EPT™
CLEAN OIL

LUBRICANT CHEMISTRY MANAGEMENT

SVR® JET PRODUCT BULLETIN

Protect your aeroderivative turbine application with a bulletproof vest.

SVR® JET IS A SKID-MOUNTED, DIALYSIS-STYLE LUBRICANT CONDITIONING SYSTEM ENGINEERED TO REMOVE VARNISH, COKING PRE-CURSORS AND PARTICULATE.

Coking is a failure mechanism that will affect most aeroderivative turbines in their operating life leading to premature mechanical overhauls and production losses. Coke begins as a dissolved oxidation by-product produced by high temperatures, water content and entrained oxygen before converting to a solid form and depositing on metal surfaces. Existing oil analysis and maintenance programs do not consider this contamination leading to high acid numbers, coking or varnish deposits, and shortened oil life.

SVR JET, backed by patented ion-exchange technology, ICB® JET, manages Acid Number so that jet lubes no longer have to be condemned on this basis. When combined with our TMR® N2 water removal system, atmospheric water ingression is eliminated, dissolved oxygen is removed, and surface contact with oxygen in the lube oil tank is prevented, severely restricting oil breakdown.

The combined approach of dissolved contaminant filtration and removing oxygen and water offers a comprehensive step-change in jet lube maintenance, allowing aeroderivative turbine users to maintain oils in ideal operating conditions.

SVR JET FEATURES AND BENEFITS

- Utilizes patented ICB JET ion-exchange technology with over 30 million successful operating hours
- Removes dissolved oxidation by-products, or coking precursors, which are the feedstock from which all coking deposits are formed, breaking the lubricant deposit formation cycle, protecting bearings and other critical components
- Selectively removes acids and stabilizes the acid number providing optimal lubricant quality throughout the lubricant lifecycle while protecting crucial mechanical components
- Protects hydraulic variable geometric control systems from sticking
- Resolves known issues when speed changes occur
- Protects against compressor surges and catastrophic engine failure
- TMR N2 generates high purity nitrogen from a standard compressed air source to blanket the oil reservoir removing water and eliminating contact with oxygen, protecting the lubricant and eliminating catalysts that contribute to oxidation
- Quickly removes and maintains low water levels without consumable elements
- Quickly reduces entrained oxygen and promotes dissolved gas removal
- Eliminates the primary ingression pathway for water and metal contamination, thereby promoting chemical stability of the lubricant and reducing maintenance requirements
- Reduces ISO particle counts, protecting and extending roller element bearings' trouble-free operating window
- **No downtime - SVR can be installed without an outtage**

SVR JET INCLUDES

- One complete set of EPT Clean Oil's patented ICB JET and mechanical post filter's
- Fluid Technical Center support until results are documented
- 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.

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	SVR SYSTEM SPECIFICATIONS		
	SVR 150	SVR 300	SVR 600
Dimension LxWxH	1122 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"
Weight	165 kg / 363 lb	181 kg / 400 lb	201 kg / 550 lb
Connections Inlet/ Outlet FNPT:	1.0" / 1.0"	1.0" / 1.0"	1.5" / 1.0"
Reservoir Volume	960 L / 253 gal	1,912 L / 505 gal	5,680 L / 1,500 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
Reservoir Exchange Rate/24 hr	5.7x	6.8x	10x
Acid Reduction Per Filter Set	0.18	0.36	0.90
Electrical Options	▪ 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 IECeX and ATEX-approved configurations are available. Please get in touch with us for more information.		
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.

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