

REC'D NEW YORK JUL 25 1921

See No. 1st Entry Report No. 3569.

Rpt. 4.

REPORT ON MACHINERY.

No. 149

Received at London Office

SAT. 13 AUG. 1921

Date of writing Report 24/2/21 1921. When handed in at Local Office 24/2/21 Port of Cleveland Ohio
No. in Survey held at Hamilton Ohio Date, First Survey 1st Nov 1920 Last Survey 8th Feb 1921
Reg. Book. on the ENG. N^o 4957 HULL N^o 21 (Number of Visits)

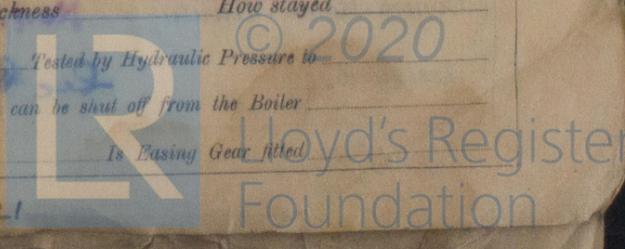
Master Hamilton Ohio Built at Oakland Cal. By whom built Union Construction Coy Tons { Gross / Net }
Engines made at Hamilton Ohio By whom made Hooven Owen & Rentschler Coy when made 1921
Boilers made at _____ By whom made _____ when made _____
Registered Horse Power _____ Owners _____ Port belonging to _____
Nom. Horse Power as per Section 28 _____ Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

ENGINES, &c.—Description of Engines Triple expansion Vertical No. of Cylinders 3 No. of Cranks 3
Dia. of Cylinders 27"-45"-74" Length of Stroke 48" Revs. per minute 80 Dia. of Screw shaft _____ as per rule / as fitted _____ Material of screw shaft _____
Is the screw shaft fitted with a continuous liner the whole length of the stern tube _____ Is the after end of the liner made water tight in the propeller boss _____ If the liner is in more than one length are the joints burned _____ 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 _____ If two liners are fitted, is the shaft lapped or protected between the liners _____ Length of stern bush _____
Dia. of Tunnel shaft _____ as per rule / as fitted _____ Dia. of Crank shaft journals _____ as per rule / as fitted _____ Dia. of Crank pin 14 1/2" Size of Crank webs 27 1/2" x 29" Dia. of thrust shaft under collars 4 1/2" Dia. of screw _____ Pitch of Screw _____ No. of Blades _____ State whether moveable _____ Total surface _____
No. of Feed pumps _____ Diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____
No. of Bilge pumps 2 Diameter of ditto 4" Stroke 26" Can one be overhauled while the other is at work Yes
No. of Donkey Engines _____ Sizes of Pumps _____ No. and size of Suctions connected to both Bilge and Donkey pumps _____
In Engine Room _____ In Holds, &c. _____
No. of Bilge Injections _____ sizes _____ Connected to condenser, or to circulating pump _____ Is a separate Donkey Suction fitted in Engine room & size _____
Are all the bilge suction pipes fitted with roses _____ Are the roses in Engine room always accessible _____ Are the sluices on Engine room bulkheads always accessible _____
Are all connections with the sea direct on the skin of the ship _____ Are they Valves or Cocks _____
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates _____ Are the Discharge Pipes above or below the deep water line _____
Are they each fitted with a Discharge Valve always accessible on the plating of the vessel _____ Are the Blow Off Cocks fitted with a spigot and brass covering plate _____
What pipes are carried through the bunkers _____ How are they protected _____
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times _____
Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges _____
Is the Screw Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

BOILERS, &c.—(Letter for record _____) Manufacturers of Steel _____
Total Heating Surface of Boilers _____ Is Forced Draft fitted _____ No. and Description of Boilers _____
Working Pressure 180# Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____
Can each boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of Safety Valves to each boiler _____
Area of each valve _____ Pressure to which they are adjusted _____ Are they fitted with easing gear _____
Smallest distance between boilers or uptakes and bunkers or woodwork _____ Mean dia. of boilers _____ Length _____ Material of shell plates _____
Thickness _____ Range of tensile strength _____ Are the shell plates welded or flanged _____ Descrip. of riveting: cir. seams _____
long. seams _____ Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Lap of plates or width of butt straps _____
Per centages of strength of longitudinal joint _____ Working pressure of shell by rules _____ Size of manhole in shell _____
Size of compensating ring _____ No. and Description of Furnaces in each boiler _____ Material _____ Outside diameter _____
Length of plain part _____ Thickness of plates _____ Description of longitudinal joint _____ No. of strengthening rings _____
Working pressure of furnace by the rules _____ Combustion chamber plates: Material _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____
Pitch of stays to ditto: Sides _____ Back _____ Top _____ If stays are fitted with nuts or riveted heads _____ Working pressure by rules _____
Material of stays _____ Area at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ End plates in steam space: _____
Material _____ Thickness _____ Pitch of stays _____ How are stays secured _____ Working pressure by rules _____ Material of stays _____
Area at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ Material of Front plates at bottom _____
Thickness _____ Material of Lower back plate _____ Thickness _____ Greatest pitch of stays _____ Working pressure of plate by rules _____
Diameter of tubes _____ Pitch of tubes _____ Material of tube plates _____ Thickness: Front _____ Back _____ Mean pitch of stays _____
Pitch across wide water spaces _____ Working pressures by rules _____ Girders to Chamber tops: Material _____ Depth and thickness of girder at centre _____ Length as per rule _____ Distance apart _____ Number and pitch of stays in each _____
Working pressure by rules _____ Steam dome: description of joint to shell _____ % of strength of joint _____
Diameter _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet holes _____
Pitch of rivets _____ Working pressure of shell by rules _____ Crown plates _____ Thickness _____ How stayed _____

SUPERHEATER. Type _____ Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____
Date of Test _____ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____
Diameter of Safety Valve _____ Pressure to which each is adjusted _____ Is Easing Gear fitted _____

W606-0021



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two top end bushes with bolts & nuts. Two bottom end bushes with bolts & nuts. Two main bearing bolts & nuts. Six Coupling bolts & nuts. Set of valves for air & bilge pumps. Set of springs & rings for H.P. I.P. & L.P. pistons. Valve stem, link block brasses, & eccentric strap complete. Air pump rod. Bilge pump plunger. Guide shoe. 1/3 length Crank shaft. Follower studs & nuts, for pistons & stuffing boxes.

The foregoing is a correct description,

Boorn Ourns Reatachler Co for 181 Hamilton Manufacturer.

Dates of Survey while building: During progress of work in shops - - - 1920, 1 Nov. 8 Dec. 1921, 18 Jan. 25 Jan. 8 Feb. 23 Feb. During erection on board vessel - - - Total No. of visits

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders	11/1/20	13/1/20	13/1/21	18/1/21	8/2/21	15/1/21	18/1/21	8/2/21
Connecting rods	8/2/21	Crank shaft	18/1/21	Thrust shaft	25/1/21	Tunnel shafts	Screw shaft	Propeller
Stern tube	Steam pipes tested	Engine and boiler seatings	Engines holding down bolts	Completion of pumping arrangements	Boilers fixed	Engines tried under steam	Completion of fitting sea connections	Stern tube
Main boiler safety valves adjusted	Thickness of adjusting washers	Material of Crank shaft	Steel	Identification Mark on Do.	LLOYDS	Material of Thrust shaft	Steel	Identification Mark on Do.
Material of Tunnel shafts	Identification Marks on Do.	Material of Screw shafts	Identification Marks on Do.	Material of Steam Pipes	Test pressure	Is an installation fitted for burning oil fuel	Is the flash point of the oil to be used over 150°F.	Have the requirements of Section 49 of the Rules been complied with
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 above Engines have been built under Special Survey. The materials & workmanship employed in their manufacture, so far as can be seen, are sound & efficient. When the Engines have been satisfactorily installed in the vessel, proved satisfactory under working conditions, & spare supplied as required by the Rules, this vessel will be eligible in my opinion for Record L.M.C. (with date).

Certificate (if required) to be sent to

The amount of Entry Fee ...	\$ 45 L.M.C. fee to be	Special	credited to Cleveland	Donkey Boiler Fee ...	\$ 90 : 00	Travelling Expenses (if any)	\$ 90 : 00
				When applied for,	19		
				When received,	19		

Committee's Minute New York JUL 26 1931
Assigned See R. 3569.

B. Drummond.
Engineer Surveyor to Lloyd's Register of Shipping.

TUE. 7 JUL 1931

