

REPORT ON WATER TUBE BOILERS.

No. 41970

Received at London Office

WED. MAY. 31 1922

Date of writing Report 29. 5. 1922

When handed in at Local Office 29. 5. 1922

Port of Glasgow

No. in Survey held at Dumbarton Date, First Survey 9-2-22 Last Survey 19-5-1922
 Reg. Bk. on the Fire float Harbour tug (by name Maryweather) Number of Visits 10 Gross Tons 10 Net Tons 10
 Master TWIN Built at London By whom built Edwards & Co 2789 When built 1922
 Engines made at Newbury By whom made Plunkin & Son Ltd N° 2478 When made 1922
 Boilers made at Dumbarton By whom made Wm Denny & Bros Ltd (50.853) When made 1922
 Registered Horse Power _____ Owners _____ Port belonging to _____

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel D. Clarke & Sons
 (Letter for Record (S)) Date of Approval of plan 6/1/22 Number and Description or Type of Boilers one narrow water tube Working Pressure 210 Tested by Hydraulic Pressure to 365 Date of Test 12/5/22
 No. of Certificate 16055 Can each boiler be worked separately ✓ Total Heating Surface of Boilers 2000 #
 Is forced draught fitted yes Area of fire grate (coal) in each Boiler ✓ Total grate area of boilers in vessel including Main and Auxiliary ✓ No. and type of burners (oil) in each boiler 3 Kernmode No. and description of safety valves on each boiler 1 pair direct spring Area of each valve 7.07"² 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'-11" Width and Length 11'-7" x 7'-8"
Steam Drums:—Number in each boiler one Inside diameter 3'-2" Material of plates steel Thickness 13/32
 Range of Tensile Strength 28 to 32 & 26 to 30 Are drum shell plates welded or flanged no Description of riveting:—
 Cir. seams lap double long. seams butt double Diameter of rivet holes in long. seams 13/32 Pitch of Rivets 2 7/8
 Lap of plate or width of butt straps 6 9/8 Thickness of straps 5/16 & 1/2 Percentage strength of long. joint:—Plate 79.4% Rivet 78.6%
 Diameter of tube holes in drum 1 3/8" x 1 1/8" Pitch of tube holes 1 1/16" x 1 1/16" Percentage strength of shell in way of tubes 33%
 If Drum has a flat side state method of staying ✓ Depth and thickness of girders at centre (if fitted) ✓ Distance apart ✓ Number and pitch of stays in each ✓ Working pressure by rules 215
Steam Drum Heads or Ends:—Material steel Thickness 3/4 Radius or how stayed 2" x 5"
 Size of Manhole or Handhole 16" x 12" **Water Drums:**—Number in each boiler 2 Inside Diameter 17" x 22 3/4"
 Material of plates steel Thickness bottom 9/16" top 1 1/8" Range of tensile strength 26 to 30 Are drum shell plates welded or flanged no Description of riveting:—Cir. seams lap single long. seams lap double Diameter of Rivet Holes in long. seams 13/32 Pitch of rivets 2 3/8 Lap of plates or width of butt straps 4 1/2 Thickness of straps 11/32
 Percentage strength of long. joint:—Plate 68.5 Rivet 70.6 Diameter of tube holes in drum 1 3/8" x 1 1/8" Pitch of tube holes 1 1/16" x 1 1/16"
 Percentage strength of drum shell in way of tubes 33% **Water Drum Heads or Ends:**—Material steel Thickness 1/16
 Radius or how stayed 25 1/2" min 51" max Size of manhole or handhole 15" x 11" **Headers or Sections:**—Number ✓
 Material ✓ Thickness ✓ Tested by Hydraulic Pressure to ✓ Material of Stays ✓
 Area at smallest part ✓ Area supported by each stay ✓ Working Pressure by Rules ✓ **Tubes:**—Diameter 1 3/8" x 1 1/8"
 Thickness 13 & 14 L.S.B. Number 1078 **Steam Dome or Collector:**—Description of Joint to Shell none
 Percentage strength of Joint ✓ Diameter ✓ Thickness of shell plates ✓ Material ✓
 Description of longitudinal joint ✓ Diameter of Rivet Holes ✓ Pitch of Rivets ✓ Working Pressure of shell by Rules ✓
Crown or End Plates:—Material ✓ Thickness ✓ How stayed ✓

SUPERHEATER. Type none 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 ✓
 Is a drain cock or valve fitted at lowest point of superheater ✓ Number, diameter, and thickness of tubes ✓
 Spare Gear. Tubes 70 Gaskets or joints:—Manhole 6 Handhole ✓ Handhole plates ✓

The foregoing is a correct description,
 For WILLIAM DENNY & BROTHERS, LTD
 Wm. Denny & Bros. Ltd. Manufacturer.

Dates of Survey } During progress of 1922 Feb 9, Mar 3, 6, 8, 28, Apr 12, 21, May 9, 12, 19.
 while } work in shops - - -
 building } During erection on board vessel - - -

Is the approved plan of boiler forwarded herewith yes
 Total No. of visits 10

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

This boiler has been built under special Survey. The materials and workmanship are of good description. The boiler has been forwarded to London when it will be fitted on board the vessel. (See London letters 9/1/22, 17/2/22, 24/4/22, 4/5/22)

Survey Fee ... £ 13 : 6 : 30 When applied for, 30. 5. 1922
 Travelling Expenses (if any) £ : : When received, 29/6/22

Committee's Minute

Assigned

GLASGOW 30 MAY 1922

TRANSMIT TO LONDON

A. McKeand

Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 8 DEC. 1922

CW

Lloyd's Register Foundation

006332-06342-0158