



## SVR™ PRODUCT BULLETIN

Industry-leading solution for removing and preventing lubricant varnish

SVR IS THE FIRST OF ITS KIND, ENGINEERED LUBRICANT CONDITIONING SYSTEM, DESIGNED TO PROTECT AND MANAGE LUBRICANT LIFE AND SYSTEM RELIABILITY.

Utilizing ICB™ purification filters, SVR goes beyond solid contamination removal, hyper-focused on the root cause of lubricant failure; dissolved oxidation material. As a result of managing oxidation material, lubricant breakdown and additive consumption decrease significantly, mitigating equipment related failure.



cleanoil.com | 1-800-256-4003 | 1-403-246-3044 | #17 3900 -106th Ave. SE Calgary, AB T2C 5B6 Canada

Rethink. Remove. Restore.

## MAINTAIN LUBRICANT SOLVENCY

Common practices misunderstand lubricant varnish. It is seen as an oil quality issue. The truth is, all lubricants form dissolved breakdown products. If this is allowed to accumulate, the lubricants capacity to hold dissolved oil breakdown products is exceeded.

## SVR FEATURES AND BENEFITS

- Quickly reduces and prevents servo valve sticking
- Restores normal MPC varnish potential and acid number (TAN/AN)
- Proven protection against solid and dissolved varnish
- Significantly reduces solid contamination
- Works all the time including operating conditions when varnish is dissolved in the oil
- Eliminates the varnish formation cycle that typically occurs when the oil cools during turbine shut down
- Engineer approved system designed to facilitate rapid approval and deployment
- Very low maintenance and time requirement – turn it on and let it run
- Low cost of ownership and operation

## SVR INCLUDES

- EPT Clean Oil's industry leading ICB™ filter purification technology to remove soluble contaminants including acids and dissolved metals
  - One complete set of filters are included with SVR purchase
- Fluid Technical Center support until results are documented
- 3-year warranty on all parts

During normal turbine operation, EPT Clean Oil's SVR™ - Soluble Varnish Removal system, permanently removes and prevents the accumulation of dissolved breakdown products. This prevents harmful varnish deposits from ever forming.



cleanoil.com | 1-800-256-4003 | 1-403-246-3044 | #17 3900 - 106th Ave. SE Calgary, AB T2C 5B6 Canada

## SVR SYSTEM SPECIFICATIONS

	SVR 150	SVR 300	SVR 600	SVR1200	SVR 2400
<b>Dimension LxWxH</b>	120 x 79 x 102 cm 47" x 31" x 40"	120 x 79 x 148 cm 47" x 31" x 58"	122 x 66 x 102 cm 48" x 26" x 40"	122 x 66 x 148 cm 48" x 26" x 58"	178 x 76 x 148 cm 70" x 30" x 58"
<b>Weight</b>	159 kg / 350 lb	181 kg / 400 lb	201 kg / 550 lb	273 kg / 600 lb	454 kg / 1000 lb
<b>Connections Inlet/Outlet FNPT:</b>	1.0" / 1.0"	1.0" / 1.0"	1.5" x 1.0"	1.5" / 1.0"	2.0" x 1.5"
<b>Reservoir Volume</b>	1600 L / 420 gal	3200 L / 845 gal	6400 L / 1690 gal	20000 L / 5280 gal	40000 L / 10560 gal
<b>Operating Temperature</b>	86°F to 176°F (30°C to 80°C)				
<b>Flow Rate *</b>	2.0 lpm / 0.5 gpm	4.0 lpm / 1.0 gpm	8.0 lpm / 2.0 gpm	16.0 lpm / 4.0 gpm	32.0 lpm / 8.0 gpm
<b>Reservoir Exchange Rate/24 hr</b>	1.8x	1.8x	1.8x	1.44x	1.44x
<b>Electrical Options</b>	115VAC / 1Ph / 60Hz (General Purpose) is standard. Other electrical options are available. Explosion Proof (Class I, Div I and Div II) options are available.				
<b>Current</b>	13.2 Amps (at 115VAC / 1Ph / 60Hz)				
<b>Fluid Compatibility</b>	Petroleum and mineral based fluids only (standard). For phosphate ester and other specified synthetic fluids, see additional SVR PE and SVE Aero.				

\*For normal lubricant maintenance, the desirable flow rate is to exchange the fluid reservoir volume 1 – 2x per day. For recovery projects, higher exchange rates are desired.

Note: Using the above sizing, 80% of sites are typically restored with 2 sets of filters with a replacement interval of 6 weeks. The clean-up or restoration period is typically 3 – 4 months. Heavily contaminated sites normally require 3 sets of filters with a replacement interval of 1 month. After lubricant restoration is complete, the normal fluid maintenance mode requires that filters are replaced annually. All installations include detailed monthly analysis until clean-up period is complete. See SVR™ Case Studies for additional information.

cleanoil.com | 1-800-256-4003 | 1-403-246-3044 | #17 3900 -106th Ave. SE Calgary, AB T2C 5B6 Canada



CLEANOIL.COM

SVR, TMR and ICB are trademarks of EPT Clean Oil.  
© EPT Clean Oil 2020



# SVR™: SOLUBLE VARNISH REMOVAL SYSTEM

Industry-leading solution for restoring and maintaining lubricant life and system reliability

## OVERVIEW

SVR™ is the first of its kind, engineered lubricant conditioning system, designed to protect and manage lubricant life and system reliability. Utilizing ICB™ purification filters, SVR goes beyond solid contamination removal, hyper-focused on the root cause of lubricant failure; dissolved oxidation material. As a result of managing oxidation material, lubricant breakdown and additive consumption decrease significantly, mitigating equipment related failure.



## SVR FEATURES AND BENEFITS

R&O OIL TURBINE AND COMPRESSOR	PE HYDRAULIC FLUID EHC*	AVIATION LUBRICANTS*
Quickly reduces and prevents servo valve sticking	Quickly reduces and prevents servo valve sticking	Quickly reduces acid number (TAN/AN), extending lubricant replacement interval
Restores normal MPC varnish potential, acid number (TAN/AN) improves demulsibility**	High acid removal capacity	Removes soluble contaminants including coking precursors
Proven protection against solid and dissolved varnish	Significantly improves fluid resistivity	Protects hydraulic variable geometric control systems resolving issues when speed changes occur
Significantly reduces solid contamination	Significantly reduces solid contamination	Significantly reduces solid contamination

\* For EHC and Aviation fluids, the SVR can be combined with the TMR™ N<sub>2</sub>, an engineered nitrogen generation system designed to remove water and oxygen within atmospheric breathing lubricant reservoirs. Through total moisture removal, TMR N<sub>2</sub> manages factors that accelerate oxidation, lowering the rate of lubricant breakdown, reducing maintenance requirements and extending lubricant life.

\*\* Several factors drive demulsibility. Initial testing is required by EPT Clean Oil to confirm results.

cleanoil.com | 1-800-256-4003 | 1-403-246-3044 | #17 3900 -106th Ave. SE Calgary, AB T2C 5B6 Canada

Rethink. Remove. Restore.

SVR, ICB and TMR are trademarks of EPT Clean Oil. © EPT Clean Oil 2020