

REPORT ON MACHINERY.

No. 17297.

Received at London Office

FRI. 24 MAY 1918

Writing Report 9 May 1918 When handed in at Local Office 17th May, 1918. Port of Greenock
Survey held at Port Glasgow & Greenock Date, First Survey 22nd Febry, 1916; Last Survey 17th May, 1918.
(Number of Visits 89)

on the Wood Hammer "Montezuma"
A. H. Clews. Built at Port Glasgow By whom built A. Duncan & Co
Tons { Gross 5037.44
Net 3187.34
When built 1910

made at Greenock By whom made John S. Kincaid & Co when made 1910
made at Greenock By whom made John S. Kincaid & Co when made 1910

erred Horse Power Owners Canadian Pacific Railway Co Port belonging to London

Horse Power as per Section 28 538 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Compound No. of Cylinders Three No. of Cranks Three
of Cylinders 27° 44' 70' Length of Stroke 48 Revs. per minute 70 Dia. of Screw shaft as per rule 14.95 Material of screw shaft Steel
as fitted 15 1/2

screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight
propeller boss Yes If the liner is in more than one length are the joints burned No If the liner does not fit tightly at the part

in the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes If two
are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 60

of Tunnel shaft as per rule 13.33 Dia. of Crank shaft journals as per rule 13.99 Dia. of Crank pin 14 Size of Crank webs 26.9 Dia. of thrust shaft under
as fitted 13 3/4 as fitted 14

s 14 Dia. of screw 18.3 Pitch of Screw 17.0 No. of Blades 4 State whether moveable No Total surface 106 sq ft
of Feed pumps two Diameter of ditto 4 Stroke 27 Can one be overhauled while the other is at work Yes

of Bilge pumps two Diameter of ditto 4 Stroke 27 Can one be overhauled while the other is at work Yes
of Donkey Engines Three Sizes of Pumps 18.10 - 6.8 - 5.8 No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room Three Sts In Holds, &c. Two Sts Forward Sts

of Bilge Injections two sizes 8 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size 2 1/2
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

all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks both
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

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

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

the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Top of the funnel
MILLERS, &c.—(Letter for record S) Manufacturers of Steel White Iron Glasgow 1910

total Heating Surface of Boilers 8151 sq ft Is Forced Draft fitted Yes No. and Description of Boilers Three long boiler
Working Pressure 185 lb Tested by hydraulic pressure to 360 lb Date of test 3/10/10 No. of Certificate 1333

each boiler be worked separately Yes Area of fire grate in each boiler 62 sq ft No. and Description of Safety Valves to
boiler Two Opening Area of each valve 9.62 sq in Pressure to which they are adjusted 185 lb Are they fitted with easing gear Yes

smallest distance between boilers or uptakes and bunkers or woodwork 18 Mean dia. of boilers 15.6 Length 12.0 Material of shell plates Steel
thickness 1 1/2 Range of tensile strength 20 - 32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams No

recast steel seams all steel Diameter of rivet holes in long. seams 1 9/16 Pitch of rivets 9/16 Lap of plates or width of butt straps 1 9/16
percentages of strength of longitudinal joint rivets 88.2 Working pressure of shell by rules 185 lb Size of manhole in shell 16.12

of compensating ring flanged 1 1/2 No. and Description of Furnaces in each boiler 3 Design Material Steel Outside diameter 49 1/2
length of plain part top 9 1/2 Thickness of plates crown 9/16 Description of longitudinal joint welded No. of strengthening rings long
bottom 9 1/2 bottom 9/16

working pressure of furnace by the rules 185 lb Combustion chamber plates: Material Steel Thickness: Sides 10/16 Back 10/16 Top 10/16 Bottom 10/16
pitch of stays to ditto: Sides 9 1/2 - 7 1/2 Back 9 1/2 - 7 1/2 Top 9 1/2 - 7 1/2 If stays are fitted with nuts or riveted heads both Working pressure by rules 185 lb

material of stays Steel Area at smallest part 1.79 sq in Area supported by each stay 68 sq in Working pressure by rules 185 lb End plates in steam space:
material Steel Thickness 1 9/16 Pitch of stays 2 1/4 How are stays secured both ends Working pressure by rules 185 lb Material of stays Steel

area at smallest part 8.12 sq in Area supported by each stay 452 sq in Working pressure by rules 185 lb Material of Front plates at bottom Steel
thickness 1 9/16 Material of Lower back plate Steel Thickness 1 9/16 Greatest pitch of stays 13 Working pressure of plate by rules 185 lb

diameter of tubes 2 1/2 Pitch of tubes 3 1/2 - 3 1/4 Material of tube plates Steel Thickness: Front 1 9/16 Back 1 9/16 Mean pitch of stays 9 9/16
pitch across wide water spaces 13 Working pressures by rules 187 lb Girders to Chamber tops: Material Steel Depth and
thickness of girder at centre 10 1/2 - 1 1/2 Length as per rule 36.6 Distance apart 9 1/2 Number and pitch of stays in each three 7 1/2

Working pressure by rules 185 lb Steam dome: description of joint to shell Yes % of strength of joint Yes
diameter 13 Thickness of shell plates 1 9/16 Material Steel Description of longitudinal joint Yes Diam. of rivet holes 1 9/16
pitch of rivets 13 Working pressure of shell by rules 185 lb Crown plates Yes Thickness 1 9/16 How stayed Yes

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



IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded? *-*

SPARE GEAR. State the articles supplied:— *Two top end bolts. Two bottom end bolts. Two main bearing bolts. One set coupling bolts. One set feed pump valves. One set bridge pump valves. One set feed check valves. Safety valve spring. Three cylinder escape valves and springs. Feed escape valve and spring. Sapelet. Bolt. Nut. &c*

The foregoing is a correct description,

FOR JOHN G. KINCAID & COY., LIMITED.

Robert Green

Manufacturer.

Secretary

Dates of Survey while building { During progress of work in shops -- *(1916) Feb. 22. Apr. 17. May 3. 23. 26. June 2. 19. 30. July 7. 12. 17. Aug. 4. 21. 23. 25. Nov. 14 (1917). Jan. 19. 29. Feb. 8. 20. 22. Apr. 24. May 8. 11. June 6. 14. 18. July 5. Aug. 21. Sep. 26. Oct. 22. 31. Nov. 1. 21. 22. 26. 30. Dec. 3. 6. 13. 17. 20. 25. (1918). Jan. 9. 15. 17. 21. 24. 25. 28. 30. 31. Feb. 4. 6. 8. 14. 18. 20. 22. 25. Mar. 1. 4. 6. 8. 12. 15. 18. 21. 26. 28. Apr. 2. 3. 5. 10. 11. 17. 18. 22. 24. 25. 26. 27. May 1. 2. 6. 8. 10. 15. 16. 17. -*
During erection on board vessel --
Total No. of visits *89.*

Is the approved plan of main boiler forwarded herewith *Yes*

" " " donkey " " " *-*

Dates of Examination of principal parts—Cylinders *8/3/18* Slides *26/4/18* Covers *8/3/18* Pistons *2/4/18* Rods *26/3/18*

Connecting rods *22/2/18* Crank shaft *6/2/18* Thrust shaft *26/3/18* Tunnel shafts *25/4/18* Screw shaft *26/3/18* Propeller *2/3/18*

Stern tube *2/3/18* Steam pipes tested *6/5/18* Engine and boiler seatings *26/3/18* Engines holding down bolts *25/4/18*

Completion of pumping arrangements *25/4/18* Boilers fixed *2/5/18* Engines tried under steam *15/5/18*

Completion of fitting sea connections *26/3/18* Stern tube *26/3/18* Screw shaft and propeller *5/4/18*

Main boiler safety valves adjusted *16/5/18* Thickness of adjusting washers *2 1/4" - 5 29/64" - 7 1/2" S 19/32" - 8 25/64" S 19/64"*

Material of Crank shaft *1 Unit* Identification Mark on Do. *2303 D* Material of Thrust shaft *1 Unit* Identification Mark on Do. *2306 D*

Material of Tunnel shafts *1 Unit* Identification Marks on Do. *2306 D* Material of Screw shafts *1 Unit* Identification Marks on Do. *2306 D*

Material of Steam Pipes *Main low* *Circle* *Circle* Test pressure *Main low to and works.*

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 *O.S. 'Ingalgar' No 24 17254*

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

The machinery and boilers of this vessel have been examined under special survey, and placed on board in accordance with the Board's Rules. They are now in my opinion in safe working condition, and the case is respectfully submitted for the Intimation + L.M.C. 5. 18, in the Register Book. also F. D.

This vessel is fitted to carry oil fuel in double bottom and deep tank. Oil above 150°F. The requirements have been carried out and to be recorded in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C 5. 18. F.D. C.L.

Greenock

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

The amount of Entry Fee ... £ 3 : 0 :
Special ... £ 46 : 10 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, *17th May, 1918.*
When received, *24.5.1918 25.5.18*

J.W.D.
27/5/18
J.P.R.
James Jones
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW. 23-MAY 1918**

Assigned *+ L.M.C 5. 18*

Surveyor's Signature *Rob Howle*

