

REPORT ON WATER TUBE BOILERS.

Std. No. 34402
Lic. No. 122502
11 APR 1945

Received at London Office

Date of writing Report 27-3-45 When handed in at Local Office 8 APR 1945 Port of Liverpool (v Nottingham)
No. in Survey held at Birkenhead & Derby Date, First Survey 23/3/44 Last Survey 27/3/1945
Reg. Bk. on the Boiler Parts Cammell Laird No 2285 (Number of Visits 38) Tons { Gross _____ Net _____

Boilers made at Birkenhead & Derby By whom made Cammell Laird & International Combustion Ltd When made 1945
Nominal Horse Power _____ Owners _____ Port belonging to _____

WATER TUBE BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel Cammell Laird & International Combustion Ltd
Date of Approval of plan 14-6-43 Standard Corvette Berlin Number and Description or Type of Boilers 2 - Three drum type
Working Pressure 225 lb Tested by Hydraulic Pressure to _____ Date of Test _____
No. of Certificate 87 and 88 Can each boiler be worked separately _____ Total Heating Surface of Boilers 10650 sq ft

Is forced draught fitted _____ Area of fire grate (coal) in each Boiler _____
No. and type of burners (oil) in each boiler 4 Admiralty Type No. and description of safety valves on each boiler 1 Set Marine Type H.L.
Area of each set of valve 25 sq in Pressure to which they are adjusted _____
Are they fitted with easing gear _____ 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 _____ Height of boiler 10-1/2 Width and Length 8-7/2 Centre
Steam Drums: - Number in each boiler One Inside diameter 50" Thickness of plates 5/8 + 1/2
Range of Tensile Strength 28/32 Ton Are drum shell plates welded or flanged no Description of riveting: -
Cir. seams D.R. long. seams D.R.-D.B.S. Diameter of rivet holes in long. seams 29/32 Pitch of rivets 3.5
Lap of plate or width of butt straps 9 3/8 Thickness of straps 1/2 Percentage strength of long. joint: - Plate 74.1 Rivet 69

Diameter of tube holes in drum 1 1/2 - 1 1/8 - 1" Pitch of tube hole 2 1/4 - 1 1/16 - 1 1/2 Percentage strength of shell in way of tubes 33
Working pressure by rules 271 lb **Steam Drum Heads or Ends:** - Range of tensile strength 26/30 Ton Thickness of plates 1 1/16 + 1/16
Radius or how stayed 4'-2" Size of manhole or handhole 16" x 12" Working pressure by rules 226 lb **Water Drums:** - Number in each boiler Two
Inside Diameter 22 7/8" Thickness of plates 1 1/2 Range of tensile strength 28/32 Ton Are drum shell plates welded or flanged no - Solid drum
Description of riveting: - Cir. seams one end S.R. long. seams Solid drum Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Lap of plates or width of butt straps _____ Thickness of straps _____

Percentage strength of long. joint: - Plate _____ Rivet _____ Diameter of tube holes in drum 1 1/2 - 1 1/8 - 1" Pitch of tube holes 2 1/4 - 1 1/16 - 1 1/2
Percentage strength of drum shell in way of tubes 33 Working pressure by rules 592 lb **Water Drum Heads or Ends:** - Range of Tensile strength 26-30 Ton Thickness of plates 13/16 Radius or how stayed 23"
Size of manhole or handhole 16" x 12" Working pressure by rules 356 lb **Headers or Sections:** - Number _____ Tubes: - Diameter 1 1/2, 1 1/8, 1"

Material _____ Thickness _____ Tested by Hydraulic Pressure to _____ **Steam Dome or Collector:** - Description of Joint to Shell _____
Inside diameter _____ Thickness of shell plates _____ Range of tensile strength _____
Description of longitudinal joint _____ Diameter of rivet holes _____ Pitch of rivets _____ Lap of plate or width of butt straps _____ Thickness of straps _____ Percentage strength of long. joint _____ Plate _____ Rivet _____

Ring pressure _____ Radius or how stayed _____ Working pressure by rules _____
RESENER HEATER. Drums or Headers: - Number in each boiler not fitted Inside Diameter _____
Decks _____ Material _____ Range of tensile strength _____ Are drum shell plates welded _____
Caulk _____ Description of riveting: - Cir. seams _____ long. seams _____ Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Lap of plates or width of butt straps _____ Thickness of straps _____

Percentage strength of long. joint: - Plate _____ Rivet _____ Diameter of tube holes in drum _____ Pitch of tube holes _____
Percentage strength of drum shell in way of tubes _____ Working pressure by rules _____ **Drum Heads or Ends:** -
Thickness _____ Range of tensile strength _____ Radius or how stayed _____ Size of manhole or handhole _____
Working pressure by rules _____ Number, diameter, and thickness of tubes _____ 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 _____
No. and description of Safety Valves _____ Area of each set of valves _____
Pressure to which they are adjusted _____ Is easing gear fitted _____
Spare Gear. Has the spare gear required by the rules been supplied _____

Inner _____
Have _____
Have the INTERNATIONAL COMBUSTION LIMITED. For Boiler Parts The foregoing is a correct description of _____
J.P. Underwood Manufacturer.
General During progress of 23/3/44 to 27/3/45 Is the approved plan of boiler forwarded herewith _____
work in shops - - - - -
this survey, including erection on _____
survey, 1,387rd vessel - - - - - Total No. of visits 38

a duplicate of a previous case yes If so, state vessel's name and report No. Alpha Corvette class.
GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boiler parts have been made under special survey, to approved plans in accordance with the Society's Requirements. They are despatched for Mr. Wor Power Ltd to Mr. International Combustion Ltd at Derby for erection. Above boilers have been erected, tested and completed to our satisfaction and despatched to Sunderland for installation on board vessel # 14952

Survey Fee _____
Supervision of Specifications _____
Travelling Expenses (if any) £ _____
* L.V. 2/22.10 - + L.V. 2/22.10 -
NOT 2/24.10 - NOT 2/22.10 -
When applied for, _____
When received, _____
ADMIRALTY
A/c retained from _____
L.V. 2/22.10 -

Committee's Minute LIVERPOOL 10 APR 1945
Character transmit to London
Su F.L. meby opt.
Lloyd's Register Foundation
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