

REPORT ON OIL ENGINE MACHINERY

No. 6244.

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Port of Copenhagen.

No. in Survey held at Helsingør and Nakskov.

Date, First Survey 10th June 1920 Last Survey 7th Nov. 1921

Number of Visits 13

No. in Reg. Book. 19833 on the Single Twin Triple Screw Vessel

Virginia

Tons { Gross 520.12
Net 363.97

Master Built at Nakskov.

By whom built Nakskov Skibsværft Yard No. 5

When built 1921

Engines made at Helsingør

By whom made Helsingør Dieselmaskinfabrik

Engine No. When made 1921

Donkey Boilers made at

By whom made

Boiler No. When made

Brake Horse Power 400

Owners Det. Østasiatisk Kompagni

Port belonging to Copenhagen.

Nom. Horse Power as per Rule 1/5

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yps.

OIL ENGINES, &c.—Type of Engines Ordinary reciprocating direct reversible Diesel engine 2 or 4 stroke cycle 4. Single or double acting single

Maximum pressure in cylinders 35 kg/cm² = 498 lb. No. of cylinders 6. No. of cranks 6. Diameter of cylinders 370 mm = 14.55" 14 7/16"

Length of stroke 570 mm = 22.42" Revolutions per minute 200 Means of ignition air compression Kind of fuel used crude oil, F.P. 180°

Is there a bearing between each crank Yps. Span of bearings (Page 92, Section 2, par. 7 of Rules) 491 mm = 19.31"

Distance between centres of main bearings 810 mm = 31.89" Is a flywheel fitted Yps. Diameter of crank shaft journals as per Rule 221 mm = 8.7"

Diameter of crank pins 222 mm as fitted 222 mm Breadth of crank webs as per Rule 294 mm as fitted 325 mm Thickness of ditto as per Rule 124 mm as fitted 133 mm

Diameter of flywheel shaft as per Rule 221 mm as fitted 222 mm Diameter of tunnel shaft as per Rule 7 1/16" as fitted 7 1/4" = 185 mm

Diameter of screw shaft as per Rule 7 3/16" as fitted 7 3/8" = 190 mm Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yps.

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

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 Yps.

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

Type of outer gland fitted to stern tube Length of stern bush 950 mm Diameter of propeller 2260 mm

Pitch of propeller 1580 mm No. of blades 4 state whether moveable No Total surface 18.18 = 1.69 m² square feet

Method of reversing direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yps. Thickness of cylinder liners 32.5 mm

Are the cylinders fitted with safety valves Yps. Means of lubrication forced lubrication Are the exhaust pipes and silencers water cooled or lagged with

on-conducting material lagged Yps. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Exhaust

led to the top of the engine casing No. of cooling water pumps one Is the sea suction provided with an efficient strainer which can be cleared

within the vessel Yps. No. of bilge pumps fitted to the main engines one Diameter of ditto 120 mm Stroke 200 mm

Can one be overhauled while the other is at work Yps. No. of auxiliary pumps connected to the main bilge lines one How driven by belt from main engine

Sizes of pumps rotary, 40 to 60 l/min No. and sizes of suction connected to both main bilge pumps and auxiliary bilge pumps:—In engine room 3 off, 2 1/2"

and in hold, etc. 4 off, 2 1/2", 2 off, 2 tanks each 2 off, 3", F.A.P. tanks No. of ballast pumps one How driven by belt from main engine Sizes of pumps rotary, 40 to 60 l/min

Is the ballast pump fitted with a direct suction from the engine room bilges Yps. State size 4" Is a separate auxiliary pump suction fitted in

Engine Room and size No. Are all the bilge suction pipes fitted with roses Yps. Are the roses in Engine Room always accessible Yps.

Are the sluices on Engine Room bulkheads always accessible No sluices Are all connections with the sea direct on the skin of the ship Yps.

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

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

Are all pipes, cocks, valves and pumps in connection with the machinery accessible at all times Yps. Are the bilge suction pipes, cocks and valves arranged so as to prevent any

communication between the sea and the bilges Yps. Is the screw shaft tunnel watertight none Is it fitted with a watertight door

worked from 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 one No. of stages 3 Diameters 80-310-355 mm Stroke 220 mm Driven by main engine

No. of auxiliary air compressors one (triple) No. of stages 2 Diameters 64-180 mm Stroke 180 mm Driven by auxil. Diesel engine

No. of small auxiliary air compressors one No. of stages 2 Diameters 40-130 mm Stroke 100 mm Driven by auxil. oil engine

No. of scavenging air pumps none Diameter Stroke Driven by

Diameter of auxiliary Diesel Engine crank shafts as per Rule 120 mm as fitted 120 mm Are the air compressors and their coolers made so as to be easy of access Yps.

AIR RECEIVERS:—No. of high pressure air receivers 3 Internal diameter 310 mm Cubic capacity of each 180 liters

Material S.M. steel Seamless, lap welded or riveted longitudinal joint 2 lap welded Range of tensile strength 37.2-39.6 kg/cm²Thickness 21 mm working pressure by Rules 22 kg/cm² No. of starting air receivers one Internal diameter 1150 mmTotal cubic capacity 3.64 m³ Material S.M. steel Seamless, lap welded or riveted longitudinal joint lap welded, dry-actyloneRange of tensile strength not less than 39 1/2 kg/cm² thickness 22 mm Working pressure by rules 25.2 kg/cm² Is each receiver, which can be isolated,

fitted with a safety valve as per Rule Yps. Can the internal surfaces of the receivers be examined Yps. What means are provided for cleaning their

inter surfaces man hole fitted to starting air receiver Is there a drain arrangement fitted at the lowest part of each receiver Yps.

