

REPORT ON MACHINERY.

No. 19758

Port of Hull

Received at London Office FRI. 24 JAN 1908

No. in Survey held at Hull Date, first Survey Oct 31/08 Last Survey Jan 16 1908
 Reg. Book. 33 Supp on the 5/ Trawler 'PEKEN' (Number of Visits 25) Tons { Gross 228 Net 119
 Master Selby Built at Selby By whom built Bochram & Sons When built 1907-8
 Engines made at Hull By whom made Chas. S. Holmes & Co. when made 1907-8
 Boilers made at Hull By whom made Hull when made Hull
 Registered Horse Power 66 Owners A. L. Taylor Port belonging to Grimsby
 Nom. Horse Power as per Section 28 66 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 12-21-34 Length of Stroke 24 Revs. per minute 112 Dia. of Screw shaft 6.9 Material of screw shaft Iron
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube No Is the after end of the liner made water tight in the propeller boss No
 If the liner is in more than one length are the joints burned No 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 Length of stern bush 2-7
 Dia. of Tunnel shaft 6.25 Dia. of Crank shaft journals 6.5 Dia. of Crank pin 6.7 Size of Crank webs 18x13 Dia. of thrust shaft under collars 6.75 Dia. of screw 8-6 Pitch of Screw 11-3-10-3 No. of Blades 4 State whether moveable No Total surface 27 1/2
 No. of Feed pumps 1 Diameter of ditto 2 1/8 Stroke 24 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 1 Diameter of ditto 2 1/8 Stroke 24 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 1 Sizes of Pumps 2 1/2 x 5 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 2-2 Fore & Aft In Holds, &c. 2-2 Fore hold & Main hold
Cyclor suction to get begun with discharge on deck
 No. of Bilge Injections 1 sizes 2 1/2 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size 2 Cyclor
 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 Both
 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 Hold suction How are they protected Wood casing
 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
 Dates of examination of completion of fitting of Sea Connections 4.12.07 of Stern Tube 4.12.07 Screw shaft and Propeller 4.12.07
 Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door Yes worked from Yes

BOILERS, &c.—(Letter for record Yes) Manufacturers of Steel Messrs David Colville
 Total Heating Surface of Boilers 10954 Is Forced Draft fitted No No. and Description of Boilers 1 S.T. Multitubular
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 3.1.08 No. of Certificate 1624
 Can each boiler be worked separately Yes Area of fire grate in each boiler 32 sq No. and Description of Safety Valves to each boiler 2 Spring loaded Area of each valve 3.97 Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 5 Mean dia. of boilers 12-0 Length 10-0 Material of shell plates Steel
 Thickness 3/8 Range of tensile strength 28-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams S.H. Lap long. seams S.B.S. joints Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 7 Lap of plates or width of butt straps 15
 Per centages of strength of longitudinal joint rivets 85-69 Working pressure of shell by rules 182 Size of manhole in shell 16x12 plate 85-26
 Size of compensating ring 7x1 No. and Description of Furnaces in each boiler 2 plain Material Steel Outside diameter 3-6
 Length of plain part top 5-9 1/2 Thickness of plates crown 7/16 Description of longitudinal joint welded No. of strengthening rings 1 bottom 5-3 1/2 bottom 5/16
 Working pressure of furnace by the rules 189 Combustion chamber plates: Material Steel Thickness: Sides 3/32 Back 1/16 Top 3/32 Bottom 3/32
 Pitch of stays to ditto: Sides 9x9 Back 9x8 1/2 Top 8 1/2 x 8 If stays are fitted with nuts or riveted heads Yes Working pressure by rules 220
 Material of stays Steel Diameter at smallest part 1 1/2 Area supported by each stay 81 Working pressure by rules 230 End plates in steam space: Material Steel Thickness 1 1/2 Pitch of stays 16x16 How are stays secured At 60 degree Working pressure by rules 196 Material of stays Steel
 Diameter at smallest part 5-78 Area supported by each stay 256 Working pressure by rules 235 Material of Front plates at bottom Steel
 Thickness 3/32 Material of Lower back plate Steel Thickness 5/16 Greatest pitch of stays 15x9 Working pressure of plate by rules 198
 Diameter of tubes 7 1/2 Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates Steel Thickness: Front 3/32 Back 3/8 Mean pitch of stays 9 1/2
 Pitch across wide water spaces 15 1/2 Working pressures by rules 180 Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 8 1/2 x 1 1/2 Length as per rule 2-8 Distance apart 8 Number and pitch of stays in each 328 1/2
 Working pressure by rules 196 Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked separately Yes
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed
 Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

VERTICAL DONKEY BOILER— Manufacturers of Steel

No. _____ Description _____

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Fire grate area _____ Description of Safety Valves _____

No. of Safety Valves _____ Area of each _____ Pressure to which they are adjusted _____ Date of adjustment _____

If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____ Dia. of donkey boiler _____ Length _____

Material of shell plates _____ Thickness _____ Range of tensile strength _____ Descrip. of riveting long. seams _____

Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Plates _____

Working pressure of shell by rules _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____

Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____

Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Stayed by _____

Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:— *Two top & two bottom end connecting rods bolts & nuts, two main bearing bolts, one set of coupling bolts & nuts one set of feed & high pump valves, one main & donkey feed check valve, assorted bolts & nuts etc.*

The foregoing is a correct description,
Charles S. Holmes Manufacturer.

Dates of Survey while building { During progress of work in shops - 1907: Oct. 31. Nov 5. 8. 11. 13. 15. 18. 20. 26. 28. 29. Dec 3. 4. 7. 11. 16. 17. 21. 1908: Jan 2. 3. 9.
 During erection on board vessel - Jan 10. 11. 13. 16.
 Total No. of visits 25

Is the approved plan of main boiler forwarded herewith *yes*
 " " " donkey " " " ✓

Dates of Examination of principal parts—Cylinders *7.12.07* Slides *2.1.08* Covers *7.12.07* Pistons *11.12.07* Rods *11.12.07*
 Connecting rods *7.12.07* Crank shaft *21.12.07* Thrust shaft *11.11.07* Tunnel shafts ✓ Screw shaft *29.11.07* Propeller *29.11.07*
 Stern tube *29.11.07* Steam pipes tested *10.1.08* Engine and boiler seatings *4.12.07* Engines holding down bolts *9.1.08*
 Completion of pumping arrangements *16.1.08*. Boilers fixed *11.1.08*. Engines tried under steam *11.1.08*.
 Main boiler safety valves adjusted *11.1.08*. Thickness of adjusting washers *A 5/16 F 1/2*
 Material of Crank shaft *Iron* Identification Mark on Do. *395.516 21.12.07* Material of Thrust shaft *Iron* Identification Mark on Do. *395.516 21.12.07*
 Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts *Iron* Identification Marks on Do. *395.516 29.11.07*
 Material of Steam Pipes *Solid drawn Copper*. Test pressure *360 lbs.*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery & boiler of this vessel have been examined under Special Survey, are of good material & workmanship, & have been found to be in accordance with the Rules. They are now in good working condition & eligible in my opinion to have the notation 'L.M.C. 1-08' in the Register Book.*

It is submitted that this vessel is eligible for THE RECORD. *L.M.C. 1-08.*

JHC 24.1.08

J.S.
24.1.08

The amount of Entry Fee. £ *1:00* When applied for. *23/11/08*
 Special £ *9.18.0*
 Donkey Boiler Fee £ *-* When received. *31.1.08*
 Travelling Expenses (if any) £ *11.6.3*

John W. Gymer
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute *TUES. 28 JAN 1908*

Assigned *+ Lmb 1.08*

MACHINERY CERTIFICATE WRITTEN.



Certificate (if required) to be sent to Hull

The Surveyors are requested not to write on or below the space for Committee's Minute.