

REPORT ON BOILERS.

No. 9828

Received at London Office

30 SEP 1927

27-28

30-31

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Date of writing Report 28th Sept. 1927 When handed in at Local Office 29th Sept. 1927 Port of Belfast
No. in Survey held at Belfast Date, First Survey 5th July Last Survey 23rd Sept. 1927
Reg. Book. 42165 on the STEEL TW. SC. ORANJESTAD (Number of Visits 8) Gross 2402 Tons Net 1242
Master Built at Belfast By whom built Harland & Wolff Ltd. 809 When built 1927
Engines made at Belfast By whom made Harland & Wolff Ltd. No 809. When made 1927
Boilers made at Belfast By whom made Harland & Wolff Ltd. No 809. When made 1927
Registered Horse Power Owners A. WEIR & Co. Port belonging to LONDON

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel P. COLVILLE & SONS LTD.

(Letter for record S.) Total Heating Surface of Boilers 3702 sq ft Is forced draft fitted No No. and Description of 12.8.27
Boilers Two single-ended cylindrical Working Pressure 180 lbs. Tested by hydraulic pressure to 320 lbs. Date of test 17.8.27
No. of Certificate 905 Can each boiler be worked separately Yes Area of fire grate in each boiler 49 sq ft No. and Description of 906
Safety valves to each boiler Two SPRING-LOADED Area of each valve 9.62 sq in Pressure to which they are adjusted 180 lbs.
Are they fitted with easing gear YES In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler
Smallest distance between boilers or uptakes and bunkers or woodwork 22" Int. Mean dia. of boilers 14'-0 1/16" Length 10'-6"
Material of shell plates Steel Thickness 1 5/32" Range of tensile strength 28-32 tons Are the shell plates welded or flanged No.
Descrip. of riveting: cir. seams double long. seams helix d.b.s. Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 3/8"
Gap of plates or width of butt straps 18 3/8" Per centages of strength of longitudinal joint rivets 97.5 Working pressure of shell by plate 85.07
Rules 180 lbs. Size of manhole in shell 16"x12" Size of compensating ring 36"x32"x1 1/8" double No. and Description of Furnaces in each
Boiler 3 normal Material Steel Outside diameter 40 1/16" Length of plain part top Thickness of plates crown 17" bottom 32"
Description of longitudinal joint helix No. of strengthening rings Working pressure of furnace by the rules 191 lbs. Combustion chamber
plates: Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 3/4" Pitch of stays to ditto: Sides 8 1/2"x8 1/2" Back 9 1/4"x7 1/2"
Top 8 1/2"x8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 187 lbs. Material of stays Steel Area at
smallest part 1.76 sq ft Area supported by each stay 72.25 sq in Working pressure by rules 210 lbs. End plates in steam space: Material Steel Thickness 1 1/8"
Pitch of stays 17 1/2"x20 1/2" How are stays secured D.n. washers Working pressure by rules 184 lbs. Material of stays Steel Dia. at smallest part 2.74"
Area supported by each stay 295 sq in Working pressure by rules 242 lbs. Material of Front plates at bottom Steel Thickness 3/8" Material of
lower back plate Steel Thickness 13/16" Greatest pitch of stays 13 1/2"x7 1/2" Working pressure of plate by rules 225 lbs. Diameter of tubes 3 1/4"
Pitch of tubes 4 1/2"x4 3/8" Material of tube plates Steel Thickness: Front 7/8" Back 13/16" Mean pitch of stays 10.27" Pitch across wide
water spaces 14 1/4" Working pressures by rules front 188 lbs back 225 lbs Girders to Chamber tops: Material Steel Depth and thickness of
order at centre 8 1/4"x1 1/2" Length as per rule 30 5/8" Distance apart 8 1/8" Number and pitch of Stays in each knee 8"
Working pressure by rules 215 lbs Steam dome: description of joint to shell % 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
SUPERHEATER. 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

The foregoing is a correct description,
FOR HARLAND AND WOLFF, LIMITED, Manufacturer.
J. S. Toole

Dates During progress of July 5 Aug 1-10-15-24 Sept Is the approved plan of boiler forwarded herewith
Survey work in shops - - -
While During erection on 2-12-23 Total No. of visits 8
Building board vessel - - -

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

These boilers have been constructed under special survey. The materials and workmanship are sound and good.
They have been satisfactorily tested by hydraulic pressure in accordance with the rules, efficiently installed
and fastened on the vessel. The safety valves have been adjusted under steam. In my opinion the vessel
is now eligible for notation L.M.C. 9.27

Register of Shipping

Survey Fee ... £ See Report: When applied for, 191
Travelling Expenses (if any) £ See Report: When received, 191

Committee's Minute

Signed

TUES. 4 OCT 1927

See Report attached

R. J. Ames

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
Foundation

W203-0247