

REPORT ON MACHINERY.

No. 494

Port of *Genoa*

Received at London Office *WED. 21 JUN 1911*

No. in Survey held at
eg. Book.

Date, first Survey *Nov 17th 1910* Last Survey *Jan 27th 1911*

on the *Screw Steamer No 10*

(Number of Visits *28* *June 16 at Regensburg*)

aster Built at *Regensburg* By whom built *Christof Rutzof* Tons Gross *120*
Engines made at *Zurich* By whom made *Aktiengesellschaft der Maschinen- fabrikten Bocher Weyss & Co* When built *1911*
Boilers made at *do* By whom made *do* when made *1911*
Registered Horse Power Owners *The Golden Horn Steam Nav Co* Port belonging to *Constantinople*
om. Horse Power as per Section 28 *27* Is Refrigerating Machinery fitted for cargo purposes *-* Is Electric Light fitted *-*

GINES, &c.—Description of Engines *Compound* No. of Cylinders *2* No. of Cranks *2*
Dia. of Cylinders *11.02" x 18.9"* Length of Stroke *11.8"* Revs. per minute *240* Dia. of Screw shaft as per rule *4.4* Material of *steel*
the screw shaft fitted with a continuous liner the whole length of the stern tube *no* Is the after end of the liner made water tight
the propeller boss *-* 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
ers are fitted, is the shaft lapped or protected between the liners *Yes with Gutta Percha* Length of stern bush *19.68*
Dia. of Tunnel shaft as per rule *4.1* Dia. of Crank shaft journals as per rule *4.4* Dia. of Crank pin *4.4* Size of Crank webs *5.2 x 2.2* Dia. of thrust shaft under
bars *4.4* Dia. of screw *4.4* Pitch of Screw *5.4* No. of Blades *4* State whether moveable *no* Total surface *5.49*
o. of Feed pumps *one* Diameter of ditto *2.16* Stroke *4* Can one be overhauled while the other is at work *-*
n. of Bilge pumps *one* Diameter of ditto *2.16* Stroke *4* Can one be overhauled while the other is at work *-*
n. of Donkey Engines *one* *one* *one* Sizes of Pumps *3" x 2" x 3"* No. and size of Suctions connected to both Bilge and Donkey pumps
Engine Room *one 2"* In Holds, &c. *Fore hold one 2" after hold*
one 2" *lock on after peak 1 7/16"* *Bottom Board pump on fore peak 4 7/8" barrels 1 7/8" pipe*
n. of Bilge Injections *one* sizes *2 3/4"* Connected to condenser, or to circulating pump *Yes* Is a separate Donkey Suction fitted in Engine room & size *Yes 2"*
e 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*
e all connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *Cocks*
e 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*
e 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*
at pipes are carried through the bunkers *none* How are they protected *-*
e all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times *Yes*
e the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges *Yes*
ates of examination of completion of fitting of Sea Connections *5.44* of Stern Tube *5.44* Screw shaft and Propeller *5.44*
the Screw Shaft Tunnel watertight *none* Is it fitted with a watertight door *Yes* worked from *-*

ILERS, &c.—(Letter for record *S*) Manufacturers of Steel *Thyssen & Co. Busseldorfer Pohnen & Eisenwalz- werke*
otal Heating Surface of Boilers *650* Is Forced Draft fitted *no* No. and Description of Boilers *One horizontal multitubular*
orking Pressure *150* Tested by hydraulic pressure to *300* Date of test *24.1.11* No. of Certificate *93*
an each boiler be worked separately *-* Area of fire grate in each boiler *20.1* No. and Description of Safety Valves to
ch boiler *2 Spring* Area of each valve *5.1* Pressure to which they are adjusted *150 lbs.* Are they fitted with easing gear *Yes*
mallest distance between boilers or uptakes and bunkers or woodwork *-* Mean dia. of boilers *80.7* Length *10.25* Material of shell plates *steel*
hickness *5 1/8"* Range of tensile strength *25.4* Are the shell plates welded or flanged *no* Descrip. of riveting: cir. seams *double*
ng. seams *double butt Swedish iron* Diameter of rivet holes in long. seams *5/8"* Pitch of rivets *2.875 x 5.8* Lap of plates or width of butt straps *9.21 x 13.78*
er centages of strength of longitudinal joint *87.1* Working pressure of shell by rules *161* Size of manhole in shell *16.2" x 12.2"*
ize of compensating ring *5.03 x .487* No. and Description of Furnaces in each boiler *One bricated* Material *steel* Outside diameter *37.4"*
length of plain part *top 6.8"* Thickness of plates *bottom 4.7"* Description of longitudinal joint *Welded* No. of strengthening rings *9*
orking pressure of furnace by the rules *170.5* Combustion chamber plates: Material *steel* Thickness: Sides *1/2"* Back *1/2"* Top *1/2"* Bottom *1/2"*
itch of stays to ditto: Sides *6" x 6"* Back *6" x 6"* Top *6" x 6"* If stays are fitted with nuts or riveted heads *R. Heads* Working pressure by rules *174.5*
aterial of stays *steel* Diameter at smallest part *1 1/8"* Area supported by each stay *36"* Working pressure by rules *192* End plates in steam space: *double at back 3/8"*
aterial *steel* Thickness *25" x 32"* Pitch of stays *17.5 x 8.5* How are stays secured *double into* Working pressure by rules *150* Material of stays *steel*
iameter at smallest part *2 1/4"* Area supported by each stay *180"* Working pressure by rules *176.25* Material of Front plates at bottom *steel*
hickness *32"* Material of Lower back plate *steel* Thickness *32"* Greatest pitch of stays *6" x 6"* Working pressure of plate by rules *250*
iameter of tubes *2 3/4"* Pitch of tubes *3.58 x 3.38* Material of tube plates *steel* Thickness: Front *25"* Back *25"* Mean pitch of stays *9 3/8"*
itch across wide water spaces *none* Working pressures by rules *248* Girders to Chamber tops: Material *steel* Depth and
ickness of girder at centre *4.72 x 1.10* Length as per rule *14.71* Distance apart *6"* Number and pitch of stays in each *2-6"*
orking pressure by rules *200* Superheater or Steam chest; how connected to boiler *none* Can the superheater be shut off and the boiler worked
parately *no* Diameter *35.5"* Length *35.5"* Thickness of shell plates *32"* Material *steel* Description of longitudinal joint *Welded* Diam. of rivet
les *-* Pitch of rivets *-* Working pressure of shell by rules *150* Diameter of flue *-* Material of flue plates *-* Thickness *-*
stiffened with rings *-* Distance between rings *-* Working pressure by rules *-* End plates: Thickness *1/2"* How stayed *no stays*
orking pressure of end plates *150* Area of safety valves to superheater *-* Are they fitted with easing gear *-*

Screw Steamer 205

Report to Hq

VERTICAL DONKEY BOILER—

Manufacturers of Steel

none

No. _____ Description _____

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Fire grate area _____ Description of Safety _____

Valves _____ No. of Safety Valves _____ Area of each _____ Pressure to which they are adjusted _____ Date of adjustment _____

If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____ Dia. of donkey boiler _____ Length _____

Material of shell plates _____ Thickness _____ Range of tensile strength _____ Descrip. of riveting long. seams _____

Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Plates _____

Working pressure of shell by rules _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____

Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____

Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Stayed by _____

Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:— 2 Connecting bottom end bolts & nuts. 2 Main bearing bolts & nuts. One set of coupling bolts & nuts each for the intermediate shafts & for the flywheel coupling. One set of feed & bilge pump valves. A quantity of assorted bolts & nuts & iron of various sizes. There are no top end bolts or common piston springs in this engine.

The foregoing is a correct description,

Manufacturer.

Aktiengesellschaft der Maschinenfabriken
ESCHER WYSS & C^{IE}

K. H. 9070

Dates of Survey while building { During progress of work in shops - 1910. Nov. 14. 23. Dec. 2 - 1911. Jan. 24
During erection on board vessel - at Regensburg. 1911. 5 April. 11 May. 15 & 16 June.
Total No. of visits 8.

Is the approved plan of main boiler forwarded herewith Yes

Dates of Examination of principal parts—Cylinders as above Slides as above Covers as above Pistons as above Rods as above

Connecting rods do Crank shaft do Thrust shaft do Tunnel shafts do Screw shaft do Propeller do

Stern tube do Steam pipes tested 4/5/11 Engine and boiler seatings 5/4/11 Engines holding down bolts 4/5/11

Completion of pumping arrangements 15/6/11 Boilers fixed 4/5/11 Engines tried under steam 15 & 16/6/11

Main boiler safety valves adjusted 15/6/11 Thickness of adjusting washers 14mm

Material of Crank shaft steel Identification Mark on Do. as before Material of Thrust shaft steel Identification Mark on Do. as before

Material of Tunnel shafts " Identification Marks on Do. as before Material of Screw shafts do Identification Marks on Do. do

Material of Steam Pipes copper Test pressure 100 lbs.

General Remarks (State quality of workmanship, opinions as to class, &c. This screw machinery has been examined during construction with a view to being classed +100A in the R. Rank. The materials and workmanship are good & in accordance with the rules requirements & the approved amended plans. The boiler has been tested to a hydraulic pressure in accordance with the rules, & found tight & sound. It is marked 20 93 Lloyd's List 370 24 MR. 27.1.11 The engines were seen erected in the works of the makers, and are to be shipped to Regensburg, to be fitted on board, where the following remain to be done to entitle the machinery to be classed +100C with date - viz: The engines & boilers to be seen fitted on board; the spare gear to be checked. The main steam pipe to be tested. The pipe arrangements to be verified with the plans. The engines to be seen running under steam, and the safety valves to be then adjusted to the working pressure of 150 lbs. Truste. Surveyors advised. Truste. The above noted requirements have been duly carried out to my satisfaction & the case is eligible in my opinion for the notation +100C. 6.11. P. Ritchie.

The amount of Entry Fee.. £25.30.

Special .. £202.40.

Donkey Boiler Fee .. £113.60.

Travelling Expenses (if any) £141.30.

See 75.90 to be added to above

Committee's Minute

Assigned

When applied for.

Feb 1st 1911

When received.

Feb 9th 1911

When applied for.

Feb 1st 1911

When received.

Feb 9th 1911

James Gibson

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

TUE. 27 JUN 1911

+ LMC 6.11

MACHINERY CERTIFICATE



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Lloyd's Register
Foundation

This office

Certificate (if required) to be sent to the Registrar of Shipping.