

# REPORT ON MACHINERY.

No. 28399

Received at London Office

SAT. 19 AUG. 1922

18 AUG 1922

Port of SUNDERLAND.

Writing Report

19

When handed in at Local Office

Survey held at SUNDERLAND.

Date, First Survey 25th November 1920 Last Survey 14th August 1922.

(Number of Visits 6.)

on the new steel S/S "IRENE MARIA."

Built at Hoboken By whom built Antwerp Engineering Co. (S/S N° 2477) When built 1922

By whom made N.E. Marine Engineering Co. Ltd. (N° 2477) when made 1922

By whom made N.E. Marine Engineering Co. Ltd. (N° 2477) when made 1922

Port belonging to

Horse Power as per Section 28 213 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

INES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3

of Cylinders 20" 33" 54" Length of Stroke 36" Revs. per minute Dia. of Screw shaft as per rule 11.38" Material of screw shaft as fitted 11.58" screw shaft

Is the after end of the liner made water tight

he propeller boss yes If the liner is in more than one length are the joints burned If the liner does not fit tightly at the part

When the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive yes If two

are fitted, is the shaft lapped or protected between the liners Length of stern bush 3' 10 1/2"

of Tunnel shaft as per rule 9.93" Dia. of Crank shaft journals as per rule 10.427" Dia. of Crank pin 10 5/8" Size of Crank webs 16' 6 1/2" Dia. of thrust shaft under

of Feed pumps 2 Diameter of ditto 3" Stroke 1' 9" Can one be overhauled while the other is at work yes

of Bilge pumps 2 Diameter of ditto 3 1/2" Stroke 1' 9" Can one be overhauled while the other is at work yes

of Donkey Engines 2 Sizes of Pumps 6 1/4" x 6" 7 1/8" x 8" No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room In Holds, &c.

of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size

all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

all connections with the sea direct on the skin of the ship Are they Valves or Cocks

they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes above or below the deep water line

they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

How are they protected

all pipes are carried through the bunkers

all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

ILERS, &c.—(Letter for record 2) Manufacturers of Steel John Spencer & Sons Ltd.

total Heating Surface of Boilers 36320 sq ft Is Forced Draft fitted no No. and Description of Boilers Two single ended marine

Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 9-8-22 No. of Certificate 3805

in each boiler be worked separately Area of fire grate in each boiler 460 sq ft No. and Description of Safety Valves to

h boiler Two dried spring Area of each valve 4.90" Pressure to which they are adjusted Are they fitted with easing gear

smallest distance between boilers or uptakes and bunkers or woodwork Ind. Mean dia. of boilers 14' 0" Length 10' 6" Material of shell plates steel

Thickness 15 1/8" Range of tensile strength 29-33 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D.R.

g. seams 10 B.S. TR Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 9 3/4" Top of plates or width of butt straps 19 1/4"

er centages of strength of longitudinal joint rivets 86.8 Working pressure of shell by rules 182 Size of manhole in end 16" x 12"

ze of compensating ring flanged No. and Description of Furnaces in each boiler 3 Morrison Material steel Outside diameter 3' 4 1/2"

length of plain part top Thickness of plates crown 3 1/2 Description of longitudinal joint welded No. of strengthening rings

Working pressure of furnace by the rules 187 Combustion chamber plates: Material steel Thickness: Sides 23/32 Back 25/32 Top 23/32 Bottom 23/32

itch of stays to ditto: Sides 9 1/4" x 10 1/4" Back 11 1/8" x 10" Top 9 3/4" x 9 1/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 181

aterial of stays steel Area at smallest part 2.030" Area supported by each stay 950" Working pressure by rules 192 End plates in steam space:

aterial steel Thickness 15 1/8" Pitch of stays 24 1/2" x 17 1/2" How are stays secured B.N. & W Working pressure by rules 180 Material of stays steel

rea at smallest part 7.660" Area supported by each stay 4300" Working pressure by rules 186 Material of Front plates at bottom steel

Thickness 13 1/8" Material of Lower back plate steel Thickness 15 1/8" Greatest pitch of stays 15 3/8" x 10" Working pressure of plate by rules 181

diameter of tubes 3 1/2" Pitch of tubes 4 1/2" x 4 3/4" Material of tube plates steel Thickness: Front 13/16 Back 3/4 Mean pitch of stays 11 5/8"

itch across wide water spaces 15" (11 1/8" B.P.) Working pressures by rules 182 Girders to Chamber tops: Material steel Depth and

ickness of girder at centre 2 @ 8" x 7 1/8" Length as per rule 2' 6 1/2" Distance apart 9 3/4" Number and pitch of stays in each 2 @ 9 1/2"

Working pressure by rules 188 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

itch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

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

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

Tested by Hydraulic Pressure to

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Is Easing Gear fitted

W401-0131

Lloyd's Register

Foundation



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,  
FOR THE NORTH EASTERN MARINE ENGINEERING CO. LD

C. T. Adams.

Manufacturer.

Manager.

Dates of Survey while building  
During progress of work in shops - - - 1920. Nov. 25. 1921. Feb. 25. Mar. 14. 1922. Apr. 24. May 25. June 19. 1922. July 14. 18. 20. 22. Aug. 14. 9. 10. 17.  
During erection on board vessel - - -  
Total No. of visits 16.

Is the approved plan of main boiler forwarded herewith yes

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 4-8-22 Slides 17-8-22 Covers 4-8-22 Pistons 10-8-22 Rods 10-8-22  
Connecting rods 1-8-22 Crank shaft 1-8-22 Thrust shaft 1-8-22 Tunnel shafts 17-8-22 Screw shaft 20-7-22 Propeller 20-7-22  
Stern tube 20-7-22 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 I. Steel Identification Mark on Do. 5122 LCO Material of Thrust shaft I. Steel Identification Mark on Do. 5122 LCO

Material of Tunnel shafts Snip 2m Identification Marks on Do. 5180 LCO Material of Screw shafts Snip 2m Identification Marks on Do. 5180 LCO

Material of Steam Pipes

Test pressure

Is an installation fitted for burning oil fuel

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

Is this machinery duplicate of a previous case yes If so, state name of vessel "Stenies" Sld Rpt. N° 28054

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

The materials and workmanship are good  
The machinery has been constructed under special survey and is being sent to Antwerp to be fitted in the vessel.

SUNDERLAND

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 ... £ 4 : : When applied for.

Special ... £ 42 : 12 : 18 AUG 1922

Donkey Boiler Fee ... £ : : When received.

Travelling Expenses (if any) £ : : 30-8-1922

Committee's Minute 11E. 31 OCT. 1922

Assigned

L. C. Davis.

Engineer Surveyor to Lloyd's Register of Shipping.



© 2019

Lloyd's Register  
Foundation