



SVR® RO PRODUCT BULLETIN

Safe and Proven Solution for
Preventing Lubricant Varnish.



LUBRICANT CHEMISTRY MANAGEMENT



SVR® RO IS A SKID-MOUNTED DIALYSIS-STYLE LUBRICANT CONDITIONING SYSTEM THAT TARGETS THE UNDERLYING CAUSE OF LUBRICANT FAILURE BY MANAGING CHEMISTRY FULL-TIME.

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 their polarity, this insoluble material is more attracted to metal surfaces, creating solid varnish – a common failure mechanism.

SVR RO, backed by patented, ICB® RO, removes dissolved oxidation material continuously, eliminating the molecules that should not be in the oil and the root cause of varnish during regular turbine operation. 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 RO FEATURES AND BENEFITS

- Eliminates varnish at the molecular level preventing the oil from becoming saturated and forming varnish deposits
- Maintains consistent fluid quality and performance
- Restores acceptable MPC varnish potential (ASTM D7843-21)
- Manages fluid life with as little as 5% annual top up
- Creates potential for fluid life to be extended for the life of the turbine
- Avoids flushing and related downtime
- Eliminates need for expensive after-market additives
- Engineer approved system designed to facilitate rapid approval and deployment
- Manufactured to ISO 9001 standards
- Very low maintenance and time requirements – turn it on and let it run
- **No downtime - SVR can be installed without an outage**

SVR RO INCLUDES

- One set of patented ICB RO filter(s) and mechanical filter(s)
- EPT Clean Oil Fluid Technical Center oil analysis and reporting until results are documented
- Dedicated online training, commissioning resources and warranty registration

1

The SVR uses patented ICB ion-exchange technology to provide a chemistry solution for a chemistry problem™: oil breakdown. SVR has been tested and proven worldwide on thousands of critical assets.

2

Extends lubricant life 2-3x by removing and preventing the accumulation of chemical breakdown materials. In doing so, SVR mitigates the risk of costly failures and avoidable production losses.

3

Designed to facilitate rapid deployment without downtime, maintaining consistent and ideal fluid quality, and performance full-time.



SVR SYSTEM SPECIFICATIONS

| | SVR 150 | SVR 300 | SVR 600 | SVR 1200 |
|--|---|--------------------------------------|--------------------------------------|--------------------------------------|
| Dimension LxWxH | 122 x 66 x 104 cm 48" x 26" x 41" | 122 x 66 x 137 cm 48" x 26" x 54" | 122 x 66 x 155 cm 48" x 26" x 61" | 122 x 66 x 160 cm 48" x 26" x 63" |
| Weight | 165 kg / 363 lb | 181 kg / 400 lb | 201 kg / 550 lb | 273 kg / 600 lb |
| Connections Inlet/ Outlet FNPT: | 1.0" / 1.0" | 1.0" / 1.0" | 1.5" x 1.0" | 1.5" / 1.0" |
| Reservoir Volume | 2,870 L / 758 gal | 5,740 L / 1,516 gal | 16,278 L / 4,300 gal | 27,255 L / 7,200 gal |
| Operating Temperature | 86°F to 176°F / 30°C to 80°C | | | |
| ICB Flow Rate * | 2.0 lpm / 0.5 gpm | 4.0 lpm / 1.0 gpm | 8.5 lpm / 2.5 gpm | 19.0 lpm / 5.0 gpm |
| Reservoir Exchange Rate/24 hr | 1.8x | 1.8x | 1.8x | 1.44x |
| Electrical Options | <ul style="list-style-type: none"> ▪ General Purpose with 50 Hz and 60 Hz electrical voltage options ▪ CSA Class 1 Div 1 Group C&D with 50 Hz and 60Hz electrical voltage options ▪ CSA Class 1 Div 2 Group A, B, C & D with 50 Hz and 60 Hz electrical voltage options <p>IECeX and ATEX-approved configurations are available. Please get in touch with us for more information.</p> | | | |
| Current | 13.2 Amps (at 120 VAC / 1Ph / 60Hz) | | | |

* 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.

