

## QATOL MANTA RAY SO 305

A premium-quality system oil for crosshead engines that can also be used in many different items of marine equipment.



### PRODUCT DESCRIPTION:

**QATOL MANTA RAY SO 305** system oils have been specifically designed for the lubrication of slow speed two-stroke crosshead diesel engines. It is available in three different viscosity grades to help you optimize the overall viscosity of your system oil when topping up.

**QATOL MANTA RAY SO 305** is formulated using high-quality paraffinic mineral base oils and selected additives to meet the needs of a wide range of marine engine manufacturers. It is designed primarily for use in marine low speed cross-head diesel engine applications, where excellent water-shedding characteristics are required.

### APPLICATION:

**QATOL MANTA RAY SO 305** Marine System Oil is suitable for use in:

- Crankcases of conventional large marine low-speed cross-head diesel engines, with water-cooled pistons.
- Crankcases of modern high-output cross-head diesel engines, with oil-cooled pistons.
- Crankcases of latest designs of camless engines.
- Stern tubes and auxiliary equipment.

### ADVANTAGES/BENEFITS:

- Excellent water-shedding properties enable water to be easily removed from the oil and therefore increase oil life and reduce the risk of bacterial growth.
- Neutralises acidic fuel combustion products thereby preventing rusting and corrosion of engine bearings, and corrosive wear of cylinder liners.
- Good anti-rust and anti-corrosion properties protect engine bearings and extend bearing life.
- Excellent detergency and dispersancy characteristics keep the engine clean and prevent the formation of deposits under oil-cooled pistons, protecting components against wear, reducing oil filter blockage, and prolonging engine service life and oil life.
- Excellent load-carrying properties prevent wear of heavily loaded bearings, extending component life and reducing maintenance costs.
- Good thermal and oxidation stability, especially important in modern oil-cooled piston engine designs, prevent oil thickening in service, keeping the oil in grade, and so prolong oil life.
- Good air release and antifoaming properties ensure optimum oil film thickness is maintained and prevents foaming problems.
- Good hydraulic oil properties ensure suitability for use in the latest designs of camless engines

## **KEY PROPERTIES:**

<b>PROPERTIES</b>	<b>TEST METHOD</b>	<b>TYPICAL VALUES</b>	<b>UNIT</b>
Density @ 15 °C	ASTM D 4052	0.89	g/ml
Kinematic Viscosity @ 40 °C	ASTM D 445	111	mm <sup>2</sup> /s
Kinematic Viscosity @ 100 °C	ASTM D 445	11.9	mm <sup>2</sup> /s
Viscosity Index	ASTM D 2270	95	-
TBN	ASTM D 2896	5.6	mg KOH/g
Flash Point, CoC	ASTM D 92	235	°C
Pour Point	ASTM D 97	-18	°C
FZG test (A/8.3/90), failure load stage	CEC-L-07-95	11	

**AVAILABLE PACKAGES:** 208L, 25L, 20L,