

### PRODUCT DESCRIPTION

Finnexx Tarrus TPEO 4000 is a high performance Medium-speed trunk piston engine oil (TPEO) developed for marine propulsion engines, burning distillate or residual fuels. The product also covers applications in land based powerplant operations.

# **CUSTOMER BENEFITS**

## Maintains power output

The detergent/dispersant additive system provides control of high temperature deposits in areas such as the undercrown of the piston and the piston ring belt area, enabling piston rings to function efficiently.

## Prolongs oil life

Base Number (BN) level and superior alkalinity retention characteristics maintain sufficiently high BN under all service conditions to ensure corrosive acids formed by the combustion of fuel sulphur are effectively neutralized, thereby minimizing liner wear.

# Efficient purifying system performance

Excellent water separation characteristics enable water to be centrifuged out with essentially no loss of additive...

## **APPLICATIONS**

- Medium-speed trunk piston engines burning distillate fuels in marine main and auxiliary powerplant service. Modern engines with low oil consumption tend to require higher BN products to maintain alkalinity where high Sulphur fuels are burnt.
- Medium-speed trunk piston engines burning distillate fuels in stationary powerplant service, particularly in modern engines where oil consumption is low.
- It is suitable for use in marine reduction gearboxes where engine oils of its type and viscosity are recommended. It should not be mixed with EP type gear oils which are sometimes used in the same application.
- It is also suitable for use in stern tube systems where engine oils of its type and viscosity grade are
  recommended. It should not be mixed with compounded type oils which are sometimes used in the
  same application.

## **PERFORMANCE**

Recommended for major OEMs for use in their medium-speed engines, including:

MAN Diesel Wärtsilä Caterpillar

### **SERVICE CONSIDERATION**

Base Number (BN) Selection

Finnexx Tarrus TPEO 4000 is a 40 Base Number product and for all Trunk piston engine oils BN selection must be matched to the properties of the fuel, oil consumption (Make up levels) and to the severity of the application. Use of an oil with a BN lower than required can result in rapid corrosive wear. Excessively high BN lubricants, relative to fuel sulphur content, can result in ash deposit accumulation on exhaust valves and result in possible valve distress. Finnexx Tarrus TPEO 4000 is normally recommended for use with fuels which have Sulphur levels in the range 3.5 – 5.0%.

# **Engine Application**

Finnexx Tarrus TPEO 4000 is not recommended as a system oil in marine two-stroke crosshead engines, burning high Sulphur marine bunker fuel but in certain circumstances can be used as a cylinder lubricant.

### TYPICAL TEST DATA

Characteristic	Test methods	SAE 40
Kinematic viscosity at 40°C, mm²/s	ASTM D445	139
Kinematic viscosity at 100°C, mm²/s	ASTM D445	14
Viscosity Index	ASTM D2270	97
Density at 20°C, kg/l	ASTM D4052	0.896
Base Number, mg KOH/g	ASTM D2896	40
	ASTM 4739	40
Zinc Content, wt%	XRAY	0.06
Sulphated Ash	ASTM D874	5.2
FZG Fail Load Stage	DIN 51354	11
Flash Point °C	ASTM D92	220

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.