

REPORT ON WATER TUBE BOILERS.

No. 18343.

Received at London Office

7 OCT 1944

21 JUN 1945

Date of writing Report 5th October 1944. When handed in at Local Office 6th October 1944. Port of Southampton

No. in Survey held at _____ Date, First Survey 11th January Last Survey 3rd October 1944.
 Reg. Bk. _____ (Number of Visits 24.) Tons { Gross 4157
 Net 2430
 on the *Transporter Denny 30+1 (J1866) 1866*
 Built at *Glasgow* By whom built *Alan Rowley & Co 1297* When built 1945
 Engines made of *Duby* By whom made *Les Nether & Co 2124, 2131* When made 1944
 Boilers made at *Southampton* By whom made *John I. Thornycroft & Co. Ltd. W 1349 (1st Pair)* When made 1944
 Nominal Horse Power _____ Owners *The Admiralty* Port belonging to _____

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel *Salford Steel Works & Charfield Tube*

Date of Approval of plan *21st February 1943* Number and Description or Type *30-8-44*
 of Boilers *Two Three Drum Type* Working Pressure *225 lb* Tested by Hydraulic Pressure to *387 lb* Date of Test *6-9-44*

No. of Certificate *66 & 67* Can each boiler be worked separately *Yes* 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 _____ No. and description of safety valves on each boiler *Two High lift* Area of each set of valve *12.50 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 *13'-11"* Width and Length *4'-9" x 14'-5"*

Steam Drums:—Number in each boiler *One* Inside diameter *4'-1 1/2"* Thickness of plates *1 1/2" & 5/8"*

Range of Tensile Strength *28/32 tons* Are drum shell plates welded or flanged *No* Description of riveting:—

Cir. seams *Double lap Long. seams Double Butt Straps* Diameter of rivet holes in long. seams *49/32* Pitch of rivets *3'-15/16*

Lap of plate or width of butt straps *10 1/2"* Thickness of straps *1/2"* Percentage strength of long. joint:—Plate *74%* Rivet *88%*

Diameter of tube holes in drum *1 1/2" & 1 1/4"* Pitch of tube holes *1 1/2", 1 1/4", 2 1/4"* Percentage strength of shell in way of tubes *33.3*

Working pressure by rules *244 lb* Steam Drum Heads or Ends:—Range of tensile strength *26/30 tons* Thickness of plates *1 1/2" & 1 1/4"*

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 3/4"* Thickness of plates *1 1/4"* Range of tensile strength *28/32 tons* Are drum shell plates welded or flanged *Solid drawn* Description of riveting:—Cir. seams *S.R. Lap* 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 *1 1/2" & 1 1/4"* Pitch of tube holes *1 1/2" 1 1/4" 2 1/4"*

Percentage strength of drum shell in way of tubes *33.3* Working pressure by rules *683 lb* Water Drum Heads or Ends:—Range of Tensile strength *26/30 tons* Thickness of plates *5/8" & 1"* Radius or how stayed *23"*

Size of manhole or handhole *16" x 12"* Working pressure by rules *459 lb* Headers or Sections:—Number _____ Tubes:—Diameter *1 1/2" & 1 1/4"*

Material _____ Thickness _____ Tested by Hydraulic Pressure to _____ Steam Dome or Collector:—Description of Joint to Shell _____

Thickness *1 1/16" & 1/16"* Number per boiler *2080* 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 _____

Working Pressure of shell by rules _____ Crown or End Plates:—Range of tensile strength _____ Thickness _____ Radius or how stayed _____ Working pressure by rules _____

SUPERHEATER. Drums or Headers:—Number in each boiler _____ Inside Diameter _____ Thickness _____ Material _____ Range of tensile strength _____ Are drum shell plates welded or flanged _____ 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 _____

JOHN I. THORNYCROFT & Co., Limited.

The foregoing is a correct description,

J. Donaldson Manufacturer.

Dates of Survey } During progress of work in shops - - - } *Jan 1, 25. Feb 1, 15, 29. Mar 7, 21, 28. Apr 5, 18, 25. May 2, 15. June 1, 21. July 6, 19. Aug 1, 22, 30. Sept 6, 12, 26. Oct 3.* Is the approved plan of boiler forwarded herewith *Yes*

while building } During erection on board vessel - - - } Total No. of visits _____

Is this boiler a duplicate of a previous case *No* If so, state vessel's name and report No. _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *These boilers have been constructed under special survey to the plans and specification. The material and workmanship is good, and proved satisfactory under test. They are being despatched to Corran for fitting on board Transport Harris.*

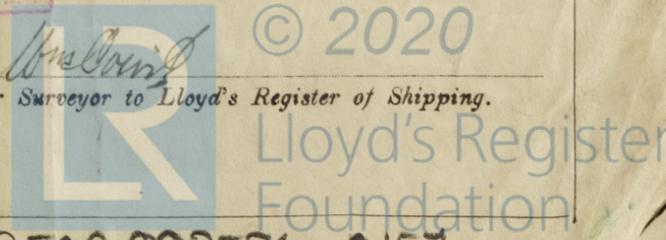
ADMIRALTY
 A/c rendered from
 13 OCT '44
 London

Survey Fee ... £45 : 0 : 0 When applied for, *5th October 1944*
 Travelling Expenses (if any) £45 : - : - When received, *19*

Committee's Minute **GLASGOW**

Assigned **SEE ACCOMPANYING MACHINERY REPORT!**

Engineer Surveyor to Lloyd's Register of Shipping.



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Boards

1997

M.H.



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