

REPORT ON OIL ENGINE MACHINERY.

No. 7970.

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of writing Report 5th May 1929 When handed in at Local Office 7th May 1929 Port of Copenhagen

in Survey held at Copenhagen Date, First Survey 19th September 1928 Last Survey 29th April 1929

Book. 140 on the ^{Single} Twin ^{Motor} Triple ^{Screw} vessel "STJERNEBORG." Tons Gross 4532.25 Net 2772.10

lt at Copenhagen By whom built Akt. Burmeister & Wain's Maskin og Skibsbyggeri. Yard No. 557 When built 1929.
ines made at Copenhagen By whom made Akt. Burmeister & Wain's Maskin og Skibsbyggeri. Engine No. 1536 When made 1929.
akey Boilers made at Copenhagen By whom made Akt. Burmeister & Wain's Maskin og Skibsbyggeri. Boiler No. 1823 When made 1929.
ke Horse Power 2200 541 Owners Akt. Dampskibsselskabet Dannebrog (C. H. Hansen) Port belonging to Copenhagen
n. Horse Power as per Rule 543 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
de for which vessel is intended For carrying cargo in oversea trade.

ENGINE, &c. Type of Engines Vertical Diesel Oil Engines (Twin piston type) 2 or 4 stroke cycle 4 Single or double acting single
imum pressure in cylinders 35 kg/cm² Diameter of cylinders 550 mm = 21 5/8" Length of stroke 1000 mm = 39 3/8" No. of cylinders 2 x 6 = 12 No. of cranks 2 x 6 = 12
of bearings, adjacent to the Crank, measured from inner edge to inner edge 730 mm/m Is there a bearing between each crank No
utions per minute 140 Turning wheel dia. 1262 mm Weight 850 kg. Means of ignition Air compression Kind of fuel used Crude oil, flash point above 180° F.
k Shafts dia. of journals as per Rule 339.98 mm Crank pin dia. 340 mm/m Crank Webs Mid. length breadth 670 mm/m Thickness parallel to axis 213 mm/m
as fitted 340 mm/m M d. length thickness 193 mm/m Thickness around eye hole 159 mm/m
heel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule 9.2" Thrust Shafts diameter at collars as per Rule 9.7"
as fitted 9 1/4" as fitted 340 mm/m
Shaft, diameter as per Rule Screw Shafts diameter as per Rule 10.17" Is the screw shaft fitted with a continuous liner Yes
as fitted 10 1/2" as fitted 10 1/2" as fitted 1/2"

ze Liners, thickness in way of bushes as per Rule 0.61" Thickness between bushes as per rule 0.46" Is the after end of the liner made watertight in the
as fitted 1 1/8" x 3/4" as fitted 1/2" Is the after end of the liner made watertight in the
er boss Yes. If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Liners in one length.
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 Yes
liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after end of the tube
If so, state type Length of Bearing in Stern Bush next to and supporting propeller 4'-6"

eller, dia. 11'-0" Pitch 9'-3" No. of blades 3. Material Bronze whether Moveable No Total Developed Surface 29 sq. feet
od of reversing Engines Direct reversible Is a governor or other arrangement fitted to prevent racing of the engine when decelerated Yes Means of lubrication
ced Thickness of cylinder liners 38 mm/m Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with
nducting material Lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Exhaust pipes led up in the funnel.

ng Water Pumps, No. 1 off Centrifugal 120 tons. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
Pumps worked from the Main Engines, No. 2 off Diameter of tanks 150 mm Stroke 175 mm Can one be overhauled while the other is at work Yes
s connected to the Main Bilge Line No. and Size 1 off Ballast pump 150 tons, 2 off independent Bilge pump 20 tons each, 2 off engine bilge pumps, 20 tons each
How driven by electric motor, by electric motors, by the main engines.

st Pumps, No. and size 1 off Rotary wing pump 150 tons Lubricating Oil Pumps, including Spare Pump, No. and size 2 off Cog wheel pumps 45 tons each.
o independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
s, No. and size:—In Machinery Spaces 4 off 3" diam. In F.P.T. & A.P.T. 1 off in each 2 1/2" dia. In I.B. tanks 3" dia. arranged as per approved plan.
lds, &c. No. 1 hold 2 off 3" dia. No. 2 hold 2 off 3 1/2" dia. No. 3 & 4 hold 3 off in each 3" dia. Deep tank 2 off to bilges 3 1/2" and 4 off to tank 4 1/2" dia. Tunnel well 1 off 3" dia.

endent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 off 3" dia. and 1 off 6" dia.
l the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces
m easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes Valves except the boiler blow
of cock.

Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks
y fixed sufficiently high on the ship's side to be seen without lifting the platform plates Yes Are the Overboard Discharges above or below the deep water line above
y each fitted with a Discharge Valve always accessible on the plating of the vessel Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes
pipes pass through the bunkers no bunkers How are they protected
pipes pass through the deep tanks Suction pipes to No. 1 & 2 holds and to the fore peak tank Have they been tested as per Rule Yes

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one
tment to another Yes Is the Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from at upper deck level
ood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Air Compressors, No. 2 off No. of stages 3 Diameters 600-540-120 mm Stroke 320 mm/m Driven by main engines.
ary Air Compressors, No. 2 off No. of stages 3 Diameters 318-285-78 " Stroke 170 mm/m Driven by auxiliary engines.
Auxiliary Air Compressors, No. 1 off No. of stages 2 Diameters 90-35 " Stroke 120 mm/m Driven by hand.

enging Air Pumps, No. Diameter Stroke Driven by
ary Engines crank shafts, diameter as per Rule 161.8 mm/m
as fitted 170 mm/m

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
e internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Starting air receivers fitted with man holes
e a drain arrangement fitted at the lowest part of each receiver Yes Expanding arrangement made for cleaning the
Pressure Air Receivers, No. 3 off cubic capacity of each 2.5 m³ Internal diameter 372-390 mm thickness 3/8"-7/16" Working pressure by Rules 25.1 kg/cm²
less, lap welded or riveted longitudinal joint 3 off Material S.M. Steel Range of tensile strength 44.4-47.2 kg/mm Working pressure by Rules 25.1 kg/cm²

ting Air Receivers, No. 1 off Total cubic capacity 565 cubic feet Internal diameter 5'-11 1/2" and 6'-1" thickness 15/16" & 1/2" Ends 1 1/2"
less, lap welded or riveted longitudinal joint double butt shape Material S.M. Steel Range of tensile strength 44.4-47.2 kg/mm Working pressure by Rules 25.1 kg/cm²



yes

18

Oil Fuel Burning Arrangements