

Rpt. 4.

REPORT ON MACHINERY.

No. 23340

Date of writing Report 30 Oct 1923 When handed in at Local Office 30/10/23 Port of New York Received at London Office MON. 19 NOV. 1923

No. in Survey held at Newark N.J. Date, First Survey 27 Sept Last Survey 26 Oct 1923
Reg. Book. 37027 on the SS ATLANTIC EX WEST CATANACE (Number of Visits 8)

Master ✓ Built at San Pedro, Cal. By whom built South Western Shipbuilding Co. Tons Gross 5524
Engines made at Los Angeles Cal. By whom made Llewellyn Iron Works Net 3455
Boilers made at Portland, Ore. By whom made Williamette Iron Works When built 1919
Registered Horse Power ✓ Owners Edgerton Parsons when made 1919
Nom. Horse Power as per Section 28 552 Is Refrigerating Machinery fitted for cargo purposes No when made 1919
Is Electric Light fitted Yes Port belonging to New York

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3
Dia. of Cylinders 24 1/2" - 41 1/2" - 72" Length of Stroke 48" Revs. per minute 88 Dia. of Screw shaft as per rule 17 1/2" Material of screw shaft steel
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 Soldered joint 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 4'-10"
Dia. of Tunnel shaft as per rule 13.25 Dia. of Crank shaft journals as per rule 13.9 Dia. of Crank pin 14 3/8" Size of Crank webs 27x9 1/2" Dia. of thrust shaft under collars 14" Dia. of screw 17'-0" Pitch of Screw 14'-6" No. of Blades 4 State whether moveable yes Total surface 92.4 sq ft
No. of Feed pumps 2 independent Diameter of ditto 12x9x24" Stroke 12x8x12" Can one be overhauled while the other is at work yes
No. of Bilge pumps 2 Diameter of ditto 5" Stroke 21" Can one be overhauled while the other is at work yes
No. of Donkey Engines 2 Sizes of Pumps 12x10x12 BALLAST FIRE-BILGE 12x8x12 No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 5-3 1/2" In Holds, &c. 2-3 1/2" in each hold

No. of Bilge Injections 1 sizes 10" Connected to condensers or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes 3 1/2"
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 ✓
Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks valves + cocks
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 yes
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 oil fuel How are they protected ✓
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 upper deck

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel Illinois Steel Co.

Total Heating Surface of Boilers 8112 Is Forced Draft fitted yes No. and Description of Boilers 3 Scotch type 3SB
Working Pressure 210 lbs Tested by hydraulic pressure to 315 lbs Date of test 27/9/23 No. of Certificate ✓
Can each boiler be worked separately yes Area of fire grate in each boiler oil fuel No. and Description of Safety Valves to each boiler 2 spring loaded Area of each valve 9.62 sq ft Pressure to which they are adjusted 210 lbs Are they fitted with easing gear yes
Smallest distance between boilers or uptakes and bunkers or woodwork about 24" Mean dia. of boilers 14'-9" Length 11'-0" Material of shell plates steel
Thickness 1 9/16" Range of tensile strength 60/70000 lbs Are the shell plates welded or flanged no Descrip. of riveting: cir. seams Double
long. seams Tell. D.B.S. Diameter of rivet holes in long. seams 1 9/16" Pitch of rivets 10" Lap of plates or width of butt straps 22 1/4"
Per centages of strength of longitudinal joint rivets 95 plate 84.4 Working pressure of shell by rules 240 Size of manhole in shell ✓
Size of compensating ring ✓ No. and Description of Furnaces in each boiler 3 Morrison Material steel Outside diameter 3'-9 1/16"
Length of plain part top ✓ bottom ✓ Thickness of plates crown 2 1/16" bottom 3/32" Description of longitudinal joint welded No. of strengthening rings ✓
Working pressure of furnace by the rules 235 Combustion chamber plates: Material steel Thickness: Sides 1 1/16" Back 1 1/16" Top 1 1/16" Bottom 1 5/16"
Pitch of stays to ditto: Sides 7x8" Back 7 1/4x7 1/4" Top 7x8 3/16" If stays are fitted with nuts or riveted heads Other Riveted heads Working pressure by rules 215
Material of stays Steel Area at smallest part 1.75 sq ft Area supported by each stay 56 sq ft Working pressure by rules 245 End plates in steam space:
Material steel Thickness 1 1/4" Pitch of stays 16 3/8x17 1/2" How are stays secured Double nuts Working pressure by rules 245 Material of stays steel
Area at smallest part 8.29 sq ft Area supported by each stay 287 sq ft Working pressure by rules 300 Material of Front plates at bottom steel
Thickness 1 3/16" Material of Lower back plate steel Thickness 1 3/16" + 1/16" doublers Greatest pitch of stays 13"x7" Working pressure of plate by rules 310
Diameter of tubes 3" Pitch of tubes 4 1/8"x4" Material of tube plates steel Thickness: Front 1 3/16" + 1/16" doublers Back 1 3/16" Mean pitch of stays 12 3/8"x8"
Pitch across wide water spaces 13" Working pressures by rules 230 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 11"x1 1/2" Length as per rule 2'-10" Distance apart 8 3/16" Number and pitch of stays in each 4-7"
Working pressure by rules 285 Steam dome: description of joint to shell no dome % 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 Foster Date of Approval of Plan ✓ Tested by Hydraulic Pressure to 315 lbs
Date of Test 27/9/23 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler yes
Diameter of Safety Valve 1 1/2" Pressure to which each is adjusted 210 Is Easing Gear fitted yes

W1232-0141

IS A DONKEY BOILER FITTED?

no.

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— One bottom and brass complete with bolts, one crosshead lines complete with bolts, 2 main bearing bolts + nuts, 2 sets shaft coupling bolts, spare valves for all pumps, assorted nuts bolts + iron. 2 propeller blades.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1923: Sept 27 to Oct 13 1911 25 26 } { During erection on board vessel -- } Total No. of visits 8

Is the approved plan of main boiler forwarded herewith yes

Is the approved plan of donkey boiler forwarded herewith yes

Dates of Examination of principal parts—Cylinders 1 Oct 1923 Slides 1/10/23 Covers 1/10/23 Pistons 1/10/23 Rods 1/10/23

Connecting rods 1/10/23 Crank shaft 1/10/23 Thrust shaft 1/10/23 Tunnel shafts 1/10/23 Screw shaft 28/9/23 Propeller 28/9/23

Stern tube 28/9/23 Steam pipes tested ✓ Engine and boiler seatings 17/10/23 Engines holding down bolts 17/10/23

Completion of pumping arrangements ✓ Boilers fixed ✓ Engines tried under steam 25/10/23

Completion of fitting sea connections ✓ Stern tube ✓ Screw shaft and propeller ✓

Main boiler safety valves adjusted 25/10/23 Thickness of adjusting washers Lock nuts fitted

Material of Crank shaft Steel Identification Mark on Do. ✓ Material of Thrust shaft Steel Identification Mark on Do. ✓

Material of Tunnel shafts Steel Identification Marks on Do. ✓ Material of Screw shafts Steel Identification Marks on Do. ✓

Material of Steam Pipes Steel Test pressure ✓

Is an installation fitted for burning oil fuel yes Is the flash point of the oil to be used over 150°F. yes

Have the requirements of Section 49 of the Rules been complied with yes

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 machinery of this vessel was not built under Special Survey, but it has been thoroughly examined & found to be in accordance with the Rules, & the workmanship & material are good.

The machinery & boilers have been satisfactorily tried under steam & the safety valves adjusted, & they are now in good & safe working condition & eligible, in our opinion, to receive the notations L.M.C 10.23 (in red) FD + 'FITTED FOR OIL FUEL 10.23 F.P. ABOVE 150°F' subject to tail shaft being specially examined at joint of lines in two years time (i.e. 10.25)

New York

254

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

Table with columns for fee types (Entry Fee, Special, Donkey Boiler Fee, Travelling Expenses) and amounts (£), and a section for 'When applied for' and 'When received'.

John S. Hecke, A.R.S. N.Y. Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York NOV 7 1923

Assigned

L.M.C - 10.23 T.S - 10.23 subject (dated 19/11/23)



© 2021 Lloyd's Register Foundation