



SVR® GT1 / XT1 PRODUCT BULLETIN

Target the root cause of lubricant-failure, eliminate varnish, and extend oil life up to 2-3x.

MEET THE NEW & IMPROVED SVR®

THE INDUSTRIES TOP VARNISH REMOVAL AND LUBRICANT CHEMISTRY MANAGEMENT SYSTEM NEXT GENERATION IS HERE.

20-50% more capacity than previous models

Certified stainless steel pressure vessels

From the first day a lubricant is put into service, it begins to accumulate dissolved oxidation by-products – the feedstock of varnish, constraining the life of the oil. These oxidation by-products accumulate until the lubricant has no remaining capacity, forcing any excess into insoluble material. Based on polarity, this insoluble material is more attracted to mechanical surfaces than the oil itself, creating a pathway for varnish formation.

SVR® 600, backed by patented, ICB® ion-exchange filters, reverses the varnish formation process, restoring lubricant quality and eliminating varnish deposits in the system.

By operating the SVR continuously, varnish formation becomes impossible, as varnish pre-cursors are more attracted to the ICB filter than the mechanical surfaces.

The result: the acid number never increases, MPC never increases, and oil performance is consistent throughout its lifecycle. Additive life is also extended as the secondary reactions with accumulated oxidation by-products that would otherwise occur are eliminated, significantly extending lubricant life.



SVR® QUICK REFERENCE GUIDE

SVR 600 GT1 MODEL SHOWN

ICB® vessel crane post

Top loading ICB vessel with 2 filters stacked

ICB vessel pressure gauge

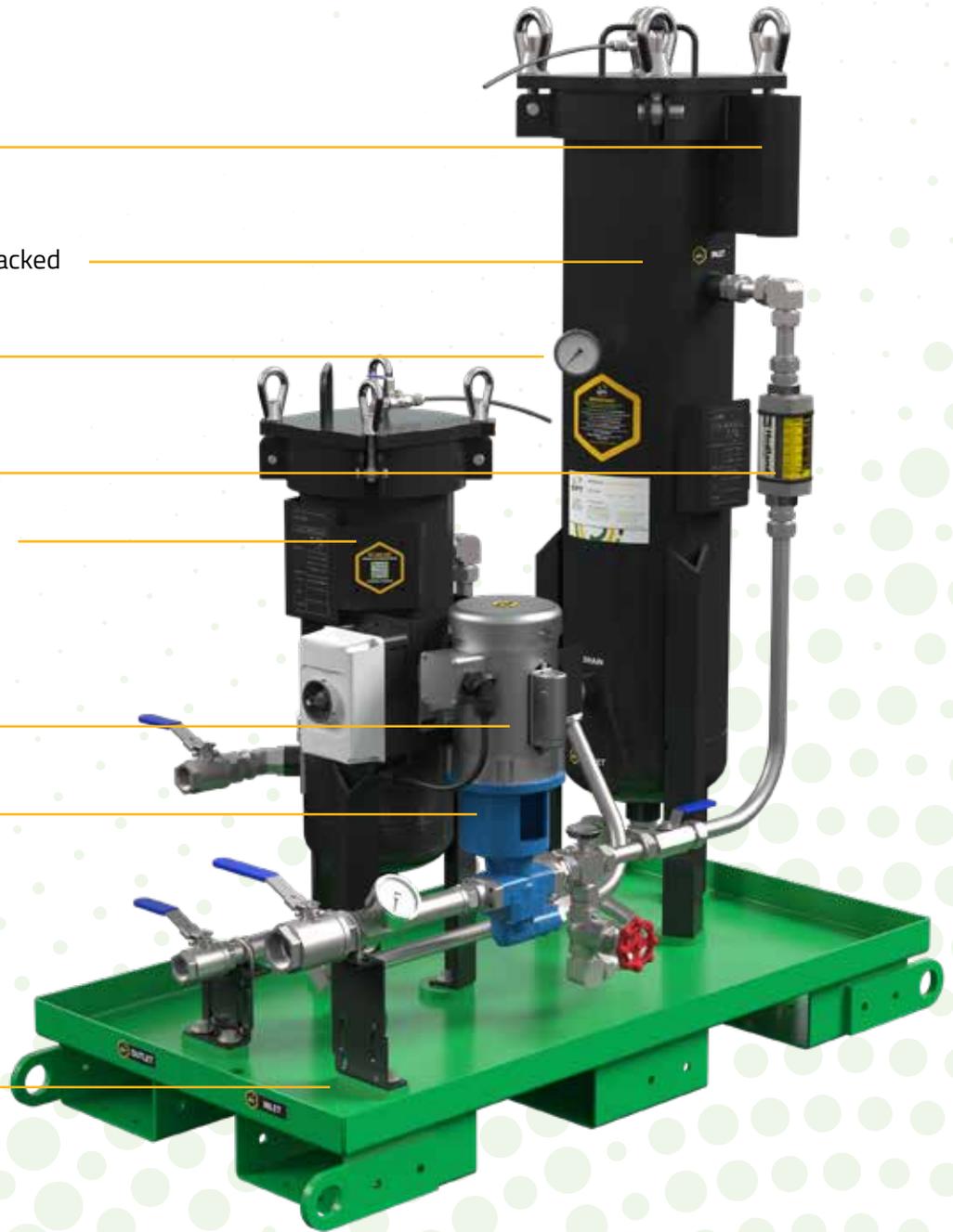
ICB vessel flow control meter

High efficiency particulate filter vessel

Electric motor

Gear pump

Steel retention tray with fork guides



SVR INCLUDES

- One set of patented ICB ion-exchange and high-efficiency particulate filter(s)
- EPT Clean Oil Fluid Technical Center oil analysis and reporting until results are documented
- Dedicated online training, commissioning resources and warranty registration
- Engineer approved system manufactured to ISO 9001 standards, designed to facilitate rapid approval and deployment
- Very low maintenance and time requirements – turn it on and let it run
- Certified stainless steel pressure vessels
- No downtime - SVR can be installed without an outage

SVR® SPECIFICATIONS

| | | Height | Length | Width | Weight |
|----------------------------------|---------------------|---|--------------|---|--|
| Dimensions | SVR 600 | 60" (153 cm) | 48" (122 cm) | 26" (66 cm) | 475 lbs (215 kg) |
| | SVR 1200 | 62.4" (158 cm) | 48" (122 cm) | 26" (66 cm) | 540 lbs (245 kg) |
| Connections | SVR 600 SVR 1200 | Inlet | | Outlet | |
| | | 1.5" FNPT with locking ball valve | | 1" FNPT with locking ball valve | |
| Max Reservoir Size | | Mineral Oil | | Synthetic Oil | |
| | SVR 600 | 4,300 gal 16,400 L | | 1,500 gal 5,500 L | |
| | SVR 1200 | 7,200 gal 27,000 L | | 2,400 gal 9,100 L | |
| Seals | SVR 600 SVR 1200 | Fluorocarbon + Silicone | | | |
| Operating Temperature | SVR 600 SVR 1200 | 86°F to 176°F 30°C to 80°C | | | |
| Materials of Construction | SVR 600 SVR 1200 | Vessels | | Tray | Fittings |
| | | ASME Rated/ CRN Certified Stainless Steel 304 Pressure Vessels | | Carbon steel with 2-part epoxy and chemical resistant powder coating | Stainless steel instrumentation fittings |
| Electric Motor | SVR 600 SVR 1200 | TEFC, 56C Frame 1HP, 1450-1760 RPM | | | |
| Motor Starter | SVR 600 SVR 1200 | Impact resistant plastic enclosure. NEMA 12 / IP65 Rated | | | |
| Pump | SVR 600 SVR 1200 | Cast Iron, PD Spur gear, Internal Relief, Lip Seal, Maximum inlet pressure 15psi (1bar) | | | |
| Flow Rates | SVR 600 | System Flow Rate 8.4-10.2GPM Particulate Removal (Fixed) ICB® Vessel 3.0 gpm 12.0 lpm MAX | | | |
| | SVR 1200 | System Flow Rate 8.4-10.2GPM Particulate Removal (Fixed) ICB® Vessel 5.0 gpm 19.0 lpm MAX | | | |
| Media Description | SVR 600 SVR 1200 | ICB® Filter | | CVR™ High Efficiency Particulate Filter | |
| | | Patented ion-exchange filters to reverse the varnish formation process through lubricant chemistry management, removing acids, varnish deposits, soluble oxidation by-products and dissolved contamination from mineral based and phosphate ester turbine oil. | | β1(c) ≥ 1,000 Particulate and Varnish Removal Other options available including Steam Turbine Applications. Email support@cleanoil.com for more information. | |
| Electrical Options | SVR 600 SVR 1200 | 115VAC / 1Ph / 60Hz (General Purpose) is standard. Other electrical options are available. Explosion Proof (Class I, Div I, Group C+D) options are available. Email support@cleanoil.com for IECEx, ATEX or other requirements. | | | |
| Fluid Compatibility | SVR 600 SVR 1200 | Petroleum and mineral based fluids, aeroderivative turbine oil, phosphate ester and other synthetic fluids. | | | |



LUBRICANT CHEMISTRY MANAGEMENT

IT'S EASIER TO CHANGE A FILTER
THAN A SERVO VALVE OR BEARING

- Eliminate varnish at the molecular level preventing the oil from becoming saturated and forming varnish deposits
 - Maintain consistent fluid quality and performance
- Restore acceptable MPC varnish potential (ASTM D7843-21)
- Manage fluid life with as little as 5% annual top up
- Create potential for fluid life to be extended for the life of the turbine
- Avoid flushing and related downtime
 - Eliminate need for expensive after-market additives

Want to find out more? Be in touch.

cleanoil.com | sales@cleanoil.com
+1 403 246 3044



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

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