

REPORT ON MACHINERY.

No. 20152
THU. 15 SEP. 1921

Received at London Office

Date of writing Report 14 Sept. 1921. When handed in at Local Office

14 Sept. 1921. Port of Newport

No. in Survey held at Newport Mon.

Date, First Survey May 24

Last Survey Sept. 9 - 1921.

Reg. Book.

30278 on the S/S "Anglo Colombian" ex "Schwarzenfels"

(Number of Visits 13.)

Master

Built at Bremen

By whom built Act. Geo. "Meier"

Tons { Gross 5407.
Net 5333.

When built 1915.

Engines made at Bremen

By whom made A. G. "Meier"

when made 1915.

Boilers made at 50

By whom made 50

when made 1915.

Registered Horse Power 542.

Owners Kityate Products S.S. Co. Ltd.

Port belonging to London

Nom. Horse Power as per Section 28 750

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes.

ENGINES, &c.—Description of Engines Quadruple exp. (Inverted)

No. of Cylinders 4

No. of Cranks 4

Dia. of Cylinders 25 1/8", 40 3/8", 55 1/4", 64 1/4" Length of Stroke 55" Revs. per minute 70

Dia. of Screw shaft as per rule 16 7/8"

Material of screw shaft 5.

Is the 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

In the propeller boss Yes If the liner is in more than one length are the joints burned on length 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 Yes

Dia. of Tunnel shaft as per rule 15 1/2" Dia. of Crank shaft journals as per rule 15 9/16"

Collars 16 3/8" Dia. of screw 20 ft. Pitch of Screw 17.75 ft. No. of Blades 4 State whether moreable Yes Total surface 127 sq. ft.

No. of Feed pumps 2 Diameter of ditto 5 1/8" Stroke 28" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 5 1/8" Stroke 28" Can one be overhauled while the other is at work Yes

No. of Donkey Engines 4 Sizes of Pumps Two 11 1/8" x 8 3/4" x 24" Ballast P. 12" x 10" x 24" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 2 (3 1/2") In Holds, &c. Two in each Hold & two in Tunnel

No. of Bilge Injections 1 sizes 8" Connected to condenser or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 8"

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 Below

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 No 1 & 2 Hold Bilge Suctions P.S. How are they protected Hand 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.

Is the Screw Shaft Tunnel watertight Yes. Is it fitted with a watertight door Yes worked from steering by. man on span aft.

OILERS, &c.—(Letter for record Manufacturers of Steel Messrs. Knapp. Bremen.

Total Heating Surface of Boilers 10320 sq. ft. Is Forced Draft fitted Yes No. and Description of Boilers Four. byl. Multi. Single ended.

Working Pressure 213 lbs. Test by hydraulic pressure to Yes Date of test No. of Certificate

Can each boiler be worked separately Yes Area of fire grate in each boiler 54 sq. ft. No. and Description of Safety Valves to

each boiler Two. Spring loaded. Area of each valve 12.17 sq. in. Pressure to which they are adjusted Not adjust. Are they fitted with easing gear Yes.

Smallest distance between boilers or uptakes and bunkers or woodwork 3 ft. Mean dia. of boilers 14-7" Length 12-0" Material of shell plates Steel

Thickness 1 1/2" Range of tensile strength 28-33 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Double

long. seams D.B. strap L.R. Diameter of rivet holes in long. seams 1.5" Pitch of rivets 11.34" Lap of plates or width of butt straps 26 3/4"

Per centages of strength of longitudinal joint rivets 117 plate 86.6 Working pressure of shell by rules 223 lbs. Size of manhole in shell 11.8" x 15.75"

Size of compensating ring 13" x 14.3" No. and Description of Furnaces in each boiler 3. Marican Material 5. Outside diameter 42.6"

Length of plain part top Thickness of plates crown 7/8" Description of longitudinal joint shielded No. of strengthening rings 63"

Working pressure of furnace by the rules 214 lbs. Combustion chamber plates: Material 5. Thickness: Sides 11/16" Back 11/16" Top 11/16" Bottom 63/64"

Pitch of stays to ditto: Sides 7.87 x 7.87 Back 7.87 x 7.87 Top 7.87 x 8.07 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 273 lbs.

Material of stays 5. Area at smallest part 1.65" Area supported by each stay 63.57 sq. in. Working pressure by rules 247 lbs. End plates in steam space:

Material 5. Thickness 1 1/4" Pitch of stays 17.3" x 14.5" How are stays secured D.N. 6 lbs. Working pressure by rules 250 lbs. Material of stays 5.

Area at smallest part 2.9" Area supported by each stay 252.3 sq. in. Working pressure by rules 292 lbs. Material of Front plates at bottom 5.

Thickness 1 1/2" Material of Lower back plate 5. Thickness 1 1/4" Greatest pitch of stays 16" x 16" Working pressure of plate by rules 236 lbs.

Diameter of tubes 2 1/2" Pitch of tubes 3.75" Material of tube plates 5. Thickness: Front 1 1/2" Back 1 1/2" Mean pitch of stays 7 1/2" x 7 1/2"

Pitch across wide water spaces 13.78" Working pressures by rules 260 lbs. Girders to Chamber tops: Material 5. Depth and

thickness of girder at centre 9.45" x 7.4" Length as per rule 333. Distance apart 8.07" Number and pitch of stays in each 3. 7.87"

Working pressure by rules 245 lbs. Steam dome: description of joint to shell Yes % of strength of joint Yes

Diameter Yes Thickness of shell plates Yes Material Yes Description of longitudinal joint Yes Diam. of rivet holes Yes

Pitch of rivets Yes Working pressure of shell by rules Yes Crown plates Yes Thickness Yes 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

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THE MARGIN.

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201496-0124

IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:— *One section crank shaft, Two halves crank pin
bushes & two bolts, Two halves top and bottom & two bolts, One main
crank Valve spindle, One front & one back pump link, Two main bearing
bolts, One screw shaft, 20 sampling bolts, A quantity of assorted iron
& bolts & nuts of assorted sizes. A number of condenser tubes*

The foregoing is a correct description.

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 *yes*

" " " donkey " " "

Dates of Examination of principal parts—Cylinders *6.6.21* Slides *6.6.21* Covers *6.6.21* Pistons *6.6.21* Rods *6.6.21*.

Connecting rods *8.6.21* Crank shaft *8.6.21* Thrust shaft *8.6.21* Tunnel shafts *6.6.21* Screw shaft Propeller

Stern tube Steam pipes tested *21.6.21*. Engine and boiler seatings *21.6.21*. Engines holding down bolts *21.6.21*.

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 *Not adjusted*. Thickness of adjusting washers ☒

Material of Crank shaft ☒ Identification Mark on Do. ☒ Material of Thrust shaft ☒ Identification Mark on Do. ☒

Material of Tunnel shafts ☒ Identification Marks on Do. ☒ Material of Screw shafts ☒ Identification Marks on Do. ☒

Material of Steam Pipes *steel*. Test pressure *618 lbs.*

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 *yes*.

Is this machinery duplicate of a previous case *yes*. If so, state name of vessel *S/S "Tudenharn"*.

General Remarks (State quality of workmanship, opinions as to class, &c. *The Machinery of this vessel
has been opened out & examined & found in place in good condition.
The material appears sound & the workmanship good.*

*In our opinion the Machinery of this vessel is eligible to
be classed with the notation of L.M.C. 9.21 when all
safety valves have been adjusted.*

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 ... £ : : When applied for.
Special ... £ : :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When received.
19

M. Gibson

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 27 SEP. 1921

FRI. 9 DEC. 1921

Assigned

FRI. 11 AUG. 1922

TUE JUL 18 1922



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