Package Filtration Systems



For Coolant Applications



Ebbco Package Filtration Systems Are A Complete Pre-Packaged Filtration System Designed To Install On Existing Equipment To Effectively Filter All Aqueous Solutions To 25 Micron. The Package Filtration System Or PFS Systems Are Designed Collect All Contaminated Into An Easy To Service Inexpensive Sludge Bag Capable Of Holding Up To 25lbs Of Sludge. These Systems Can Be Custom Designed To Fit Any Machines Tools, Grinders, Parts Washers, Cooling Towers Or Other Application To Provide Extended Coolant Life, Increased Tool Life And Reduce Part Rejection

Sequence of Operation:

The Package Filtration System Is Ready To Install, Independent Of The Existing Systems Flow. Contaminated Coolant Or Liquid Enters
The Systems through a Strainer Basket where larger particles are collected, fluid is Pumped Through The Separator. In The Separator
Liquid Enters The Unit Tangentially Setting Up A Circular Flow, particles are Drawn Through Tangential Slots, Accelerated Into a
Separation Chamber. Centrifugal Action causes the Heavier Particles to adhere to the perimeter of the separator and fall into the
separators collection chamber where they are Continually Purged Into A Sludge Receiver. Solids-Free Liquid Is Drawn Into The Vortex
Of The Separator and exits the vessel through the Separator's Outlet, clean fluid then returns to the machine through an in-tank
plumbing packaged designed to keep solids from settling in the machines tank.

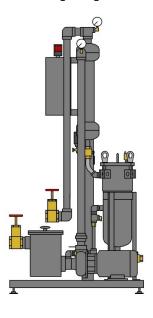
System Layout



PFS- Solids Removal

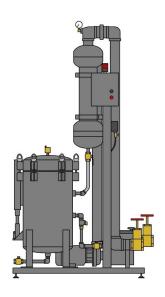
Light Solids Removal

Centrifugal Separator And Pump, Solids Collected In A Size One Single-Bag Vessel.



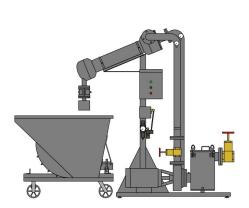
Medium Solids Removal

Centrifugal Separator And Pump, Solids Collected In A Size One Triple-Bag Vessel.



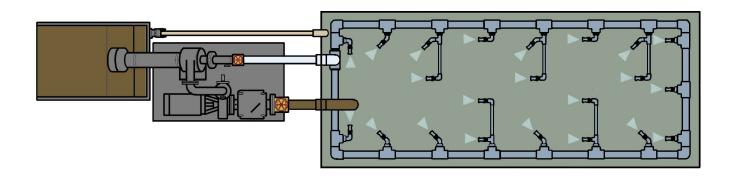
Heavy Solids Removal

Centrifugal Separator And Pump, Solids Collected In A Self-Dumping Hopper For Quick And Easy Removal.



Typical Installation

Contaminated Coolant Enters The System At The Strainer Basket And Is Pumped Through The Separator Where Solids 74-Micron And Larger Are Removed, Clean Coolant Returns To Circulate The Tank Through Eductors, Moving Particulate Toward Pump Suction.



PFS Series- System Sizing

The single most important factor in applying a package filtration system is proper sizing . The PFS can remove

contaminant from the system only if it is pumped through the PFS.. Sizing is attained by determining the square footage of the tank and by sweeping the bottom of the tank with the appropriate gallons per minute (GPM) of clean liquid. With this in mind the following guidelines must be used to assure successful application. Calculate the square footage of tank to be treated. Using the chart select the proper size system. This chart is recommended for liquid depths under four feet. Consult Ebbco for deeper tanks. All baffles and/or weirs must be removed from existing tank for proper PFS operation.

Model	Application of	System		Pump Size	System Flow
	Square Feet	Inlet	Outlet	(HP)	Rate: GPM
PFS-0075-B	Up to 3	1.5"	3/4"	1	10
PFS-0100-B	3 to 6	1.5"	1"	1	20
PFS-0125-B	6 to 9	2"	1.25"	2.5	30
PFS-0150-B	9 to 15	2"	1.5"	3	50
PFS-0200-B	15 to 21	3"	2"	5	70
		For High Solids Load	ing Applications		
PFS-0250-B	21 to 31	3"	2.5"	5	100
PFS-0301-B	30 to 36	3"	3"	7.5	150
PFS-0302-B	36 to 60	3"	3"	7.5	200
PFS-0303-B	60 to 100	3"	3"	10	250

Basic Systems

PFS Series

Standard Package Filtration System
Featuring Separator, Sludge Receiver
And Centrifugal Pump With Basket Strainer.

Sludge Holding Capacity: 25 lbs.



PFS-DS Series

For Heavy Sludge Applications, This Series Features Dual Sludge Receivers, Separator and Centrifugal Pump With Basket Strainer

Sludge Holding Capacity: 50 Gallons



PFS-C Series

For Tramp Oil Removal and Average Sludge Removal. This Series Feature Side-Stream Coalescing Chamber With Separator, Sludge Receiver, Centrifugal Pump With Basket Strainer.

Sludge Holding Capacity: 25 lbs

Oil Removal Capacity: Up to 6 gallons Per Bag



PFS-HS Series

For Severe Applications This Series features a Separator, 50 Gallon Sludge Tank and Centrifugal pump with Basket Strainer.

Sludge Holding Capacity: 50 Gallons



