

REPORT ON BOILERS.

No. 18546

Received at London Office 14 JUL 1926

Date of writing Report 6.5.26 When handed in at Local Office 6.7.26 Port of Greenock
No. in Survey held at Greenock Date, First Survey 15 June 1925 Last Survey July 29 1926
Reg. Book. S/S "Flawless" (Number of Visits 59) Gross Tons 1926
on the
Master Built at Glasgow By whom built Lithgow & Co (1880) When built 1926
Engines made at Greenock By whom made John & Kneale & Co (1826) When made 1926
Boilers made at ditto By whom made ditto (1826) When made 1926
Registered Horse Power 467 Owners Walter Stansfield & Co Port belonging to London

MULTITUBULAR BOILERS—MAIN, ~~AUXILIARY OR DONKEY~~—Manufacturers of Steel

(Letter for record S) Total Heating Surface of Boilers 6845 Is forced draft fitted yes No. and Description of Boilers 3 Single ended 3SB Working Pressure 180 Tested by hydraulic pressure to 320 Date of test 19.12.25
No. of Certificate 1714 Can each boiler be worked separately yes Area of fire grate in each boiler 6.36.00 No. and Description of safety valves to each boiler Double Spring Area of each valve 9.62.00 Pressure to which they are adjusted 185
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 18" Mean dia. of boilers 14.6" Length 11.6"
Material of shell plates S Thickness 13/16" Range of tensile strength 28/32 Are the shell plates welded or flanged
Descrip. of riveting: cir. seams DR long. seams TR.DBS Diameter of rivet holes in long. seams 1/4" Pitch of rivets 8 3/4"
Top of plates or width of butt straps 18 7/16" Per centages of strength of longitudinal joint rivets 91.1% plate 85.7% Working pressure of shell by rules 182 Size of manhole in shell 20 5/16" Size of compensating ring 31.35" 1 9/32" No. and Description of Furnaces in each boiler 3 Corrugated Material S Outside diameter 3.9 1/4" Length of plain part top Thickness of plates crown 17/32" bottom
Description of longitudinal joint mild No. of strengthening rings Working pressure of furnace by the rules 182 Combustion chamber plates: Material S Thickness: Sides 5/8" Back 2 1/32" Top 5/8" Bottom 3/4" Pitch of stays to ditto: Sides 8.9" Back 9 1/4" 9"
Top 8.9" If stays are fitted with nuts or riveted heads DN Working pressure by rules 186 Material of stays S Area at smallest part 13.23" Area supported by each stay 83.5" Working pressure by rules 183 End plates in steam space: Material S Thickness 19/32"
Pitch of stays 21.19 3/4" How are stays secured DN Working pressure by rules 181 Material of stays S Area at smallest part 6.66"
Area supported by each stay 414.7" Working pressure by rules 181 Material of Front plates at bottom S Thickness 15/16" Material of Lower back plate S Thickness 25/32" Greatest pitch of stays 13 3/4" Working pressure of plate by rules 184 Diameter of tubes 2 1/2"
Pitch of tubes 3 3/4" 3 3/4" Material of tube plates S Thickness: Front 15/16" Back 5/8" Mean pitch of stays 9.37 Pitch across wide water spaces 13 1/2" Working pressures by rules 184 Girders to Chamber tops: Material S Depth and thickness of girder at centre 8 3/4" 11 3/4" (2) Length as per rule 31.4 Distance apart 9 Number and pitch of Stays in each 3 at 8"
Working pressure by rules 184 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 JOHN S. KINCAID & CO., LONDON.
Robert Green Manufacturer.

Dates of Survey During progress of work in shops - -
while building During erection on board vessel - - -
see Report on Machinery Total No. of visits 59

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These Boilers have been built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality. They have now been securely fitted on board. Plus Repl. & accompanying trial of the Machinery.

Survey Fee : : When applied for, 19.
Travelling expenses : : When received, 19.
May 1926

Committee's Minute GLASGOW 13 JUL 1926
Assigned See accompanying machinery report
W. J. Gordon-Mitchell
Engineer Surveyor to Lloyd's Register of Shipping.