



# ICB® RO PRODUCT BULLETIN



**Meet ICB® RO.** Safe, reliable and cost-effective chemistry solution for in-service rust and oxidation inhibited oils focused on the root cause of varnish formation: oxidation.

## OVERVIEW

Rust and oxidation inhibited oils, also known as R&O oils or Turbine oils, are designed for use in turbines, compressors and other rotating applications. Offering outstanding lubricating properties, these lubricants break down due to oxidation, creating dissolved contaminants from day one. These dissolved oil breakdown products accumulate until they saturate the oil, forming varnish.

ICB RO, patented ion-exchange technology, continuously removes varnish precursors and dissolved breakdown products. Rather than waiting for these oxidation products to cause harm, ICB RO breaks the accumulation cycle, eliminating the root cause of varnish formation and improving lubricant performance.

## ICB RO FEATURES AND BENEFITS

- Removes and prevents all forms of varnish (solid and dissolved)
- Removes dissolved breakdown molecules that are formed as part of standard equipment operation, preventing the varnish formation cycle from starting
- Reverses the varnish formation cycle, restoring lubricant solvency and removing varnish deposits via chemical equilibrium



- Prevents varnish related bearing and servo valve failures
- Reduces MPC values and keeps them low
- Manages the fluid chemistry, minimizing the impact of oxidation, decreasing anti-oxidant additive consumption rates and extending the lubricant life
- Does not affect turbine oil additives
- Creates a trouble-free operating environment with predictable outcomes and costs
- Maintains oil condition standards required by ASTM D4378: Standard Practice for In-Service Monitoring of Mineral Turbine Oils for Steam, Gas and Combined Cycle Turbines

## YOU ARE ONE STEP CLOSER TO TROUBLE-FREE OPERATION

Submit an oil sample today to get a comprehensive, ASTM D4378-compliant understanding of your in-service oil's condition and the remaining lifetime so that it can be aligned with future maintenance windows and proactive strategies for optimization. We take the routine out of oil analysis, providing a complete picture of your R&O Turbine Oil condition.

From advanced testing to the expert interpretation of results, our team of professional and Ph.D chemists are here to provide the data you need to make informed decisions about your critical assets. You can expect more when you partner with our Fluid Technical Center.

### Our Gas and Steam Turbine Lube Oil test package, applicable for rust and oxidation inhibited oils includes:

- MPC Varnish Potential ▪ Acid Number ▪ Fluid Color
- Viscosity (40°C) ▪ Water ▪ ISO Particle Count ▪ Dissolved Metals
- Antioxidant Levels ▪ Demulsibility (Steam Turbine Lube Oils)

Our Fluid Technical Center reported analysis and results will be utilized to determine ICB RO sizing and a complete lubricant treatment plan inclusive of ICB RO filter change out intervals to achieve lubricant stability.

