q: Is hydraulic fluid purification approved by Boeing?

A: Yes. Boeing has published a Service Information Letter (SIL) that concurs with the use of the Pall portable fluid purifier

Q: Is the Pall purifier NATO codified?

A: Yes. For the US military, there are two versions that are NATO codified:

Pall P/N	NSN	Description
PE0109012HW83	4330-01-588-8625	Latest purifier model. Added features include: tow bar, larger wheels, hose rack, forklift slots, retracting reel for electrical cord
PE0107812HW83	4330-01-522-2007	Original model

Q: Do you have a training program available?

A: Yes. A training & instruction disc is available upon request from your Pall representative.

Pall's technical support group can also provide commissioning and training services if required.

Q: Who do I contact for price and availability of purifiers and associated spares?

A: Inquiries via email: aerospace@pall.com



Pall PE0107812HW83 Portable Fluid Purifier



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¹Major Michael Boucher, AFRL/MLQE, paper titled "PURIFY AND REUSE WASTE AIRCRAFT HYDRAULIC FLUID"

²G. M. Fadel, E. B. Seaman, N. C. Werner, Joint Services Pollution Prevention Conference, San Antonio, TX, 1998



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