



Summarized Design Comparison Between Centrifugal/Rotary Purifier Versus Filter/Separator

Aircraft Appliances (AAE) was approached by the U.S Navy to replace existing Centrifugal Purifiers in the Lube Oil Purification System with Filter Separators. AAE's Study and testing eliminated the need for Centrifugal Separators in the Lube Oil Purification system of U.S. Navy vessels.

Item	Description	Centrifugal Purifier	AAE Filter Separator
1	Application	Uniform performance for any range of mixture JP-5. Lube Oil and Water	Maximum performance up to 40% of water contamination
2	Cost: a. Capital Equipment Installation and Support Equipment b. Maintenance Cost Annually c. Service and Contract	 \$400,000.00 \$60,000.00 \$6,000.00	 \$150,000.00 \$15,000.00 \$None
3	Storage and Disposal	Storage space depending on number of units. It varies but a minimum of 150 Cubic Feet	Storage space- Only for elements and Gaskets 20 Cubic Feet.
4	Power	10 Hp Motor and power consumed for heating hot water for flushing	Minimal needed for control panel.



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Item	Description	Centrifugal Purifier	AAE Filter Separator
5	Hot and Cold Water Supply	Yes	None Needed
6	Down Time for Maintenance (Annual)	2 Weeks	1 Day
7	Manpower Skill Requirement	High	Average
8	Weight	2,000 Lbs	1,800 Lbs