

REPORT ON OIL ENGINE MACHINERY.

No. 2602

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No. in Survey held at Sickla, Skm. Distr. Date, First Survey 28th Oct. 1918 Last Survey 12th Aug 1925

Reg. Book. Single } Screw vessels (not yet named) Tons { Gross _____ Net _____

Master _____ Built at Gothenburg By whom built Aktiebolaget Lindholmen - Motala Yard No. 923 When built 1925

Engines made at Stockholm By whom made Aktiebolaget Atlas-Diesel Engine No. 50048 When made 1925

Donkey Boilers made at _____ By whom made _____ Boiler No. _____ When made _____

Brake Horse Power 1250 Owners A.B. Svenska Ostasiatiska Kompaniet Port belonging to Gothenburg

Nom. Horse Power as ^{new} per Rule 358 716 Total H.P. Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

OIL ENGINES, &c. Type of Engines Polar Diesel Oil Engine type A6Z 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders 35 kg/cm² No. of cylinders 6 No. of cranks 6 Diameter of cylinders 630 mm.

Length of stroke 1000 mm. Revolutions per minute 125 Means of ignition Diesel Kind of fuel used Crude Oil

Is there a bearing between each crank Yes Span of bearings (Page 91, Section 2, par. 7 of (Rules) metric 860 mm.

Distance between centres of main bearings 1300 mm. Is a flywheel fitted Yes Diameter of crank shaft journals ^{as per Rule} 378 mm. ^{as fitted} 380 "

Diameter of crank pins 380 mm. Breadth of crank webs ^{as per Rule} 505 mm. Thickness of ditto ^{as per Rule} 213 mm. ^{as fitted} 720 " ^{as fitted} 250 "

Diameter of flywheel shaft ^{as per Rule} 378 mm. Diameter of tunnel shaft ^{as per Rule} _____ Diameter of thrust shaft ^{as per Rule} 275 mm. ^{as fitted} 380 " ^{as fitted} 310 "

Diameter of screw shaft ^{as per Rule} _____ Is the screw shaft fitted with a continuous liner the whole length of the stern tube _____

Is the after end of the liner made watertight in the propeller boss _____ If the liner is in more than one length are the joints burned _____

If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive _____

If two liners are fitted, is the shaft lapped or protected between the liners _____ If without liners, is the shaft arranged to run in oil _____

Type of outer gland fitted to stern tube _____ Length of stern bush _____ Diameter of propeller _____

Pitch of propeller _____ No. of blades _____ state whether moveable _____ Total surface _____ square feet

Method of reversing manoeuvring cyls. Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Thickness of cylinder liners 60 mm.

Are the cylinders fitted with safety valves yes Means of lubrication gear wheel pumps Are the exhaust pipes and silencers water cooled or lagged with non-conducting material _____

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine _____

No. of cooling water pumps 1 Is the sea suction provided with an efficient strainer which can be cleared _____

How many bilge pumps fitted to the main engines 1 Diameter of ditto 150 mm. Stroke 220 mm. (double acting)

Can one be overhauled while the other is at work _____ No. of auxiliary pumps connected to the main bilge lines _____ How driven _____

No. and sizes of suction connections connected to both main bilge pumps and auxiliary bilge pumps:—In engine room _____

Are there ballast pumps _____ How driven _____ Sizes of pumps _____

Is the ballast pump fitted with a direct suction from the engine room bilges _____ State size _____ Is a separate auxiliary pump suction fitted in engine room and size _____

Are all the bilge suction pipes fitted with roses _____ Are the roses in Engine Room always accessible _____

Are the sluices on Engine Room bulkheads always accessible _____ Are all connections with the sea direct on the skin of the ship _____

Are the valves or cocks _____ Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates _____

Are the discharge pipes above or below the deep water line _____ Are they each fitted with a discharge valve always accessible on the plating of the vessel _____

Are all pipes, cocks, valves and pumps in connection with the machinery accessible at all times _____ Are the bilge suction pipes, cocks and valves arranged so as to prevent any communication between the sea and the bilges _____

Is the screw shaft tunnel watertight _____ Is it fitted with a watertight door _____

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork _____

No. of main air compressors 1 No. of stages 3 Diameters 630-115/ Stroke 460 mm. Driven by Main engine

No. of auxiliary air compressors 1 No. of stages 3 Diameters 320-75/ Stroke 200 mm. Driven by Electric motor

No. of small auxiliary air compressors 1 No. of stages 2 Diameters 80/ Stroke 80 mm. Driven by "Atlas" motor

No. of scavenging air pumps none fitted Diameter _____ Stroke _____ Driven by _____

Are the auxiliary Diesel Engine crank shafts ^{as per Rule} _____ ^{as fitted} _____ Are the air compressors and their coolers made so as to be easy of access _____

RECEIVERS:— No. of high pressure air receivers 2 Internal diameter 400 mm. Cubic capacity of each 315 litres

Material S.M. Steel Seamless, lap welded or riveted longitudinal joint lap welded Range of tensile strength min. 38 kg/mm²

Thickness 23 mm. Working pressure by Rules 73 kg/cm² No. of starting air receivers 1 Internal diameter 1900 mm.

Cubic capacity 13200 litres Material S.M. Steel Seamless, lap welded or riveted longitudinal joint lap welded

Range of tensile strength 38 kg/mm² thickness 22.5 mm. Working pressure by rules 15 kg/cm² Is each receiver, which can be isolated, _____

Are they fitted with a safety valve as per Rule yes Can the internal surfaces of the receivers be examined yes What means are provided for cleaning their surfaces man- and mudholes resp. Is there a drain arrangement fitted at the lowest part of each receiver yes

