

REPORT ON BOILERS.

No. 8986

Received at London Office

THU. 1 NOV. 1923

Date of writing Report

When handed in at Local Office

Port of

Belfast

No. in Survey held at

Belfast

Date, First Survey

Last Survey

191

Req. Book.

on the New Steel Y.S.S. "Malaja"

(Number of Visits)

Gross 2083 1/4
Net 12830

Master

Built at Belfast

By whom built

Harland & Wolff Ltd

When built 1923

Engines made at

Belfast

By whom made

Harland & Wolff Ltd

When made 1923

Boilers made at

Belfast

By whom made

Harland & Wolff Ltd

When made 1923

Registered Horse Power

Owners Peninsula & Oriental Steam Navigation Co. Port belonging to Belfast

MULTITUBULAR BOILERS—MAIN, ~~AUXILIARY OR DONKEY~~ Manufacturers of Steel David Colville & Sons Ltd

(Letter for record 5) Total Heating Surface of Boilers 35244 sq ft forced draft fitted yes No. and Description of Boilers Six Double ended Working Pressure 215 lbs Tested by hydraulic pressure to 343 lbs (146.57 # Coat.) 16-2-23

No. of Certificate 822 & 423. Can each boiler be worked separately in chest. Yes Area of fire grate in each boiler Oil fuel No. and Description of safety valves to each boiler 4 Spring loaded in Area of each valve 9.62 sq Pressure to which they are adjusted 220 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 20" Mean dia. of boilers 16'-6" Length 20'-0"

Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 30-33 tons Are the shell plates welded or flanged no.

Descrip. of riveting: cir. seams Centre T.R. long. seams T.R. D.B.S. Diameter of rivet holes in long. seams 1 7/16" Pitch of rivets 10 1/2"

Lap of plates or width of butt straps 1'-11" Per centages of strength of longitudinal joint rivets 84.6 Working pressure of shell by plate 85.11

rules 224 lbs Size of manhole in shell 16" x 12" Size of compensating ring 2 @ 36" x 32" x 1 1/4" No. and Description of Furnaces in each boiler 8 Corrugated Material Steel Outside diameter 3' 1/2" Length of plain part top 7' 8" Thickness of plates crown 7/8" bottom

Description of longitudinal joint Weld No. of strengthening rings Working pressure of furnace by the rules 226.5 lbs Combustion chamber plates: Material Steel Thickness: Sides 2 3/8" Back Top 2 1/8" Bottom 3/4" Pitch of stays to ditto: Sides 8" x 8" Back dia

Top 4 1/4" x 8" 9" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 239 lbs Material of stays Steel dia at smallest part 1 1/2" x 1 1/8" Area supported by each stay 65 sq Working pressure by rules 234 lbs End plates in steam space: Material Steel Thickness 1"

Pitch of stays 16" x 15 1/2" How are stays secured D.N. Wash Working pressure by rules 226.5 lbs Material of stays Steel Area at smallest part 5.05

Area supported by each stay 24 sq Working pressure by rules 222 lbs Material of Front plates at bottom Steel Thickness 7/8" Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules Diameter of tubes 2 3/4"

Pitch of tubes 4" x 4 1/2" Material of tube plates Steel Thickness: Front 7/8" Back 1 1/16" Mean pitch of stays 9" Pitch across wide water spaces 13 3/4" Working pressures by rules 254 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 2 @ 8" x 7/8" Length as per rule 4'-2 7/8" Distance apart 4 3/4" - 8" + 9" Number and pitch of Stays in each 6'-4 1/4"

Working pressure by rules 259 lbs 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

SUPERHEATER. Type External tubular Date of Approval of Plan 13-2-22 Tested by Hydraulic Pressure to 430 lbs

Date of Test Oct 5 1923 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 220 lbs Is Easing Gear fitted yes

FOR HARLAND & WOLFF LTD

The foregoing is a correct description,

J. D. Keay

Manufacturer.

Is the approved plan of boiler forwarded herewith yes

Total No. of visits

Dates of Survey: During progress of work in shops - - - while building: During erection on board vessel - - -

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

These boilers have been built under special survey, materials & workmanship good. Hydraulic tests satisfactory.

Survey Fee ... £ Travelling Expenses (if any) £

When applied for, 191 When received, 191

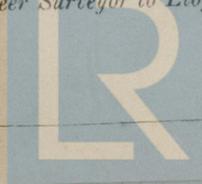
TUE NOV. 6 1923

William Butler

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned



Lloyd's Register Foundation