

Rpt. 4.

REPORT ON MACHINERY

No. 34

Date of writing Report 19th April 1921 When handed in at Local Office 22nd April 1921 Port of Cleveland Ohio

No. in Survey held at Hamilton Ohio Date, First Survey 7th April Last Survey 14th April 1921
Reg. Book. on the ENG N^o 4528, Single Screw Ferro Concrete Steamship MOFFITT (Number of Visits 2)

Master Built at Jacksonville By whom built A. Bentley & Sons Co Tons { Gross 6144
Net 3696
When built 1921-3

Engines made at Hamilton Ohio By whom made Horven Owens & Kentschler Co when made 1919

Boilers made at Orie, Pa. By whom made Union Iron Works when made 1919

Registered Horse Power Owners Emergency Fleet Corporation Port belonging to Jacksonville, Fla
Nom. Horse Power as per Section 28 609 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion (Vertical) No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 24 1/2 - 41 1/2 - 72" Length of Stroke 48" Revs. per minute 88 Dia. of Screw shaft 14.29 Material of screw shaft Steel
as per rule 15 1/4 as fitted

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes (2 bearings & 2 collars) the after end of the liner made water tight in the propeller boss Yes. If the liner is in more than one length are the joints burned one joint 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 Yes If two liners are fitted, is the shaft lapped or protected between the liners Yes

Dia. of Tunnel shaft 13.1 as per rule 13.75 Dia. of Crank shaft journals 14 as fitted 14 Dia. of Crank pin 14 3/8 Size of Crank webs 29 1/2 x 27 Dia. of thrust shaft under collars 14 Dia. of screw 16-9 Pitch of Screw 16-9 No. of Blades 4 State whether moveable Yes Total surface 79.56 Sq ft

No. of Feed pumps 2 Diameter of ditto 12 x 8" Stroke 18" Can one be overhauled while the other is at work Yes
No. of Bilge pumps 2 Diameter of ditto 5 Stroke 21" Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2 Sizes of Pumps 12 x 1 1/2 x 18 No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 4 @ 3' In Holds, &c. 2-3' in each pump room; 2-3' in after hold.

No. of Bilge Injections 1 sizes 10" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size 8" ?

Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes
Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks valves

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes 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 Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes

What pipes are carried through the bunkers Yes How are they protected Yes

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door No worked from No

BOILERS, &c.—(Letter for record) Manufacturers of Steel

Total Heating Surface of Boilers 200 Is Forced Draft fitted Yes No. and Description of Boilers

Working Pressure 200 Tested by hydraulic pressure to 200 Date of test 22 April 1921 No. of Certificate 1

Can each boiler be worked separately Yes Area of fire grate in each boiler 100 No. and Description of Safety Valves to each boiler 1

Area of each valve 100 Pressure to which they are adjusted 200 Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 14" Length 12' Material of shell plates Steel

Thickness 1/2" Range of tensile strength 40,000 Are the shell plates welded or flanged Yes Descrip. of riveting: cir. seams Yes
long. seams Yes Diameter of rivet holes in long. seams 1/4" Pitch of rivets 2" Lap of plates or width of butt straps 1"

Per centages of strength of longitudinal joint 85 Working pressure of shell by rules 200 Size of manhole in shell 18"

Size of compensating ring 18" No. and Description of Furnaces in each boiler 1 Material Steel Outside diameter 18"

Length of plain part 12' Thickness of plates 1/2" Description of longitudinal joint Butt No. of strengthening rings 1

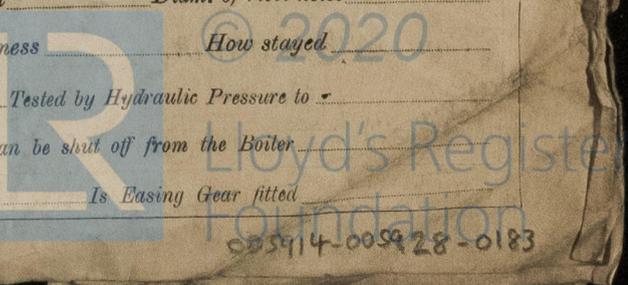
Working pressure of furnace by the rules 200 Combustion chamber plates: Material Steel Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 1/2"

Pitch of stays to ditto: Sides 12" Back 12" Top 12" If stays are fitted with nuts or riveted heads Yes Working pressure by rules 200

Material of stays Steel Area at smallest part 100 Area supported by each stay 100 Working pressure by rules 200 End plates in steam space: Yes

Material Steel Thickness 1/2" Pitch of stays 12" How are stays secured By nuts Working pressure by rules 200 Material of stays Steel
Area at smallest part 100 Area supported by each stay 100 Working pressure by rules 200 Material of Front plates at bottom Steel
Thickness 1/2" Material of Lower back plate Steel Thickness 1/2" Greatest pitch of stays 12" Working pressure of plate by rules 200
Diameter of tubes 12" Pitch of tubes 12" Material of tube plates Steel Thickness: Front 1/2" Back 1/2" Mean pitch of stays 12"
Pitch across wide water spaces 12" Working pressures by rules 200 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 12" Length as per rule 12' Distance apart 12" Number and pitch of stays in each 1 @ 12"
Working pressure by rules 200 Steam dome: description of joint to shell Butt % of strength of joint 85
Diameter 12" Thickness of shell plates 1/2" Material Steel Description of longitudinal joint Butt Diam. of rivet holes 1/4"
Pitch of rivets 2" Working pressure of shell by rules 200 Crown plates Yes Thickness 1/2" How staged Yes

SUPERHEATER. Type Horizontal Date of Approval of Plan 22 April 1921 Tested by Hydraulic Pressure to 200
Date of Test 22 April 1921 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Yes
Diameter of Safety Valve 1 1/2" Pressure to which each is adjusted 200 Is Easing Gear fitted Yes



005914-005928-0183

IS A DONKEY BOILER FITTED?

No.

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied: - Two top & bottom end bolts & nuts. Two main bearing bolts & nuts. Set of Coupling bolts & nuts. One crank pin bearing. A pair of top end brasses. H.P. Valve spindle. 2 H.P. & 2 I.P. & 1 L.P. piston rings. 2 H.P. piston valve rings. Set of valves & guards & studs for air & bilge pumps.

The foregoing is a correct description,

for engine only.
THE HOOVEN WERKE, REITSCHLÖßER CO.
559 Heine, Ass't Chief Engrs Manufacturer.

Dates of Survey while building: During progress of work in shops - April 7th & 14th 1919. During erection on board vessel - Oct. 21, 25, 29, 30, Nov. 5, 11, 14, 26, Dec. 7, 15, 22, 29, 31, 1921. Jan. 3, 11, 16, 19, 23, 26, 28, Feb. 7, 5, 8, 11, 14, 18, 27, 28. Total No. of visits 48. Is the approved plan of main boiler forwarded herewith? Yes.

Dates of Examination of principal parts - Cylinders 7-4-19 Slides 7-4-19 Covers 14-4-19 Pistons 14/4/19 Rods 7-4-19 Connecting rods 14-4-19 Crank shaft 7-4-19 Thrust shaft 14/4/19 Tunnel shafts 11th Nov. 1920 Screw shaft 19th July 1920 Propeller 6 Aug 1920 Stern tube 17th Dec. 19. Steam pipes tested 28 Feb. 1921. Engine and boiler seatings 11 Apr. 19. Engines holding down bolts 11th Nov. 19. Completion of pumping arrangements Dec. 1920 Boilers fixed Dec. 1920 Engines tried under steam 17th March 1921. Completion of fitting sea connections 13th Jan 1920. Stern tube 17th Dec. 19. Screw shaft and propeller 29th Dec. 1920. Main boiler safety valves adjusted 28th Mar. 1921 Thickness of adjusting washers ✓

Material of Crank shaft Steel Identification Mark on Do. JE Material of Thrust shaft Steel Identification Mark on Do. JE
Material of Tunnel shafts Steel Identification Marks on Do. LLOYDS 1941-2-B. R.S. Material of Screw shafts Steel Identification Marks on Do. LLOYDS 1946 R.S.
Material of Steam Pipes Steel Test pressure 675 lbs.

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

Have the requirements of Section 49 of the Rules been complied with? Yes.

Is this machinery duplicate of a previous case? No. 4516 If so, state name of vessel "DINSMORE"

General Remarks (State quality of workmanship, opinions as to class, &c.)

The above Engines have been constructed under Special Survey, also under the supervision of the American Bureau Surveyors. The materials & workmanship employed in their manufacture so far as can be seen are sound & good.

When the Engines have been satisfactorily installed in vessel and proving satisfactory under working conditions & spare gear supplied as required by the rules. The vessel in which they are fitted will in my opinion be eligible for record of F.I.M.C. (with date).

Shipped to Jacksonville Ship outfitting Co Jacksonville
The above machinery has been satisfactorily installed on completion was tried under working conditions & found satisfactory

The amount of Entry Fee \$15.00 : When applied for, 3 Dec. 1921
Special \$252.25 :
Donkey Boiler Fee £ : When received, 5.7.1921
Travelling Expenses (if any) \$15.25 :
J. Robinson & Hugh Boyle, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York APR 12 1921
Assigned + L.M.C. 321 Subject FRI. 16 SEP. 1921



Certificate (if required) to be sent to
The Surveyors are requested not to write on or below the space for Committee's Minute.