

REPORT ON MACHINERY.

No. 1588

Received at London Office TUE. 20 AUG. 1918

When handed in at Local Office July 19 1918

Port of New York

Date, First Survey Nov 2 1917 Last Survey July 15 1918

Number of Visits 64

On the STEEL SS "H.M. FLAGLER"

Builder Built at New York By whom built New York S & S Co

When built 1918-7

Engines made at New York By whom made New York S & S Co when made 1918-7

Boilers made at New York By whom made New York S & S Co when made 1918

Registered Horse Power 533 Owners Standard Oil Co 17 N.Y. Port belonging to Bayonne

Net Horse Power as per Section 28 533 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yls.

Engines, &c.—Description of Engines Quadruple Expansion No. of Cylinders 4 No. of Cranks 4

Dia. of Cylinders 24.35, 51.75 Length of Stroke 51 Revs. per minute 75 Dia. of Screw shaft as per rule 14.85 Material of screw shaft as fitted 15 O.H.S.

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yls. Is the after end of the liner made water tight

Is the propeller boss Yls. If the liner is in more than one length are the joints burned Yls. 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 Yls. If two

liners are fitted, is the shaft lapped or protected between the liners Yls. Length of stern bush 60"

Dia. of Tunnel shaft as per rule 13.49 Dia. of Crank shaft journals as per rule 14.18 Dia. of Crank pin 14.34 Size of Crank webs 9.4 Dia. of thrust shaft under

bars 14.4 Dia. of screw 17.6 Pitch of Screw 18.0 No. of Blades 4 State whether moveable Yls. Total surface 101.4

No. of Feed pumps 3 Diameter of ditto 11x8 Stroke 24 Can one be overhauled while the other is at work Yls.

No. of Bilge pumps 2 Diameter of ditto 3.5 Stroke 24 Can one be overhauled while the other is at work Yls.

No. of Donkey Engines 3 Sizes of Pumps 12x8 1/2 x 12-9x8 1/2 x 10-8x6 1/2 No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room Three 3 1/2" In Holds, &c. Two 3" in fore hold

No. of Bilge Injections 1 sizes 9" Connected to condenser to circulating pump Yls. Is a separate Donkey Suction fitted in Engine room & size 4 1/2 3 1/2"

Are all the bilge suction pipes fitted with roses Yls. Are the roses in Engine room always accessible Yls. Are the sluices on Engine room bulkheads always accessible Yls.

Are all connections with the sea direct on the skin of the ship Yls. Are they Valves or Cocks Valves

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yls. Are the Discharge Pipes above or below the deep water line Yls.

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yls. Are the Blow Off Cocks fitted with a spigot and brass covering plate Yls.

Are all pipes carried through the bunkers Fuel tank & Oil tank How are they protected Iron Casing

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yls.

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yls.

Is the Screw Shaft Tunnel watertight Yls. Is it fitted with a watertight door Yls. Is it worked from

Suppliers, &c.—(Letter for record S.) Manufacturers of Steel Lukens 15 C. Carnegie Steel Co

Heating Surface of Boilers 7035 Is Forced Draft fitted Yls. No. and Description of Boilers 3 S.E. Satch

Working Pressure 220 Tested by hydraulic pressure to 330 Date of test Jan 3 1919 No. of Certificate 185-186-187

Can each boiler be worked separately Yls. Area of fire grate in each boiler 59 No. and Description of Safety Valves to

boiler Two 3" Spring Area of each valve 7.070 Pressure to which they are adjusted 220 Are they fitted with easing gear Yls.

Least distance between boilers or uptakes and bunkers or woodwork 36" Mean dia. of boilers 14.4 Length 11.6 Material of shell plates 8.

Thickness 1 1/2 Range of tensile strength 28-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams L.O.R.

seams I.D.R. Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 8 1/2 Lap of plates or width of butt straps 23"

Percentages of strength of longitudinal joint rivets 94.1 Working pressure of shell by rules 239 Size of manhole in shell 16 x 12

of compensating ring 38 x 34 No. and Description of Furnaces in each boiler 3 Marine Material S. Outside diameter 47 3/8

Length of plain part top 11 Thickness of plates crown 1 1/2 Description of longitudinal joint Well No. of strengthening rings

bottom 1 1/2 Working pressure of furnace by the rules 240 Combustion chamber plates: Material O.H.S. Thickness: Sides 1 3/32 Back 1 3/32 Top 5/8 Bottom 1/4

Number of stays to ditto: Sides 7x7 Back 7x7 Top 7x7 If stays are fitted with nuts or riveted heads Nuts. Working pressure by rules 231

Material of stays S. Area at smallest part 1.48 Area supported by each stay 50.75 Working pressure by rules 233 End plates in steam space:

Material S. Thickness 1 3/32 Pitch of stays 17 1/2 How are stays secured I.D.R. Working pressure by rules 230 Material of stays S.

Area at smallest part 7.67 Area supported by each stay 272 Working pressure by rules 276 Material of Front plates at bottom S.

Thickness 3/32 Material of Lower back plate S. Thickness 3/4 Greatest pitch of stays 7x7 Working pressure of plate by rules 307

Diameter of tubes 2 3/4 Pitch of tubes 4 x 3 3/4 Material of tube plates S. Thickness: Front 25/32 Back 1/16 Mean pitch of stays 12 1/2

Clearance across wide water spaces 12 3/4 Working pressures by rules 230 Girders to Chamber tops: Material S. Depth and

Thickness of girder at centre Two 10 x 1 Length as per rule 33 Distance apart 7 1/2 Number and pitch of stays in each 4-7"

Working pressure by rules 262 Steam dome: description of joint to shell None % of strength of joint

Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Number of rivets Working pressure of shell by rules Crown plates Thickness How stayed

Superheater. Type None Date of Approval of Plan Tested by Hydraulic Pressure to

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Pressure to which each is adjusted Is Easing Gear fitted

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:—

Crank shaft; Tail shaft; 2 bronze blades
A.P. Rod & bucket—C.P. Impeller; Pump bucket; Stern & bilge valves
Slide valve body; Electric Straps; Top and bottom end
brasses and bolts; Main flaring bolts—Set of Coupling bolts
Piston rings; Piston tubes; Boiler tubes; Nuts, Bolts &
Nuts of various sizes—

The foregoing is a correct description,

Newport News Shipbuilding & Dry Dock Co.,

By

Manufacturer.

Dates of Survey while building
During progress of work in shops -- 0.2.10.12.24. N. 5.12.23.27. J. 4.10.12.14.18.20.21. 1917
During erection on board vessel -- J. 3.11.16.18.19.23. F. 6.8.14.18.21.22. M. 2.7.8.16.18.19.29. A. 3.8.11.17.19.23. 27. 1918
Total No. of visits 64

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders M. 6.18.28 Slides M. 7. Covers J. 23 M. 7. Pistons J. 21 M. 7. Rods A. 30.
Connecting rods J. 21 Crank shaft A. 19 T. 6 Thrust shaft A. 17 Tunnel shafts A. 17 Screw shaft A. 9 T. 2 Propeller M. 9. 29
Stern tube F. 22 A. 8. Steam pipes tested M. 16 A. 25 Engine and boiler seatings J. 11. Engines holding down bolts J. 11.
Completion of pumping arrangements J. 15 J. 10. 11 Boilers fixed J. 11. Engines tried under steam J. 11.
Completion of fitting sea connections A. 27 J. 30. Stern tube A. 27. J. 30. Screw shaft and propeller J. 30.
Main boiler safety valves adjusted J. 11 Thickness of adjusting washers Look Note—

Material of Crank shaft S. Identification Mark on Do. J. 19. 4. 18 Material of Thrust shaft S. Identification Mark on Do. M. 17. 4. 18

Material of Tunnel shafts S. Identification Marks on Do. M. 17. 4. 18 Material of Screw shafts S. Identification Marks on Do. J. 19. 4. 18

Material of Steam Pipes Steel & Copper Test pressure S. 660 lb. Gp 1440 lb.

Is an installation fitted for burning oil fuel yls Is the flash point of the oil to be used over 150°F. yls.

Have the requirements of Section 49 of the Rules been complied with yls.

Is this machinery duplicate of a previous case yls. If so, state name of vessel S.P. "ANTWERPEN"

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery has been

built under special survey, in accordance with approved

plans and Rules for the intended Class & LMC

Engines tested and found to work well.

The vessel is fitted to burn oil fuel. The fuel is

carried in fuel tanks and No. 5 burner tanks.

The pumping arrangements are separate from Cargo

and bilge systems & the requirements of Sec 49 have

been complied with. The oil is atomized by mech-

anical burners, and supplied by fuel pump in Stowhold.

The vessel is eligible, in my opinion, to have the

records of LMC 7.18—M.P.s 220 Hk

J.B. 180 Hk—Fitted for oil fuel F.P. above 150°F.

in the Register Book—

The amount of Entry Fee ... \$15.00 :

Special ... \$233.00 :

Donkey Boiler Fee ... \$10.00 :

Travelling Expenses (if any) £ :

When applied for,

When received,

Committee's Minute

New York JUL 30 1918

Assigned

+ LMC 7.18

Fitted for oil fuel 7.18 F.P. above 150°F.

MACHINERY CERTIFICATE

WRITTEN, 20. 8. 18

Engineer Surveyor to Lloyd's Register of Shipping.

It is certified that this vessel is eligible for

THE RECORD. + LMC 7.18

FITTED FOR OIL FUEL 7.18 F.P. ABOVE 150°F.

Lloyd's Register Foundation