

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

No. 470

Date of writing Report 10.2.1933 When handed in at Local Office 15.2.1933 Port of Susak Received at London Office 18 FEB 1933  
 No. in Survey held at Fiume & Susak Reg. Book. Date, First Survey 23.10.31 Last Survey 2.2.1933  
 on the TWIN SHIP JUGOSLAVIA (Number of Visits)

Built at Fiume By whom built Sankei Naval at Fiume or Jank & Co. Danubio Yard No. Tons 1274.54  
 Engines made at Gefast By whom made Habland & Wolff Ltd Engine No. 472 When built 1915  
 Boilers made at Walker By whom made Santhomas & Wilson Priljean Boiler No. 1412 when made 1931  
 Registered Horse Power 286.278 Owners Jadranska Parobrodarstva DD Port belonging to Susak  
 Nom. Horse Power as per Rule 286.278 Is Refrigerating Machinery fitted for cargo purposes  Is Electric Light fitted Yes

**ENGINES, &c.**—Description of Engines Steam Single Quadruple Expansion  
 Dia. of Cylinders 13 1/2 - 14 1/2 - 28 - 40 Length of Stroke 28" Revs. per minute 150 No. of Cylinders 8 No. of Cranks 8  
 Dia. of Crank shaft journals as per rule 7.6 as fitted 8.25 Dia. of Crank pin 8 1/2 Crank webs Mid. length breadth 12 If shrunk Thickness parallel to axis  
 Diameter of Thrust shaft under collars as per rule 7.6 as fitted 8.14 Diameter of Tunnel shaft as per rule 7.24 as fitted 8 Diameter of Screw shaft as per rule 8 as fitted 8.5/8 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 watertight 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   
 If two liners are fitted, is the shaft lapped or protected between the liners  Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated   
 Pitch of Propeller 12° - 0° No. of Blades four Length of Stern Bush 3° - 3/4" Diameter of Propeller 9° - 0" State whether Moveable no Total Surface 28 square feet.  
 No. of Feed Pumps fitted to the Main Engines  Diameter of ditto  Stroke  Can one be overhauled while the other is at work   
 No. of Bilge Pumps fitted to the Main Engines  Diameter of ditto  Stroke  Can one be overhauled while the other is at work   
 Total number and size of power driven Feed and Bilge Auxiliary Pumps N: 2, feed duplex 13 1/2 x 9 x 21", N: 2 bilge duplex  
 No. and size of Pumps connected to the Main Bilge Line N: 2, - 6 x 6 x 6, - 4 1/2 x 4 1/2 x 5,  
 No. and size of Ballast Pumps N: 1, - 6 x 6 x 6 No. and size of Lubricating Oil Pumps, including Spare Pump   
 Are two independent means arranged for circulating water through the Oil Cooler  No. and size of suction connected to both Main Bilge Pumps and Auxiliary and in Holds, &c. 3 - 2 1/2"  
 Bilge Pumps;—In Engine and Boiler Room 4 - 2 1/2"

No. and size of Main Water Circulating Pump Bilge Suctions N: 1, - 6" No. and size of Donkey Pump Direct Suctions one 3 1/2"  
 to the Engine Room Bilges one 3 1/2" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes  
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes  
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks valves  
 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 Bilge forward & tank fresh water How are they protected strong steel casing  
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes  
 Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another Yes Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from floor & top of stokehold block

**MAIN BOILERS, &c.**—(Letter for record S) Total Heating Surface of Boilers 4440 sq ft Working Pressure 200 lbs  
 Is Forced Draft fitted Yes No. and Description of Boilers two Scotch single end  
**IS A REPORT ON MAIN BOILERS NOW FORWARDED?** Yes completion (see Newcastle on Tyne Rep. No 87000)  
**IS A DONKEY BOILER FITTED?**  If so, is a report now forwarded?   
**PLANS.** Are approved plans forwarded herewith for Shafting  Main Boilers  Auxiliary Boilers  Donkey Boilers   
 General Pumping Arrangements Yes Oil Fuel Burning Piping Arrangements

**SPARE GEAR.** State the articles supplied:— 4 connecting rod top end bolts and nuts, 4 connecting rod bottom end bolts and nuts, 4 main bearing bolts, 2 sets of coupling bolts, 1 set of piston springs, 1 pair of connecting rod branes, 1 pair of crosshead branes, 6 bylinder cover bolts, 6 junk pins bolts, 4 valve chest cover bolts, 1 set feed pump valves, a quantity of assorted bolts and nuts and 1 ton of various sizes.

The foregoing is a correct description,

Manufacturer.



Dates of Survey while building

During progress of work in shops - - - 16/2/31, - 18/2, 19/2, 20/2, 26/2, 15/3, 17/3, 21/3, 11/4/1932

During erection on board vessel - - - 23/10, 14/11, 26/11, 27/11, 29/12, 30/12/1931 - 21/1, 5/2, 12/2, 4/5, 6/5, 7/5/1932 - 2/2/1933

Total No. of visits 22

Dates of Examination of principal parts - Cylinders

Covers

Connecting rods

Tunnel shafts

Stern tube 26/11/31

Completion of pumping arrangements 6.5.32

Completion of fitting sea connections 27.11.31

Main boiler safety valves adjusted 26.4.32 - 1.2.33

Material of Crank shaft J.M.F.

Material of Thrust shaft 7

Material of Tunnel shafts 4

Material of Screw shafts 2

Material of Steam Pipes copper

Is an installation fitted for burning oil fuel

Have the requirements of the Rules for carrying and burning oil fuel been complied with

Is this machinery duplicate of a previous case  If so, state name of vessel

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

Material and workmanship of this machinery erection on board is good. The machinery of this vessel is constructed at Goffport, and fitted on board at Finnie, under special survey in accordance with the Rules and the approved plans.

It has been tested under full working condition and found satisfactory. It is submitted the machinery of this vessel is eligible to have the notation of + LMC - 2.33 and notation of + NE 1915 refitted 2.33.

The following new approved plans forwarded under separate cover:

- 1) Main steam pipes
- 2) Pumping arrangements
- 3) Auxiliary steam pipes
- 4) Steam discharge pipes
- 5) Gudge and double bottom section
- 6) Thrust shaft seatings
- 7) Girdle mounting arrangements.

A test certificate herewith enclosed.

The amount of Entry Fee <sup>14.00</sup> <sup>question of fees submitted</sup> <sup>for the down bills</sup> <sup>consideration letter</sup> <sup>will follow.</sup>

Special 15

Donkey Boiler Fee ... £

Travelling Expenses (if any) £

When applied for, 19

When received, 2/6/33

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned + L.M.C. 2, 33 + N.E. 5.15 Refitted 33.

+ N.B. 2.33. (N) 2.33 C.L.

FEB. 24 FEB 1933



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