

Rpt. 4b

Date of writing report... Received London... Port YOKOHAMA... No. 2832... Survey held at YOKOHAMA... In shops 48... First date 5-9-1958... Last date 14-1-1959

FIRST ENTRY REPORT ON INTERNAL COMBUSTION MACHINERY

No. in R.B. Name... Owners Philippine Ace Lines, In-Corporation... Managers Kasado Dockyard Co., Ltd. Port of Registry... Hull built at Kasado, Japan... Yard No. 203... Main Engines made at Yokohama... By Mitsubishi Nippon Heavy Ind. Ltd. Eng. No. D 65238... When 1958-12

Particulars of restricted service of ship, if limited for classification... Particulars of vegetable or similar cargo oil notation, if required... Is ship to be classed for navigation in ice? Is ship intended to carry petroleum in bulk? Is refrigerating machinery fitted? If so, is it for cargo purposes? Type of refrigerant

The following particulars should be given as fully and as clearly as possible. Where the answer is "No" or "None", say so! Ticks and other, signs of doubtful meaning are not to be used. Where the wording is not applicable to the installation, a black line may be inserted. If the main engines have been constructed at another port and are covered by a separate report, the particulars given in that report need not be repeated below, but the port and report number should be stated.

No. of main engines One No. of propellers One Brief description of propulsion system Oil Engine 2.S.A. 6 Cyl. 520x700m/m direct coupled

MAIN RECIPROCATING ENGINES. Licence Name and Type No. Yokohama M.A.N. G6Z 52/70 No. of cylinders per engine 6 Dia. of cylinders 520 m/m stroke(s) 700 m/m 2 or 4 stroke cycle 2 Single or double acting Single

Maximum approved BHP per engine 2500 at 220 RPM of engine and 220 RPM of propeller. Corresponding MIP 7.16 kg/cm2 (For DA engines give MIP top & bottom) Maximum cylinder pressure 57 kg/cm2 Machinery numeral 500

Are the cylinders arranged in Vee or other special formation? No If so, number of crankshafts per engine... TWO STROKE ENGINES. Is the engine of opposed piston type? No If so, how are upper pistons connected to crankshaft?

Is the exhaust discharged through ports in the cylinders or through valve(s) in the cylinder covers? Ports No. and type of mechanically driven scavenge pumps or blowers per engine and how driven Roots' Blower, by main engine

No. of exhaust gas driven scavenge blowers per engine No Where exhaust gas driven blowers only are fitted, can the engine operate with one blower out of action? -

If a stand-by or emergency pump or blower is fitted, state how driven 0.19 kg/cm2 Are scavenge manifold explosion relief valves fitted? Yes No. of scavenge air coolers - Scavenge air pressure at full power -

FOUR STROKE ENGINES. Is the engine supercharged? Are the undersides of the pistons arranged as supercharge pumps? No. of exhaust gas driven blowers per engine No. of supercharge air coolers per engine Supercharge air pressure Can engine operate without supercharger?

TWO STROKE ENGINES-GENERAL. No. of valves per cylinder: Fuel 1 Inlet - Exhaust - Starting 1 Safety 1 Material of cylinder covers Special Cast Iron Material of piston crowns O.H. Steel Is the engine equipped to operate on heavy fuel oil? Yes

Cooling medium for: Cylinders Fresh Water Pistons Lubricating Oil Fuel valves Fresh Water Overall diameter of piston rod for double acting engines -

Is the rod fitted with a sleeve? - Is welded construction employed for: Bedplate? No Frames? No Entablature? No Is the crankcase separated from the underside of pistons? No Is the engine of crosshead or trunk piston type? Yes Total internal volume of crankcase 347.5 ft3 No. and total area of explosion relief devices 3 x 219.6 in2 Are flame guards or traps fitted to relief devices? No Is the crankcase readily accessible? Yes If not, must the engine be removed for overhaul of bearings, etc? - Is the engine secured directly to the tank top or to a built-up seating? - How is the engine started? by compressed air

Can the engine be directly reversed? Yes If not, how is reversing obtained? - Has the engine been tested working in the shop? Yes How long at full power? 2 hours

CRANK & FLYWHEEL SHAFTING. Date of approval of torsional vibration characteristics of the propelling machinery system 8/5/59 425.W. State barred speed range(s), if imposed for working propeller 110 - 135 For spare propeller - Is a governor fitted? Yes Is a torsional vibration damper or detuner fitted to the shafting? No

Where positioned? - Type - No. of main bearings 7 Are main bearings of ball or roller type? No Distance between inner edges of bearings in way of crank(s) 660 m/m Distance between centre lines of side cranks or eccentrics of opposed piston engines -

Crankshaft type: Built, semi-built, solid. (State which) Solid Diameter of journals 340 m/m Diameter of crankpins Centre 340 m/m Side - Breadth of webs at mid-throw 520 m/m Axial thickness of webs 185 m/m

If shrunk, radial thickness around eyeholes - Are dowel pins fitted? No Crankshaft material Journals Electric Minimum - Approved 53 kg/mm2 Webs Steel Tensile strength -

Diameter of flywheel 1575.8 m/m Weight 640 kg. Are balance weights fitted? No Total weight - Radius of gyration -

Diameter of flywheel shaft - Material - Minimum approved tensile strength -

Flywheel shaft: separate, integral with crankshaft, integral with thrustshaft. (State which) -



018232-018239-0221/2



