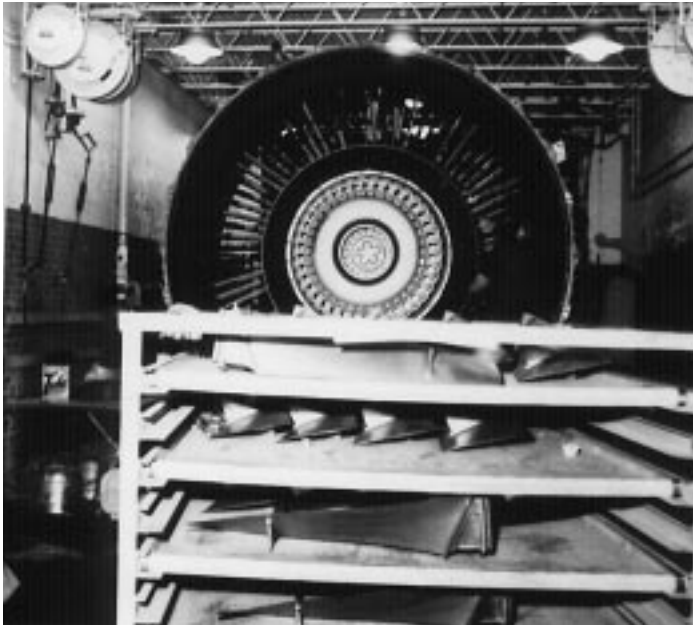


# APPLICATIONS PUMPS



## OPERATION:

In 1972 American Airlines installed two model 2500 CAT PUMPS for engine cleaning at its maintenance overhaul facility. These pumps clean over 40 engines per month.

The high pressure cleaning system has provided better cleaning in much less time than the old conveyor and dip method. The high pressure cleaning has reduced expenses by eliminating some of the special cleaning solutions and time necessary for soaking in these solutions. It has also saved money because of its dependable, low-maintenance operation.

The average engine requires a complete overhaul every 12,000 hours. This overhaul is a very complicated process and every part of the engine is given a thorough evaluation and rebuilding. Considering the average engine initially costs \$2.2 million dollars, the best in maintenance is essential. A good overhaul depends upon a thorough cleaning.

727, 747 and DC 10 engines are cleaned at this facility. Each engine is completely disassembled and may go through several cleaning processes in preparation for overhaul. These engines run on kerosene fuel. A soap solution and high pressure are used to remove the carbon build up from the kerosene fuel. In some cases of

## CLEANING AIRCRAFT ENGINES

File No. 131

Section 7

### PROBLEM:

Cleaning aircraft engines before repairing or rebuilding.

### SOLUTION:

Install a high pressure wash bay.

### SPECIFICATIONS:

CAT PUMPS Model (two) .....	*2500
Pressure .....	700 PSI
Flow (each) .....	22 GPM
Temperature .....	Ambient
Fluid .....	Soap solution wash and water rinse
Duty Cycle.....	Intermittent
Drive .....	Electric

\*Alternate CAT PUMP models 2520 and 3520.

### BENEFITS:

- Saves time and trouble when servicing engines.
- Easy, effective cleaning accomplished in 45 minutes.
- Pump provides dependable, low-maintenance cleaning operation.

unusually severe carbon buildup, a hot alkaline soak is also necessary.

Silicon is used as a sealant during assembly of engines. When the engine is disassembled for overhaul, the old silicon must be removed from the engine parts. High pressure cleaning is used along with a silicone stripper solution and soak.

On special carts, the engine parts are wheeled into a 300 x 600 foot cleaning bay. Four guns, each delivering 11 GPM at 700 PSI, apply the soap solution and rinse to the engine parts. A thorough cleaning before overhaul can be completed in just 45 minutes.

*“Customer confidence is our greatest asset”*

Products described hereon are covered by one or more of the following U.S. patents 3558244, 3652188, 3809508, 3920356, 3930756 and 5035580

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*The Pump with "Nine Lives"*

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