



Triple R

VR Series



Features

- Remove 99% of solid particles, absorb water, eliminate sludge, varnish, soot, carbon and other oil oxidation products
- Stand alone system can operate independent of main system
- Integrated 9kW chiller
- Counter flow heat exchanger to reduce temperature differential in operating fluid

Benefits

- Increase Hydraulic Component and oil life through optimised oil conditioning
- Reduce operating cost by reducing oil consumption, and waste oil while extending full flow filter life
- Reduce machine downtime by allowing safe element change while system is operating
- Increase oil life by up to 40,000 hours
- Simple installation and servicing procedure
- Increase full flow filter life

Accessories and Options



Aqua Sensor

Monitor water level in oil for early indication of breather bypass of heat exchanger failure.



Particle counter

Particle counters can be added to any Triple R filter to monitor the cleanliness of incoming oil in order to trend system condition.



Oil Monitor Sensor

Monitor key oil statistics such as; particle count (ISO 4406:2017), wear particle recognition, water content, temperature and oil oxidation.



Remote monitoring and recording

Monitor the current condition and past trends of your oil to predict and prevent unplanned down-time.



Tank Adaptor Kit

Adapts for standard tank filler/ breather connection to inlet/outlet and desiccant breather connection point.



Installation and Service Plans

Plans to help you install and maintain the product for its life.



Varnish

Origin and causes

Varnish is the accumulation of oil oxidation and degradation compounds on machine surfaces or components. It has many possible root causes, including; high temperatures, electrostatic discharge, lubricant degradation and microdieseling.

Initially, varnish is hard to diagnose as it is 100% dissolved in oil. Once varnish reaches a saturation point, impurities begin to accumulate on metal surfaces due to their polar nature.

Over time, varnish can cause many issues that reduce system performance including valve sticking, lubricant flow restriction, reduce heat rejection and clogged filters.

RRR Filtration Technology

Triple R filters are constructed from specially engineered cellulose media, wound around a central supporting core.

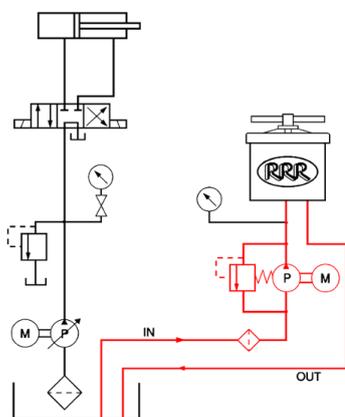
The combination of Triple R's special cellulose material and the thickness of the element allows absorbing of water and sludge.

The lower part of the element is compressed by a cardboard ring, creating an even finer final filter medium.

Sizing and Installation

Typical Installation

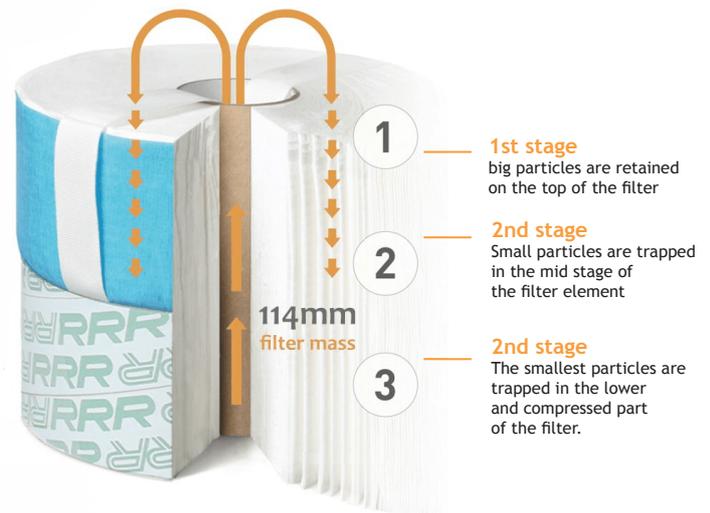
Connection to existing reservoir.



Removal

The solubility of oil is directly related to oil temperature; warmer oil will hold more polar molecules in solution. Both varnish products and water are polar molecules.

The VR series filter cools oil to below 20°C, to shift polar substances from solution to suspension. The molecules are then passed through 114mm of polar, cellulose media, which attracts the varnish contamination and absorbs the water molecules.



Tank Capacity	Unit Size			
	140	250	480	720
600L				
1200L				
2,400L				
3,600L				

^Based on tank capacity in typical hydraulic power unit applications. Suitability will vary depending on application.





Model Code

CS-VR-SU103-1R-4.1-A-xxx

Model:

OSCA = Offline filter system

Series:

VR = Varnish Removal

Housing:

- SU102 = Stainless two-element housing
- SU103 = Stainless three-element housing
- SS102 = Steel two-element housing
- SS103 = Steel three-element housing
- AL100 = Aluminium single-element housing
- SS305 = Steel five-element housing

Modification:

- Blank = No Modification
- xxx = Special Version

Power:

A= 3 phase 415VAC, 50 Hz

Flow Rate:

- 130 = 138 L/Hour
- 240 = 246 L/Hour
- 480 = 480 L/Hour
- 720 = 720 L/Hour

No. of Housings:

- 1R = 1 Housings
- 2R = 2 Housings
- 3R = 3 Housings

Spare Filter Elements



	D-Series
Absolute Rating	3µm
Filtration Efficiency	B ³ > 458
Media	Cellulose
Fluid	Hydraulic & Lube oils
Features	High dirt holding
Size 100-H114	TR-20000
Size 300-H114	TR-20515



Custom Solutions Available





Triple R

VR Series



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