

No. 94
pt. 5a.

Glasgow No. 45480

REPORT ON BOILERS.

No. 9492

Received at London Office

23 JAN 1926

Report of Surveying Report 23-1-1926 When handed in at Local Office 23-1-1926 Port of Belfast
No. in Survey held at Belfast Date, First Survey 14th Aug 1925 Last Survey 15th Jan 1926
No. of Book. 23 (Number of Visits 23) Gross 154 Tons Net 3154
on the Donkey Boiler for the New Steel M.S. "OAKBANK" (6859)
Built at Glasgow By whom built Harland & Wolff Ltd When built 1926
Engines made at Glasgow By whom made Harland & Wolff Ltd When made 1926
Boilers made at Belfast By whom made Harland & Wolff Ltd When made 1926
Registered Horse Power Owners Messrs Andrew Weir & Co. (Bank Line Ltd) Port belonging to Glasgow

MULTITUBULAR BOILERS DONKEY.—Manufacturers of Steel D Colville & Sons Ltd
Letter for record 5 Total Heating Surface of Boilers 1510 Is forced draft fitted No No. and Description of Boilers One Single Ended Working Pressure 110 lbs Tested by hydraulic pressure to 215 lbs Date of test 12-1-26
No. of Certificate 849 Can each boiler be worked separately ✓ Area of fire grate in each boiler 44 No. and Description of Safety valves to each boiler TWO SPRING LOADED Area of each valve 9.62 Pressure to which they are adjusted 110 lbs/sq
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 2'-1" Inside dia. of boilers 13'-0" Length 11'-0"
Material of shell plates Steel Thickness 3/4" Range of tensile strength 28-32 tons Are the shell plates welded or flanged No
Description of riveting: cir. seams D.R. long. seams T.R.D.S. Diameter of rivet holes in long. seams 15/16" Pitch of rivets 6'8"
Pitch of plates or width of butt straps 1'-2 1/4" Per centages of strength of longitudinal joint rivets 116 Working pressure of shell by rules 84
Size of manhole in shell 16" x 12" Size of compensating ring 2 @ 3'-0" x 2'-8" x 2'-4" No. and Description of Furnaces in each boiler 3 corrugated Material Steel Outside diameter 3'-4 1/8" Length of plain part top 16' bottom 16' Thickness of plates crown 1/2" bottom 1/2"
Description of longitudinal joint Weld No. of strengthening rings 9 Working pressure of furnace by the rules 156 lbs Combustion chamber: Material Steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 3/4" Pitch of stays to ditto: Sides 8'4" x 8'2" Back 9' x 8'2"
If stays are fitted with nuts or riveted heads nuts Working pressure by rules 137 lbs Material of stays Steel Area at smallest part 1'-22" Area supported by each stay 18.3 Working pressure by rules 129 lbs End plates in steam space: Material Steel Thickness 1/8"
Pitch of stays 18' x 18' How are stays secured Weld Working pressure by rules 122 lbs Material of stays Steel Diameter at smallest part 4.116
Area supported by each stay 377 Working pressure by rules 137 lbs Material of Front plates at bottom Steel Thickness 3/4" Material of over back plate Steel Thickness 3/4" Greatest pitch of stays 12'4" x 8'2" Working pressure of plate by rules 190 lbs Diameter of tubes 3 1/4"
Pitch of tubes 8'7" x 4'7" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 8.98' Pitch across wide over spaces 1'-2 1/4" Working pressures by rules 134 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 2 @ 4" x 3 1/4" length as per rule 2'-6" Distance apart 9'2" Number and pitch of Stays in each 3 @ 8 1/4"
Working pressure by rules 141 lbs Superheater or Steam chest: how connected to boiler none Can the superheater be shut off and the boiler worked separately
Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet
Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
Stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed
Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

The foregoing is a correct description,
FOR HARLAND AND WOLFF, LIMITED.
W. Lebeck Manufacturer.

Dates During progress of Survey: Aug 17-24 Sept 11-14-18-25 Oct. 1-2-12-16-23 Is the approved plan of boiler forwarded herewith will be sent with work in shops - No 16-19-26-27-30 Dec 4-9-17 1925-26 = 23
During erection on board vessel - No Total No. of visits 23

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This Boiler has been built under Special Survey. Materials & Workmanship good. Hydraulic test satisfactory. It has been shipped to Glasgow for installation in the vessel. This boiler has now been fitted on board the above vessel in an efficient manner, examined under steam and everything found satisfactory. Safety valves adjusted to 110 lbs/sq

Survey Fee ... £ 10 : 2 : 0 When applied for, 23-1-1926 Washers F 3/16" A 1/4"
Travelling Expenses (if any) £ : : : When received, 10-2-1926
Wm. D. Bates & H. G. Crick
Engineer Surveyors to Lloyd's Register of British and Foreign Shipping.

Committee's Minute **GLASGOW 23 MAR 1926**

Assigned See Gls. Rpt. No. 45480



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