EPT™
CLEAN OIL

LUBRICANT CHEMISTRY MANAGEMENT

SVR® GT1 / XT1 PRODUCT BULLETIN

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

THE INDUSTRIES TOP VARNISH REMOVAL AND LUBRICANT CHEMISTRY MANAGEMENT SYSTEM JUST GOT IMPROVED. 20-50% MORE CAPACITY THAN PREVIOUS MODELS AND 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 their polarity, this insoluble material is more attracted to metal surfaces, creating solid varnish – a common failure mechanism.

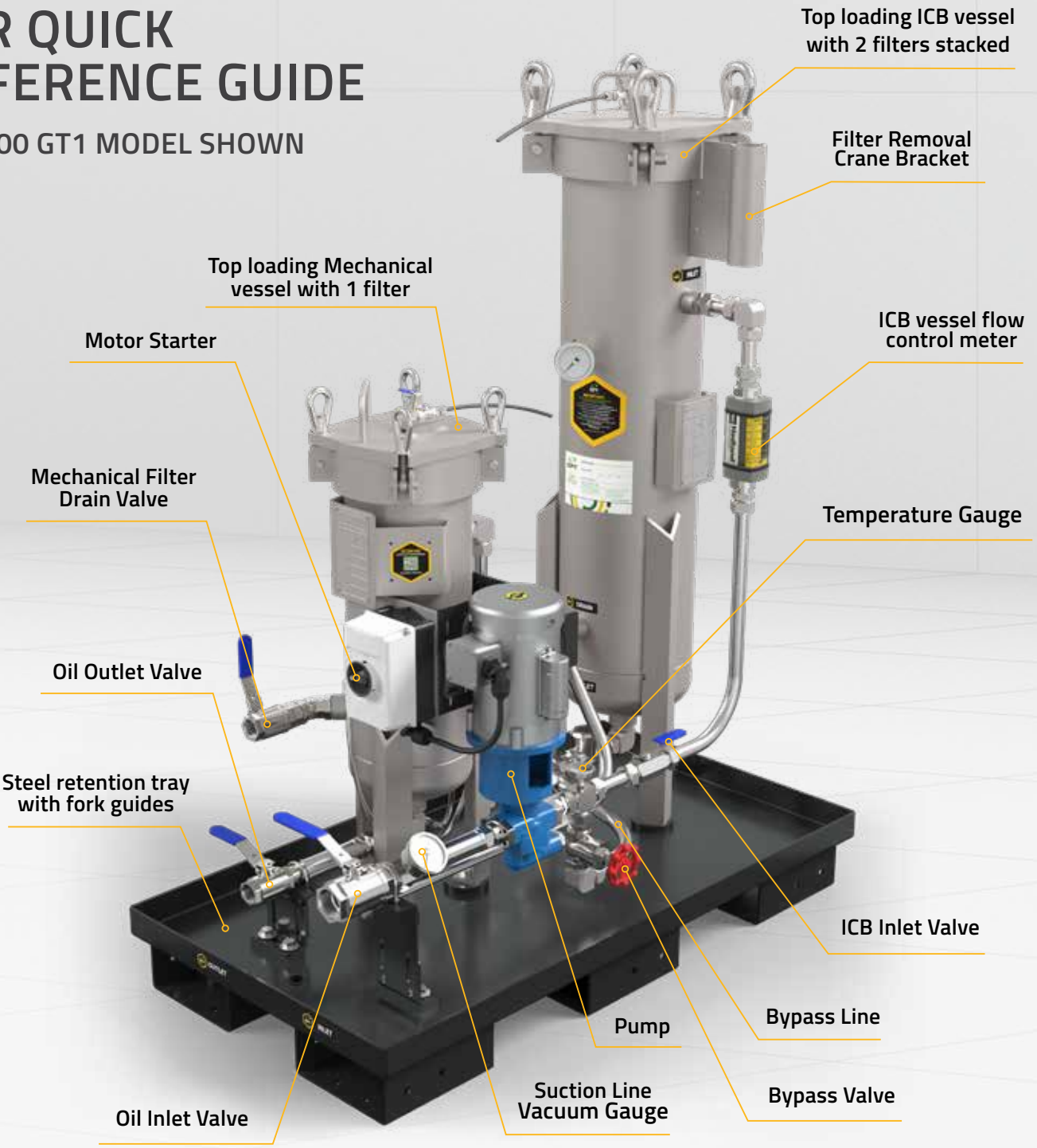
SVR®, backed by patented, ICB® ion-exchange technology, removes dissolved oxidation material continuously, eliminating the molecules that should not be in the oil and the root cause of varnish during regular turbine operation. The result: the acid number never increases, MPC never increases, and oil 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 LUBRICANT CONDITIONING SKIDS INCLUDE

- 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
- 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 outtage

SVR QUICK REFERENCE GUIDE

SVR 600 GT1 MODEL SHOWN



	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
Flow Rates	System Flow Rate 8.4-10.2GPM Particulate Removal (Fixed) ICB® Vessel 2.0 lpm / 0.5 gpm MAX	System Flow Rate 8.4-10.2GPM Particulate Removal (Fixed) ICB® Vessel 4.0 lpm / 1.0 gpm MAX	System Flow Rate 8.4-10.2GPM Particulate Removal (Fixed) ICB® Vessel 3.0 gpm / 12.0 lpm MAX	System Flow Rate 8.4-10.2GPM Particulate Removal (Fixed) ICB® Vessel 5.0 gpm / 19.0 lpm MAX

	ALL SVR SYSTEMS		
Seals	Fluorocarbon + Silicone		
Operating Temperature	86°F to 176°F | 30°C to 80°C		
Materials of Construction	**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	TEFC, 56C Frame / 1HP, 1450-1760 RPM		
Motor Starter	Impact resistant plastic enclosure. NEMA 12 / IP65 Rated		
Pump	Cast Iron, PD Spur gear, Internal Relief, Lip Seal, Maximum inlet pressure 15 psi (1 bar)		
Media Description	**ICB® Filter**	**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.	ß1(c) ≥ 1,000 Particulate and Varnish Removal Other options available including Steam Turbine Applications. Email **support@cleanoil.com** for more information.	
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.		
Fluid Compatability	Petroleum and mineral based fluids, aeroderivative turbine oil, phosphate ester and other synthetic fluids.		

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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.
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