

NEWCASTLE-ON-TYNE, No. 104585
REPORT ON WATER TUBE BOILERS. No. 71169

Received at London Office 30 OCT 1946

Writing Report 19 When handed in at Local Office 26.10.1946 Port of GLASGOW.
Survey held at RENFREW. Date, First Survey 11.10.45 Last Survey 17A Oct. 1946
on the PATRICIAN.
SUNDERLAND By whom built J.L. THOMPSON & SONS LTD Yard No. 649 When built 1947-6mo
made at NEWCASTLE:ON:TYNE By whom made WALLSEND SLIPWAY & ENG. CO. Engine No. 998 When made 1947
made at RENFREW By whom made BABCOCK & WILCOX, Ltd. Boiler No. 6/1846 When made 1946.
Horse Power 417 Owners ELLERMAN LINE, Ltd. Port belonging to

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Colvilles Ltd.

Approval of plan 3.10.45. No. and Description or Type
Boilers 2 - B. & W. Marine Type Working Pressure 450 lb. Tested by Hydraulic Pressure to 725 lbs Date of Test 19.9.46.

Certificate 22257 Can each boiler be worked separately Yes Total Heating Surface of Boilers 5394 sq.ft. 5400
S.H. 866 sq.ft. 812

draught fitted Yes Area of Fire Grate (coal) in each Boiler
type of burners (oil) in each boiler 2 - Wallsend Howden No. and description of safety valves on

Boiler 1 - 2" H.L. Double Area of each set of valves per boiler
as fitted 6.28 sq.inch. + 3.14 sq.inch. See over Pressure to which they

Are they fitted with easing gear Yes Are they fitted with easing gear Yes
In case of donkey boilers state whether steam from main boilers can enter

Smallest distance between boilers or uptakes and bunkers or woodwork
Height of boiler 19'-10"

Steam Drums:—Number in each boiler One Inside diameter 3'-6"
Range of tensile strength 28/32 tons Are drum shell plates welded

If fusion welded, state name of welding firm Babcock & Wilcox, Ltd. Have all the requirements of the Rules

Description of riveting:—Circ. seams long. seams
Pitch of rivets Thickness of straps Percentage strength of

Rivet Diameter of tube holes in drum 4" Pitch of tube holes 7 1/4"
Steam Drum Heads or Ends:—Range of tensile strength 26/30 tons

Radius or how stayed 3'-0" Size of manhole or handhole 12" x 16" Water Drums:—Number

Thickness of plates Range of tensile strength Are drum shell plates

If fusion welded, state name of welding firm Have all the requirements of the Rules

Description of riveting:—Circ. seams long. seams
Pitch of rivets Thickness of straps

Diameter of tube holes in drum Pitch of tube holes
Water Drum Heads or Ends:—Range of tensile strength

Radius or how stayed Size of manhole or handhole
Tested by hydraulic pressure to 725 lbs.

Material S.D. Steel Thickness 5" nominal Muddrum
Number 12 & 24, 2; 92 & 389

Sections Nippled Inside diameter 6" x 6" Thickness of shell plates 3/4" Nominal Range of tensile

28/32 tons Description of longitudinal joint solid drawn If fusion welded, state name of welding

Have all the requirements for the Rules for Class I vessels been complied with Diameter of rivet holes

Thickness of straps Percentage strength of long. joint plate rivet

Range of tensile strength Thickness Radius or how stayed

Number in each boiler 1 - Inlet, 1 - Outlet Inside diameter 6" x 6"
Material S.D. Steel Range of tensile strength 28/32 tons Are drum shell plates welded

If fusion welded, state name of welding firm Have all the requirements of the Rules

Description of riveting:—Circ. seams long. seams
Pitch of rivets Thickness of straps Percentage strength of

Diameter of tube holes in drum 1 1/4" Pitch of tube holes 1 5/8" Percentage strength of

Drum Heads or Ends:—Thickness Range of tensile strength
71 @ 1 1/4" 11G. 36 @ 1 1/4" 10G.

Size of manhole or handhole 3 5/8" square Number, diameter, and thickness of tubes
Is a safety valve fitted to each section of the superheater which

725 lb. Date of test 9.10.46. Area of each set

1 - 2" H.L. Single No. and description of safety valves
Pressure to which they are adjusted 44.0 lb. Is easing gear fitted Yes

Has the spare gear required by the Rules been supplied Yes

The foregoing is a correct description,
Babcock & Wilcox, Manufacturer.

Is the approved plan of boiler forwarded herewith No

Total No. of visits 37

This boiler a duplicate of a previous case. Yes If so, state vessel's name and report No. See Glasgow Report No. 71016

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. These boilers have been built under special

Survey in accordance with the Rules and approved plans and the materials and workmanship are good.

They have been sent to Newcastle:On:Tyne for installation in the vessel.

Survey Fee ... £ 50 : : When applied for 29 OCT 1946

Travelling Expenses (if any) £ : : When received 19

Date GLASGOW 29 OCT 1946 FRI 25 JUL 1947

Committee's Minute. Defered for Completion See F.E. mch. rpt.

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

004351-004352-0095

See makers' L.R. 13/12/46

15/11/46

Have 16/9

These main Boilers have been satisfactorily tested on board + SV's adj under steam See new. Rpt. with new results on 2nd 16/6/47