#### **PRODUCT DESCRIPTION**

Finnexx Ornitho TO R&O is a premium quality, inhibited turbine oil formulated from highly refined base stocks and special rust, oxidation and foam inhibitors.

#### **CUSTOMER BENEFITS**

# Prolonged oil service life

The superior oxidation stability provided by the multi-component inhibitor system resists oil breakdown during exposure to high temperature conditions, ensuring longer service life.

### Saves on maintenance and downtime

The highly refined base stocks and multi-component oxidation inhibitor system resist the formation of harmful sludge and varnish deposits. The special rust inhibitor protects components against corrosion.

### • Trouble-free operation

The excellent water separability of the highly refined base stocks and special inhibitor system ensure rapid settling of harmful water accumulated from steam condensate.

The non-silicone foam inhibitor allows rapid release of entrained air while minimizing foam formation enabling reliable operation of sensitive hydraulic control devices.

# Saves on inventory

The premium quality rust and oxidation inhibited formulation has multipurpose capability in a wide range of industrial applications for which this type of product is recommended, simplifying oil inventories and reducing the possibility of using the wrong lubricant.

# **APPLICATIONS**

- Steam and hydraulic turbines operating under all service conditions
- Industrial gas turbines operating under moderate service conditions where the oil is not exposed to excessively high temperatures, or gearsets requiring enhanced load carrying performance
- Centrifugal, rotary and reciprocating compressors, turbo-blowers and centrifugal pumps, requiring a rust and oxidation inhibited oil
- Bath and circulating systems supplying rolling element bearings of all types, lightly loaded gear sets, vacuum pumps, machine tools (including computer controlled units), conveyors, electric motors, and low to moderate pressure hydraulic pumps where anti-wear properties are not required.

Not recommended for breathing air compressors

#### **PERFORMANCE**

- British Standard BS 489:1999 (ISO 32 to 100)
- DIN 51515 Part 1
- ISO 8068; L-TSA and TGA (ISO 32, 46, 68)
- Siemens TLV 9013 04 for use in turbosets without gearbox. (ISO 32, 46)
- Alstom HTGD 90117
- Meets requirements of major turbine builders including GE and Solar.

### **TYPICAL TEST DATA**

Characteristic	Test methods	VG 32	VG 46	VG 68	VG 100
Kinematic viscosity at 40°C, mm²/s	ASTM D445	32	46	68	100
Viscosity Index	ASTM D2270	110	110	105	100
Density at 20°C, kg/l	ASTM D4052	0.858	0.864	0.867	0.871
Air release @ 50°C, min.	ASTM D3427	2.0	2.3	4.8	-
Flash Point COC, °C	ASTM D92	>200	>200	>220	>240
Pour Point, °C	ASTM D97	<-12	<-12	<-12	<-12
Demulsibility, min.	ASTM D1401	40-40-0	40-40-0	40-40-0	40-40-0
		(5)	(10)	(10)	(10)
Oxidation Stab. hrs to 2.0	ASTM D943	>4000	>4000	>4000	>2000

Values are typical of production but will be subject to variation.

**Health & Safety Note** – Always maintain good levels of personal hygiene when handling mineral oils. Wear protective clothing/gloves. Wash hands and skin areas where contact has occurred and avoid ingestion. See applicable Material Safety Data Sheet for further information.