

REPORT ON MACHINERY.

No. 2505.

Received at London Office

Date of writing Report 24 April 1919 When handed in at Local Office 19 Port of Kobe WED. 9-JUL. 1919
 No. in Survey held at Kobe Date, First Survey 28 March 1918 Last Survey 12 March 1919
 Reg. Book. on the Engines for the Asano Shipbuilding Yard No 12 (Number of Visits)
 Master Tsurumi Built at Tsurumi By whom built Asano S. B. Co Tons { Gross
 Engines made at Kobe By whom made The Kobe Steel Works when made 1918-19 Net
 Boilers made at Tokyo By whom made Ishikawajima S. B. Co when made 1919
 Registered Horse Power 513 Owners Hashimoto Kisen K Port belonging to Uraga
 Nom. Horse Power as per Section 28 513 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders Three No. of Cranks Three
 Dia. of Cylinders 26" 43 1/2" 72" Length of Stroke 48" Revs. per minute 14.9 Dia. of Screw shaft 16" 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 1 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 ✓ Length of stern bush 5' 3 3/8"
 Dia. of Tunnel shaft 13.54" as per rule 13 3/4" Dia. of Crank shaft journals 14.2" as per rule 14 1/2" Dia. of Crank pin 14 3/4" Size of Crank webs 9 1/2" x 27" Dia. of thrust shaft under
 collars 14 1/2" Dia. of screw 17" 9" Pitch of Screw 19" 0" No. of Blades 4 State whether moveable yes Total surface 99"
 No. of Feed pumps 2 Diameter of ditto 4 1/2" Stroke 24" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 4 1/2" Stroke 24" Can one be overhauled while the other is at work yes
 No. of Donkey Engines 1 Sizes of Pumps 1 1/2" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 1 In Holds, &c. 1

No. of Bilge Injections 1 sizes 1 1/2" Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size
 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 yes
 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
 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
 What pipes are carried through the bunkers yes How are they protected yes
 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 yes

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

Total Heating Surface of Boilers 10,000 Is Forced Draft fitted yes No. and Description of Boilers 1
 Working Pressure 150 Tested by hydraulic pressure to 180 Date of test 1918 No. of Certificate 1
 Can each boiler be worked separately yes Area of fire grate in each boiler 100 No. and Description of Safety Valves to
 each boiler 1 Area of each valve 100 Pressure to which they are adjusted 180 Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 10 Mean dia. of boilers 48 Length 10 Material of shell plates steel
 Thickness 1/2" Range of tensile strength 40,000 Are the shell plates welded or flanged yes Descrip. of riveting: cir. seams yes
 long. seams yes Diameter of rivet holes in long. seams 1/4" Pitch of rivets 4" Lap of plates or width of butt straps 1"
 Per centages of strength of longitudinal joint 100 rivets 100 Working pressure of shell by rules 150 Size of manhole in shell 18"
 Size of compensating ring 18" No. and Description of Furnaces in each boiler 1 Material steel Outside diameter 48"
 Length of plain part 10 top 10 Thickness of plates 1/2" crown 1/2" Description of longitudinal joint yes No. of strengthening rings 1
 bottom 10 Working pressure of furnace by the rules 150 Combustion chamber plates: Material steel Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 1/2"
 Pitch of stays to ditto: Sides 10 Back 10 Top 10 If stays are fitted with nuts or riveted heads yes Working pressure by rules 150
 Material of stays steel Area at smallest part 10 Area supported by each stay 10 Working pressure by rules 150 End plates in steam space: yes
 Material steel Thickness 1/2" Pitch of stays 10 How are stays secured yes Working pressure by rules 150 Material of stays steel
 Area at smallest part 10 Area supported by each stay 10 Working pressure by rules 150 Material of Front plates at bottom steel
 Thickness 1/2" Material of Lower back plate steel Thickness 1/2" Greatest pitch of stays 10 Working pressure of plate by rules 150
 Diameter of tubes 10 Pitch of tubes 10 Material of tube plates steel Thickness: Front 1/2" Back 1/2" Mean pitch of stays 10
 Pitch across wide water spaces 10 Working pressures by rules 150 Girders to Chamber tops: Material steel Depth and
 thickness of girder at centre 10 Length as per rule 10 Distance apart 10 Number and pitch of stays in each 10
 Working pressure by rules 150 Steam dome: description of joint to shell yes % of strength of joint 100
 Diameter 10 Thickness of shell plates 1/2" Material steel Description of longitudinal joint yes Diam. of rivet holes 1/4"
 Pitch of rivets 4" Working pressure of shell by rules 150 Crown plates yes Thickness 1/2" How stayed yes

SUPERHEATER. Type 1 Date of Approval of Plan 1918 Tested by Hydraulic Pressure to 180
 Date of Test 1918 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler yes
 Diameter of Safety Valve 10 Pressure to which each is adjusted 180 Is Easing Gear fitted yes

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

M. Kimura, Superintendent Engineer of Kobe Steel Works, Manufacturer. Kobe Steel Works Ltd.

Dates of Survey while building { During progress of work in shops - - } Continuous attendance 28th March 1918 - 12th March 1919. { During erection on board vessel - - - } { Total No. of visits }

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 28/12/18 Slides 10/12/18 Covers 10/12/18 Pistons 10/12/18 Rods 16/23/18

Connecting rods 16/8/18 Crank shaft 8.3.19 Thrust shaft 29/5/18 Tunnel shafts 14/3/19 Screw shaft 6/5/18 Propeller

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

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 Thickness of adjusting washers

Material of Crank shaft Steel Identification Mark on Do. 8.3.19 Material of Thrust shaft Steel Identification Mark on Do. 29.5.18

Material of Tunnel shafts Steel Identification Marks on Do. A1.20.19 Material of Screw shafts Steel Identification Marks on Do. A.S.8.19

Material of Steam Pipes Test pressure " " Spare A.S.17.19 LLOYDS 6.5.18

Is an installation fitted for burning oil fuel Is the flash point of the oil to be used over 150°F. ROB. R. 21.8.18

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

Is this machinery duplicate of a previous case Yes. If so, state name of vessel Asano S.S. No. 8. & 10.

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

These engines have been made under special survey in accordance with the requirements of the Rules and the materials and workmanship have been found good. The Engines have been sent to Yokohama.

The amount of Entry Fee ... £ : : When applied for, Special ... 4/10/19 162.00 : : 20th May 1919. Donkey Boiler Fee ... £ : : When received, Travelling Expenses (if any) £ : : 19.

Committee's Minute 10th JUL 15 1919

Assigned

R. B. Batches

Engineer Surveyor to Lloyd's Register of Shipping.



© 2021

Lloyd's Register Foundation