

REPORT ON OIL ENGINE MACHINERY.

No. 1868

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Report 13/3 19 48 When handed in at Local Office 13/3 19 48 Port of HELSINGBORG
 Survey held at Helsingborg Date, First Survey 8/11 1947 Last Survey 11/3 19 48
 Number of Visits 31
 Single ~~XXXX~~ Screw vessel Motorvessel "S O M M E N". Tons Gross 3927 Net 2608
 Richmond, Cal. By whom built Kaiser Cargo Inc. Yard No. 68 When built 1945
 Wisconsin By whom made Nordberg Manufact. Co. Ser. No. 216135 Engine No. 3215243 When made 1944
 By whom made - Boiler No. - When made -
 Power 1700 Owners Rederi A/B Sigyn Port belonging to Helsingborg
 Ry Numeral 529 497 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes
 as per Rule NHP 2 86
 which vessel is intended General.

INES, &c. — Type of Engines Heavy oil engine 2 or 4 stroke cycle 2 Single or double acting Single
 Pressure in cylinders 750 lbs/sq.in. Diameter of cylinders 21 1/2" Length of stroke 29" No. of cylinders 6 No. of cranks 6
 Rated Pressure 87 lbs/sq.in. Rings, adjacent to the crank, measured from inner edge to inner edge 26.1/4" Is there a bearing between each crank Yes
 per minute 180 Flywheel dia 6'-5.3/4" Weight - Means of ignition Compr. Kind of fuel used Diesel oil
 lid forged dia. of journals as per Rule - as fitted 14.3/4" Crank pin dia 14.3/4" Crank webs Mid. length breadth 19.11/16" Thickness parallel to axis 6.4/5"
 as fitted 14.3/4" Mid. length thickness 6.4/5" shrunk Thickness around eyehole 2.1/2"
 shaft, diameter as per Rule - as fitted 9.3/8" Thrust Shaft, diameter at collars as per Rule - as fitted 10.1/4"
 as fitted - Screw Shaft, diameter as per Rule - as fitted 10.1/2" Is the ~~XXXX~~ shaft fitted with a continuous liner Yes
 ers, thickness in way of bushes as per Rule 13/20" Thickness between bushes as per Rule 13/20" Is the after end of the liner made watertight in the See back
 as fitted 13/20" of report
 ss. Yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of 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-
 Yes If two liners are fitted, is the shaft lapped or protected between the liners - Is an approved Oil Gland or other appliance fitted at the after
 shaft No If so, state type - Length of bearing in Stern Bush next to and supporting propeller 3'-7.5/16"
 dia. 11'-0" Pitch 6'-7.1/4" No. of blades 3 Material Bronze whether moveable No Total developed surface - sq. feet
 reversing Engines Compr. air Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of
 Forced Thickness of cylinder liners 1" Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers ~~XXXXXX~~
 with non-conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned
 engine Led to Cooling Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel No
 funnel
 ps worked from the Main Engines, No. - Diameter - Stroke - Can one be overhauled while the other is at work -
 needed to the Main Bilge Line { No. and size 2 x 67 tons/hour. 1 x 89 tons/hour
 How driven Electric Electric
 ng water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping
 uts -
 mps, No. and size 1 x 67 t/h. Power Driven Lubricating Oil Pumps, including spare pump, No. and size 2 x 110 t/h.
 dependent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both main bilge pumps and auxiliary
 s, No. and size:—In machinery spaces 2 x 3". Tunnel well 1 x 3". In pump room -
 cc. No.1 H= 2x3". No.2 H= 2x3". No.3 H= 2x3". Refr. Hold drain well = 3".
 ant Power Pump Direct Suctions to the engine room bilges, No. and size 2x3"; 1x8" (main circ. water pump suction).
 bilge suction pipes in holds and tunnel well fitted with strum-boxes Yes Are the bilge suction in the machinery spaces led from easily
 mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges. Mudboxes on main bilge line.
 Connections fitted direct on the skin of the Ship Yes Are they fitted with valves or cocks Yes Are they fixed
 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 Both
 ach 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 -
 s pass through the bunkers No bunkers How are they protected -
 s pass through the deep tanks To fore peak tank Have they been tested as per Rule -
 es, cocks, valves and pumps in connection with the machinery ~~XXXXXX~~ accessible at all times Yes
 ngement 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
 from one compartment to another Yes Is the shaft tunnel watertight - Is it fitted with a watertight door - worked from -
 vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork -
 Compressors, No. - No. of stages - diameters - stroke - driven by -
 Air Compressors, No. 2 No. of stages 2 diameters 5" x 3" stroke 5" driven by electr.
 xiliary Air Compressors, No. 1 No. of stages 2 diameters 4" x 1 1/2" stroke 3 1/2" driven by -
 By the small-aux. air compressors. Current supplied from the
 ntion is made for first charging the air receivers. battery started emergency generator.
 g Air Pumps, No. 1 diameter 4'-5.3/4" stroke 1'-7.11/16" driven by main eng.
 Engines crank shafts, diameter as per Rule - as fitted Journal 8 1/2". Cr. pin. 8". Position Port side in Engine Room.
 auxiliary engines been constructed under special survey Yes. A.B.S. Is a report sent herewith

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AIR RECEIVERS:—Have they been made under survey Yes. A.B.S. State No. of report or certificate -
Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
Can the internal surfaces of the receivers be examined and cleaned Yes Is a drain fitted at the lowest part of each receiver Yes
Injection Air Receivers, No. - Cubic capacity of each - Internal diameter - thickness -
Seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure -
Starting Air Receivers, No. 4 Total cubic capacity - Internal diameter 3' thickness 0.75"
Seamless, lap welded or riveted longitudinal joint Welded Material - Range of tensile strength - Working pressure 1 fwd
IS A DONKEY BOILER FITTED Yes If so, is a report now forwarded -
Is the donkey boiler intended to be used for domestic purposes only See below. (Vapour Clarkson Type DL-230;56B.).
PLANS. Are approved plans forwarded herewith for shafting - Receivers - Separate for -
(If not, state date of approval)
Donkey boilers - General pumping arrangements - Pumping arrangements in machinery space -
Oil fuel buring arrangements -

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes
State the principal additional spare gear supplied -
Main engine:- 1 cylinder cover, 1 cylinder liner. 1 piston. 1 connecting rod. 2 top
2 main bearings. 1 starting valve. 2 safety valves.
Scavenging pump:- 1 piston. 1 piston rod. 1 impeller and shaft for the salt and fresh
water pumps; 1 impeller and shaft for the bilge and ballast pumps.
The foregoing is a correct description, - Manufacturer. -

Dates of Survey while building
During progress of work in shops - -
During erection on board vessel - -
Total No. of visits 31
Dates of examination of principal parts—Cylinders 16.12.47 & 19.2.48 Covers 16.12.47 & 19.2.48 Pistons 16.12.47 & 19.2.48 Rods - Connecting rods -
Crank shaft 19.2.48 Flywheel shaft - Thrust shaft 24.1.48 Intermediate shafts 22.2.48 Tube shaft -
Screw shaft 6.2.48 Propeller 6.2.48 Stern tube 6.2.48 Engine seatings 29.2.48 Engine holding down bolts -
~~Examination of sea connections.~~ 3.2.48 ~~Examination of~~ pumping arrangements 10.3.48 Engines tried under working conditions -
Crank shaft, material - Identification mark - Flywheel shaft, material - Identification mark -
Thrust shaft, material - Identification mark - Intermediate shafts, material - Identification marks -
Tube shaft, material - Identification mark - Screw shaft, material - Identification mark -
Identification marks on air receivers See separate particulars enclosed.

Is the flash point of the oil to be used over 150°F Yes
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with Yes
Description of fire extinguishing apparatus fitted 4x1 1/2" and 4x2 1/2" water hoses. 7 chemical exting. with 9 li
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No If so, have the requirements of the Rules been complied with -
If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with No
Is this machinery duplicate of a previous case - If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel was origi
under the special supervision of the Surveyors to the American Bureau of Shipping and cla
that Society but has now been surveyed by me for Classification with this Society.
The condition and standard of workmanship, as now seen, is considered to be good and
factory.

NOTE:- The steam generator has been examined (the coils renewed) but, due to fault with
electrical equipment on the stack and low water switches, the boiler could not be examine
working condition and the safety valves not be adjusted. (Working pressure 100 lbs.).

The main- and auxiliary engines have been tried under working condition and found to
satisfactorily.

The machinery of this vessel is eligible in my opinion to be classed in the Society's
(See Cont)

The amount of Entry Fee ... £ --: :
Special ... £ Kr 960:00 : When applied for 13/3 19 48
Donkey Boiler Fee... £ --: : When received - 19 -
Travelling Expenses (if any) £ --: :
Assigned see 3E Rpt

Rpt. 9a.

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Port of HELSINGBORG

Continuation of Report No. 1868 dated 13th March, 1948, on the

M/S "S O M M E N", No.37814 in the Register Book

,when the survey has been completed,
Book with the notations of LMC 3,48/and CL 3,48, subject to the propeller shaft
being renewed before the end of July, 1948.
Please also see Rpt.9 forwarded herewith.

T. O. Fogrum
SURVEYOR TO LLOYD'S
REGISTER OF SHIPPING

PARTICULARS OF IDENTIFICATION MARKS ON AIR RECEIVERS.

ORDINARY AIR RECEIVERS (3 off):-

Maloney Tank Mfg. Tulsa, Oklahoma.

WLD	PV	No.	Port	Centre	Stbd.
			33244	26844	30444
S.T.	.75	Cert.	SL 2205	SL2078	SL2146
H.T.	.75	A.B.S.	290MDM	290MDM	290MDM
T.S.	55000	Date	28.8.44	26.7.44	8.8.44
T.P.	800 lbs.	U.S.C.G.No.	M-271	M-186	
S.W.P.	400 lbs.				
S.D.	36" I.D.				
H.R.	Ellip 2,1				
M.T.	C.L.B. Grade B.				

AIR SURG TANK:-

Peerless Fab.Co.,Oakland,
Calif.
T.P. 550 lbs.
H.T. 415
T.S. 55.000 lbs.
Max.WP 275 lbs.
Cert.No. S.F.4813
Ser.No.104
Shell 3/8"
Head 3/8"
Insp. S.J.H. 5.8.44
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Certificate (if required) to be sent to
Helsingborg Office, when surv. completed.