

Received at London Office

Date of writing Report 3-3-

1927

When handed in at Local Office 5-3-

1927

Port of

Aberdeen.

(M.A.N. 13.1)

No. in Survey held at
Reg. Book.

Aberdeen

Date, First Survey 26-4-26 Last Survey 2-3-1927

on the Steel Sc. Hopper Barge "CLEARWAY."

(Number of Visits 28.)

Master

Built at Aberdeen

By whom built A. Hall & Co. Ltd. (No 601)

Tons Gross 270.80

Net 106.99

When built 1927-1

Engines made at

Aberdeen

By whom made A. Hall & Co. Ltd. (No 301)

when made

1927

Boilers made at

Aberdeen

By whom made A. Hall & Co. Ltd. (No 294)

when made

1927

Registered Horse Power

Owners Messrs James, Dredging, Towing, & Transport Co. Ltd.

Port belonging to London.

Nom. Horse Power as per Section 28

46

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes.

ENGINES, &c.—Description of Engines

Triple expansion.

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders 10" 16" 26" Length of Stroke 18" Revs. per minute

Dia. of Screw shaft as per rule 5.66" 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 ☒Dia. of Tunnel shaft as per rule 4.88" Dia. of Crank shaft journals as per rule 5.12" Dia. of Crank pin 5 1/4" Size of Crank webs 9 3/4" x 3 1/4" Dia. of thrust shaft under collars 5 1/4" Dia. of screw 6-6" Pitch of Screw 10'-0" No. of Blades 4 State whether moveable ☒ Total surface 19.5 sq ftNo. of Feed pumps 1 Diameter of ditto 2 1/8" Stroke 9" Can one be overhauled while the other is at work ☒No. of Bilge pumps 1 Diameter of ditto 2 1/8" Stroke 9" Can one be overhauled while the other is at work ☒

No. of Donkey Engines 2 Sizes of Pumps 4 1/2" x 2 3/4" x 4; 5 1/4" x 4 3/4" x 5 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room One 2" dia. In Holds, &c. One @ 2" dia from :- Fore peak,

after peak, Forward hold, Port wing chamber, Starboard wing chamber.

No. of Bilge Injections 1 sizes 2" Connected to condenser, or to circulating pump pumps Is a separate Donkey Suction fitted in Engine room & size yes, 2 1/4"

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 S)

Manufacturers of Steel Henschel & Sohn, alt. Henrichshütte, Hattingen.

Total Heating Surface of Boilers 925 sq ft Is Forced Draft fitted ☒ No. and Description of Boilers One S.E. Main.

Working Pressure 180 lb. Tested by hydraulic pressure to 320 lb. Date of test 12-1-27. No. of Certificate 1054.

Can each boiler be worked separately ☒ Area of fire grate in each boiler 34 sq ft No. and Description of Safety Valves to each boiler 2 spring loaded Area of each valve 3-14-0" Pressure to which they are adjusted 180 lb. Are they fitted with easing gear ☒

Smallest distance between boilers or uptakes and bunkers or woodwork 9" Mean dia. of boilers 10-6" Length 10'-0" Material of shell plates Steel.

Thickness 7/8" Range of tensile strength 28/32 tons Are the shell plates welded or flanged ☒ Descrip. of riveting: cir. seams D.R.

long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 15/16" Pitch of rivets 6 7/8" Lap of plates or width of butt straps 1 1/4"

Per centages of strength of longitudinal joint rivets 88.2 plate 86.36 Working pressure of shell by rules 181 lb. Size of manhole in shell 16" x 12"

Size of compensating ring 34" x 30" x 3/8" No. and Description of Furnaces in each boiler 2 Deighton Material S Outside diameter 3'-3 1/4"

Length of plain part top bottom Thickness of plates crown bottom 1 1/2" Description of longitudinal joint welded. No. of strengthening rings

Working pressure of furnace by the rules 200 lb Combustion chamber plates: Material S Thickness: Sides 11/16" Back 19/32" Top 11/16" Bottom 11/16"

Pitch of stays to ditto: Sides 8" x 8" Back 8" x 8" Top 8" x 7 1/2" If stays are fitted with nuts or riveted heads ☒ Working pressure by rules 190 lb.

Material of stays S Area at smallest part 1 1/2" dia. Area supported by each stay 64 sq in Working pressure by rules 196 lb End plates in steam space:

Material S Thickness 29/32" Pitch of stays 14 1/2" x 14 1/4" How are stays secured D.N. Working pressure by rules 182 lb Material of stays S

Area at smallest part 2 1/2" dia Area supported by each stay 206.6 Working pressure by rules 214 Material of Front plates at bottom S

Thickness 29/32" Material of Lower back plate S Thickness 29/32" Greatest pitch of stays 19" dia. Working pressure of plate by rules 208

Diameter of tubes 3 1/2" Pitch of tubes 4 3/4" x 5/8" Material of tube plates S Thickness: Front 29/32" Back 13/16" Mean pitch of stays 9 1/2" x 9 1/4"

Pitch across wide water spaces 13 1/4" Working pressures by rules 250 lb Girders to Chamber tops: Material S Depth and

thickness of girder at centre 8" x 1 1/4" Length as per rule 2'-4 1/2" Distance apart 7 1/2" Number and pitch of stays in each 2 @ 8"

Working pressure by rules 215 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

011493-011498-0166

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

Two top end bolts & nuts, 2 bottom end bolts & nuts, 2 main bearing bolts & nuts, set of coupling bolts, set of feed, ledge, air & circulating pump valves, one main & one donkey check valve. Spare propeller. 6 junk ring bolts & nuts.

The foregoing is a correct description,
ALEXANDER HALL & CO., LTD.

Manufacturer.

Dates of Survey while building
During progress of work in shops - - -
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 15-9-26 Slides 28-9-26 Covers 23-8-26 Pistons 28-9-26 Rods 28-9-26
Connecting rods 28-9-26 Crank shaft 23-8-26 Thrust shaft 23-8-26 Tunnel shafts 12-11-26 Screw shaft 12-11-26 Propeller 12-11-26
Stern tube 12-11-26 Steam pipes tested 24-1-27 Engine and boiler seatings 18-1-27 Engines holding down bolts 27-1-27
Completion of pumping arrangements 1-2-27 Boilers fixed 27-1-27 Engines tried under steam 28-1-27
Completion of fitting sea connections 18-1-27 Stern tube 18-1-27 Screw shaft and propeller 18-1-27
Main boiler safety valves adjusted 28-1-27 Thickness of adjusting washers P 9/32 S 11/32 part of crank shaft.
Material of Crank shaft Steel Identification Mark on Do. 301 JDB Material of Thrust shaft Identification Mark on Do.
Material of Tunnel shafts Steel Identification Marks on Do. 6839 PF Material of Screw shafts Steel Identification Marks on Do. 6840 PF
Material of Steam Pipes S.D. Copper 3 1/2 dia. 6 W.C. Test pressure 360 lb per sq. in.
Is an installation fitted for burning oil fuel No 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 No If so, state name of vessel

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

The engines & boiler of this vessel have been built under special survey & in accordance with the approved plans & the Rules of this Society. The materials & workmanship are good. The machinery has been properly fitted & secured on board, tried under working conditions, & found good. The steam & feed pipes have been tested by hydraulic pressure as required by the Rules. The safety valves have been adjusted under steam & tried for accumulation. The machinery is eligible in my opinion to have the record in the Register Book.

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 3. 27. 06.

The amount of Entry Fee ... £ 2 : -
Special ... £ 15 : -
Donkey Boiler Fee ... £ : -
Travelling Expenses (if any) £ : -

When applied for,

5-3-1927

When received,

26-4-1927

P. Fitzgerald.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

TUES. 8 MAR 1927

+ LMC 3. 27. 06

CERTIFICATE WRITTEN



© 2021

Lloyd's Register
Foundation