

Rpt. 4.

REPORT ON MACHINERY.

No. 146

Date of writing Report 21/12/20 When handed in at Local Office 21/12/20 Port of Cleveland Ohio Received at London Office WED. 4 APR 1921
No. in Survey held at Hamilton Ohio Date, First Survey 19/11/20 Last Survey 18/12/1920
Reg. Book. ENG. N° 4908. Hull N° 42. (Number of Visits)

Master _____ Built at _____ By whom built Northwest B.S. Coy Tons { Gross _____ Net _____
Engines made at Hamilton O. By whom made Hooven Owens & Leitch Co When made 1920.
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 1/2" x 46" x 78" Length of Stroke 57 Revs. per minute 77 Dia. of Screw shaft _____ as per rule _____ Material of _____ as fitted _____ 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 14.6 Dia. of Crank shaft journals _____ as per rule 15.3 Dia. of Crank pin 16 1/4" Size of Crank webs 30 5/8" Dia. of thrust shaft under _____
collars 16" 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 5 Stroke 24 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 210 # 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 _____ rivets _____ 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 _____ top _____ Thickness of plates _____ crown _____ Description of longitudinal joint _____ No. of strengthening rings _____
bottom _____ 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 _____

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Lloyd's Register
Foundation

W677-0078

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. Two sets of coupling bolts & nuts. Set of valves for
air & bilge pumps. Set of rings for H.P. I.P. & L.P. pistons.
Air pump rod. H.P. valve stem. Set of link block brasses.
Set of H.P. piston valve rings. Follower studs for pistons.
Cylinders cover & valve chest cover studs.

The foregoing is a correct description,

Harold Carr Kentschler Co. Agt. Manufacturer.

Dates of Survey while building
During progress of work in shops --
During erection on board vessel --
Total No. of visits

19th Nov. 19. 20th Nov. 7 Dec. 18 Dec.

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 30/11/20 Slides 20/11/20 Covers 18/12/20 Pistons 2/12/20 Rods 2/12/20

Connecting rods 7/12/20 Crank shaft 19/11/20 Thrust shaft 30/11/20 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 Screw shaft and propeller

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. 3623 W.B. 5.

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 gear supplied as required by the Rules; this vessel will be eligible in my opinion for Record & L.M.C. (with date)

The amount of Entry Fee ... \$

25 L.M.C. fee to be

Credited to Cleveland

Donkey Boiler Fee ... \$

Travelling Expenses (if any) \$127.50

When applied for.

19.

When received.

22/12/20

G. Drummond

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

New York

MAR 15 1921

Assigned

See P.O. Rpt 624

Rpt. 13.

Port of Po

No. in Reg. Book

Owners SW

Yard No. 42

DESCRIPTION

Two

Single Syl

Capacity of Dyn

Where is Dyna

Position of Ma

Positions of au

Signal Li

If fuses are fit

circuits

If cessel is wire

Are the fuses o

Are all fuses fi

are perman

Are all switches

Total number of

A

B

C

D Search

E 5 Deck

1 Mast h

2 St

3

If arc lights, wha

Where are the s

DESCRIPTION

Main cable carryin

Branch cables ca

Branch cables ca

Leads to lamps ca

Cargo light cables

DESCRIPTION

Joints in cables, ho

tape and P.

Are all the joints o

positions, non

Are there any join

How are the cables

compasses w



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