

REPORT ON MACHINERY

No. 5710
AUG. 2 1921

Received at London Office

Date of writing Report 20. 6. 21 When handed in at Local Office 30. 7. 21 Port of Trieste
No. in Survey held at Trieste Date, First Survey 30/5/16 Last Survey 15/6/1921
Reg. Book. on the S.S. ISONZO (Number of Visits 53) Tons { Gross 5447
Net 3428

Master Built at Trieste By whom built Cantieri S. Rocco S.R. When built

Engines made at Trieste By whom made Stabilimento Selenico Sreustino when made 1921.

Boilers made at Hamburg Trieste By whom made Blohm & Voß Stabilimento Selenico Sreustino when made 1921.

Registered Horse Power Owners Navigatione Lina Sreustino Port belonging to Trieste

Nom. Horse Power as per Section 28 465 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3. No. of Cranks 3.

Dia. of Cylinders 27.42 x 68" Length of Stroke 48" Revs. per minute 46 Dia. of Screw shaft as per rule 14.48 Material of screw shaft 5
as fitted 16.4

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 Yes. 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 61"

Dia. of Tunnel shaft as per rule 13.1 Dia. of Crank shaft journals as per rule 13.82 Dia. of Crank pin 14.17 Size of Crank webs 26x9" Dia. of thrust shaft under

collars 14.17 Dia. of screw 17.9 Pitch of Screw 16.3 No. of Blades 4 State whether moceable Yes. Total surface 99 sq

No. of Feed pumps 2 Diameter of ditto 3 3/4" 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 2 Sizes of Pumps 6.5 x 6.3 x 9 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 6 @ 3 1/2" In Holds, &c. 13 @ 3 1/2"

No. of Bilge Injectious 1 sizes 4.87" Connected to condenser or to circulating pump Yes. Is a separate Donkey Suction fitted in Engine room & size 10 3/2"

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 None.

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 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 Forward hold Suctions How are they protected Below ceiling

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 See hull Report Is it fitted with a watertight door Yes. worked from Top platform

BOILERS, &c.—(Letter for record S Manufacturers of Steel Reinhardt Stahlbau and Maschinenbau

Total Heating Surface of Boilers 7223 sq Is Forced Draft fitted Yes. No. and Description of Boilers 3 Single ended.

Working Pressure 180 lbs Tested by hydraulic pressure to 260 Date of test 2/12/19 No. of Certificate 201. 202. 203.

Can each boiler be worked separately Yes. Area of fire grate in each boiler 52.4 sq No. and Description of Safety Valves to

each boiler 2 direct spring Area of each valve 9.62 sq Pressure to which they are adjusted 185 Are they fitted with easing gear Yes.

Smallest distance between boilers or uptakes and bunkers or woodwork 4'-0" Mean dia. of boilers 15'-0" Length 11'-9" Material of shell plates S

Thickness 17/32 Range of tensile strength 28-30 Are the shell plates welded or flanged No. Descrip. of riveting: cir. seams DR. lap.

long. seams DBS. TR. Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 1/4" Top of plates or width of butt straps 18 1/2"

Per centages of strength of longitudinal joint rivets 85.4 Working pressure of shell by rules 186. Size of manhole in shell Plate 16" x 12"

Size of compensating ring Yes. No. and Description of Furnaces in each boiler 3 Morrison Material S Outside diameter 17 1/4"

Length of plain part top Yes. Thickness of plates crown 9/16 Description of longitudinal joint Weld. No. of strengthening rings 0

Working pressure of furnace by the rules 188. Combustion chamber plates: Material S Thickness: Sides 1 1/2" Back 1 1/2" Top 1 1/2" Bottom 1 1/2"

Pitch of stays to ditto: Sides 8 1/4 x 8" Back 8 1/2 x 7 1/2" Top 8 1/4 x 8" If stays are fitted with nuts or riveted heads Auto Working pressure by rules 184.

Material of stays S Area at smallest part 1.05 sq Area supported by each stay 62.75 sq Working pressure by rules 182. End plates in steam space:

Material S Thickness 1" Pitch of stay 1 1/4 x 5 1/2" How are stays secured D. Auto Working pressure by rules 183. Material of stays S

Area at smallest part 4.3 sq Area supported by each stay 244 sq Working pressure by rules 183. Material of Front plates at bottom S

Thickness 1/8" Material of Lower back plate S Thickness 1 1/2" Greatest pitch of stays 23 x 10" Working pressure of plate by rules 339

Diameter of tubes 3" Pitch of tubes 4 1/2 x 4 1/2" Material of tube plates S Thickness: Front 1 1/2" Back 1 1/2" Mean pitch of stays 8 1/2"

Pitch across wide water spaces 14" Working pressures by rules 182 Girders to Chamber tops: Material S Depth and

thickness of girder at centre 9 1/4" x 1 1/2" Length as per rule 36.2 Distance apart 8. Number and pitch of stays in each 3 @ 8 1/4"

Working pressure by rules 187. Steam dome: description of joint to shell None. % 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

UPERHEATER. Type Schmit Date of Approval of Plan Tested by Hydraulic Pressure to 50 Atms.

Date of Test 20/7/17 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Yes.

Diameter of Safety Valve 2" Pressure to which each is adjusted 187. Is Easing Gear fitted No.

IS A DONKEY BOILER FITTED?

No.

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two each of connecting rod top end, and bottom end bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts, feed & helix pump valves, condenser tubes, gaskets, Propeller & screw shaft, Cranked bolts & nuts, and a quantity of iron of various sizes.

The foregoing is a correct description,

STABILIMENTO TECNICO TRIESTINO

M. Ant. King

Manufacturer.

Dates of Survey while building: During progress of work in shops: 1916 May 30, July 13, 1918 Oct 4, 9, 29, 1919 Jan 24, Mar 31, Apr 8, 11, May 8, June 14, July 22, Sep 3, 12, 30, Oct 14, 19, 25, Nov 8, 13, 25, 26, Dec 2, 3, 5, 16, 17, 19, 20, Jan 3, 5, Feb 2, 13, 16, Mar 9, Apr 14, May 27, July 29, 30, 31, Oct 12, Nov 23, Dec 11, 1921 Feb 24, Mar 10, 25, 31, Apr 13, 26, 30, May 3, 5, 21, 23, June 15. Total No. of visits: fifty three.

Is the approved plan of main boiler forwarded herewith?

Dates of Examination of principal parts: Cylinders 24/11/19, Slides 14/10/19, Covers 20/10/19, Pistons 8/11/19, Rods 8/11/19, Connecting rods 8/11/19, Crank shaft 1/17, Thrust shaft 3/17, Tunnel shafts 3/17, Screw shaft 6/17, Propeller 3/5/21, Stern tube 3/12/19, Steam pipes tested 25/4/21, Engine and boiler seatings 3/12/19, Engines holding down bolts 30/4/21, Completion of pumping arrangements 33/5/21, Boilers fixed 26/4/21, Engines tried under steam 21/5/21, Completion of fitting sea connections 17/12/19, Stern tube 17/12/19, Screw shaft and propeller 3/5/21, Main boiler safety valves adjusted 21/5/21, Thickness of adjusting washers PB: 4.5 x 4.5, C.B: 3.5 x 4.15, S.B: 4.15 x 4.15.

Material of Crank shaft: S.S. Identification Mark on Do. 4295-716. Material of Thrust shaft: S.S. Identification Mark on Do. 4298-716. Material of Tunnel shafts: S.S. Identification Marks on Do. 4293/300. Material of Screw shafts: S.S. Identification Marks on Do. 6480-00. Material of Steam Pipes: Solid drawn steel. Test pressure: 50 atmos.

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? No. If so, state name of vessel: Cherka, Maria & Awa.

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

The machinery of this vessel has been built under special survey, and in accordance with the Rules. The materials and workmanship are good, and on completion the engines, boilers, and auxiliary machinery were tried under full working conditions and found satisfactory.

The machinery of this vessel is eligible in our opinion to have notation of +L.M.C. 6-21.

Wireless telegraphy and electric light fitted.

It is submitted that this vessel is eligible for THE RECORD, +L.M.C. 6-21 F.D., C.L.

11/8/21

The amount of Entry Fee ... £ 390 : When applied for, 17.12.17. Special Electric Installation ... £ 69.94 : 16.6.19.21. Donkey Boiler Fee ... £ 10.92 : When received, 12.8.18. Travelling Expenses (if any) £ : 18.6.19.21.

Godformos M. G. G. Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 12 AUG. 1921

Assigned +L.M.C. 6, 21

F.D. C.L.

