# MATRIX FILTRATION

India Private Limited

# Hydraulic & Lube Filter

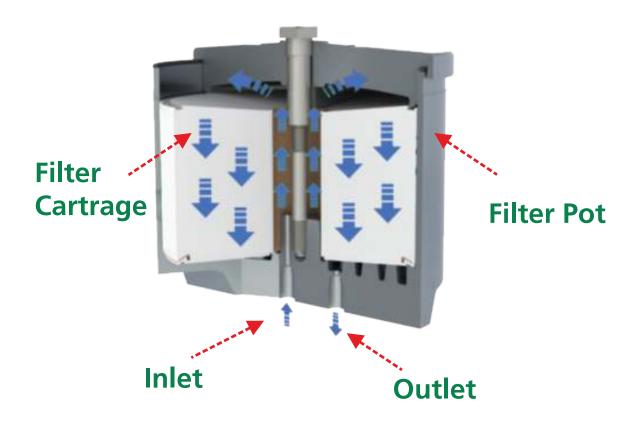


# **Operating Technology**

Our filter cartridge based on depth media filter and acts by absorbing water and particles in a continuous filtration process. The special cellulose fibers absorb free and dissolved water from the oils. This is formed either through the combustion process or by condensation.

Larger oil molecules are forced to pass between the different layers of the cartridge which removes up to 99.9% of water and contamination's. As the oil passes through the cartridge, minute particles of carbon, wear metals, silicon, varnish and oxidation residues are extracted from the oil by adhering to then many layers of the filter cartridge.

Removing water and particle contamination by continues flirtation- results the ageing effect of such catalysts are minimized. This enables the oil life to be extended.



#### **Filtration Level**

Our filter cartridge are designed for complete removal of particle contamination down to less than 1 Micron & moisture below 500 PPM, with viscosity range from 10 CST up to 680 CST, at the NAS-1638 Class 6 levels.



### We removes Sludge, Water, Solid Particles, from Hydraulic and Lube oils



Sludge- Varnish formed due to oxidation process



Water- Formed either through the combustion or condensation process



**Solid Particles- Enters from many ways in Hydraulic Systems** 









## After a few hour of operation oil will become as like as new oil.

Matrix Filtration System is a multi-purpose semi-automated oil filtration machine. This machine can be used to filter and maintain the industrial oils such as Hydraulic, Lube, Gear and Turbine oils and diesel type fuels. This machine can be permanently connected to large oil reservoirs and used as a mobile skid for small size oil tanks. With a wide range of filtration flow rates and viscosity from 10 CST upto 680 CST, it is suitable for various applications in different industries.

#### **Features**

Matrix Filtration System maintains the lube oil including hydraulic and turbine oils at NAS 6 or better.

Removes contaminations down to less than 1 Micron.

Maintains the rate of contamination removal higher than it is getting generated and is applicable to various viscosity grades upto 680 CST in different applications.

Prevents contamination related failures of bearing and servo valves.

This filtration system helps Extends oil life and maintained all oil properties.

Its retards regeneration of continuous wears and hence improves machine Reliability and Productivity.

Matrix Filtration System can also be used for recycling oil used in flushing applications.



# **Technical Details.**

Model Number	Suitable	Water Retention/ Per cartridge*	Flow Rate/ Per Hour*	Electrical Motor	Dimensions MM
MFS/Single Filter	Upto 2,500 Ltrs Tank	1.Kg	600 - LPH	HP-0.5 Volt- 415 Phase-3. RPM- 1450	900X500X500
MFS/Double Filter	Upto 5000 Ltrs Tank	1.Kg	800 - LPH	HP-0.5 Volt- 415 Phase-3. RPM- 1450	900X500X500
MFS/Four Filter	Upto 10000 Ltrs Tank	1.Kg	1200 - LPH	HP-0.5 Volt- 415 Phase-3. RPM- 1450	900X750X750

## **Matrix Filter Cartridge**

Model Number	Suitable	Water Retention*	Dimensions	Micron Rating*		
MFC-100	All MFS Models	1.Kg	D- 200 H -115	1 Micron(Absolute)		

#### NAS GRADE(National Aerospace Standard 1638):

NAS grade is widely adopted standard to measure the contamination degree of hydraulic oil

Particle Size(n')	NAS GRADE(n' of particules in 100 ml)											
	1	2	3	4	5	6	7	8	9	10	11	12
5-15	500	1.000	2.000	4.000	8.000	16.000	32.000	64.000	128.000	256.000	512.000	1.024,000
15-25	59	178	356	712	1.425	2.850	5.700	11.400	22.800	45.600	91.000	182.400
25-50	16	32	63	126	253	506	1.012	2.025	4,050	8.100	16.200	32.400
50-100	3	6	11	22	45	90	180	360	720	1.440	2.880	5.760
>100	1	1	2	4	8	16	32	64	128	256	512	1.024

**Matrix Filter** 



# MATRIX FILTRATION

India Private Limited

Add:No-140, Near DAV Public School, Khandsa Road Gurgaon Haryana. INDIA E-mail:info@matrixfiltration.com

web:www.matrixfiltration.com