

Rpt. 5c.

REPORT ON WATER TUBE BOILERS.

MOB. 18406.
No. 23533.

Date of writing Report 23rd JULY 1947 When handed in at Local Office 28th JULY 1947 Port of GREENOCK
Received at London Office 3 AUG 1947
No. in Survey held at GREENOCK Date, First Survey 14th NOVEMBER '46 Last Survey 9th JUNE 1947
Reg. Bk. on the 3/3 "GOMPHINA" (Number of Visits 15) Tons { Gross 5042
Net 2432
Built at Sunderland By whom built W. Thompson & Sons Ltd When built 1947
Engines made at So. Bank, GLASGOW By whom made Smiths Dock Co. Ltd When made 1947
Boilers made at GREENOCK By whom made BABCOCK & WILCOX N° 6/1926 When made 1947
Nominal Horse Power 710 boiler only Owners JOHN G. KINCARD & CO. LTD Port belonging to Willemsstad

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Babcock & Wilcox supply

Date of Approval of plan 16/6/45 13/9/45 Rad details 7/9/45 Number and Description or Type of Boilers Two water tube Working Pressure 220 Tested by Hydraulic Pressure to 380 Date of Test 4/12/47
No. of Certificate 7225/6 Can each boiler be worked separately Yes Total Heating Surface of Boilers 10640 Not checked

Is forced draught fitted Yes Area of fire grate (coal) in each Boiler 5. Summary Bros (Middlesbrough) Smiths Dock Co. Middlesbrough

No. and type of burners (oil) in each boiler 1-3 1/2" Double High Lift No. and description of safety valves on each boiler 220 lbs / 10

Area of each set of valves per boiler { per rule as fitted 19-24 1/2 Pressure to which they are adjusted 220 lbs / 10

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

Smallest distance between boilers or uptakes and bunkers or woodwork 2' 6" Height of boiler 3' 6"

Width and Length 220 lbs / 10 Steam Drums:—Number in each boiler One Inside diameter 3' 6"

Thickness of plates Drum 9/16" tube plates 1 1/8" Range of Tensile Strength 35 tons Are drum shell plates welded or flanged No If fusion welded, state name of welding firm Not welded

Have all the requirements of the rules for Class I vessels been complied with Yes Description of riveting:—Cir. seams DR. long. seams DR. OBS.

Diameter of rivet holes in long. seams 29/32" Pitch of rivets 3.491" Thickness of straps 9/16" Percentage strength of long. joint:—Plate 74% Rivet 96.77% Diameter of tube holes in drum 4.056" Pitch of tube holes 7"

Percentage strength of shell in way of tubes 42.8% Steam Drum Heads or Ends:—Range of tensile strength 24/30 tons

Thickness of plates 7/8" Radius or how stayed 3'-0" Size of manhole or handhole 16" x 12" Water Drums:—Number in each boiler None

Are drum shell plates welded or flanged None If fusion welded, state name of welding firm None Have all the requirements of the rules for Class I vessels been complied with Yes

Description of riveting:—Cir. seams None long. seam None Diameter of rivet holes in long. seams None Pitch of rivets None Thickness of straps None

Percentage strength of long. joint:—Plate None Rivet None Diameter of tube holes in drum None Pitch of tube holes None

Percentage strength of drum shell in way of tubes None Water Drum Heads or Ends:—Range of Tensile strength None

Thickness of plates None Radius or how stayed None Size of manhole or handhole None

Tested by Hydraulic Pressure to 380 lbs / 10 Is a safety valve fitted to each section of the superheater which can be shut off from the boiler Yes

No. and description of Safety Valves 220 lbs / 10 Area of each set of valves 220 lbs / 10

Pressure to which they are adjusted 220 lbs / 10 Is easing gear fitted Yes

Spare Gear. Has the spare gear required by the rules been supplied Yes

The foregoing is a correct description, for J. G. Kincard & Co. Ltd

Chief of Technical Staff. Manufacturer.

Is the approved plan of boiler forwarded herewith No.

Total No. of visits 15.

Is this boiler a duplicate of a previous case Yes If so, state vessel's name and report No. Greenock F.I. N° 23489.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed under special survey in accordance with the Rules & approved plans. The materials & workmanship are sound & good. The boiler when completed & tested will be eligible to be fitted into a vessel classed in the Society's Register book. They have been dispatched to Middlesbrough to be installed in Smiths Dock Co. Ltd Contract N° EN 655

Survey Fee GREENOCK £ 36 : 0 : 0 When applied for, 2/8/ 1947

Travelling Expenses (if any) GLASGOW £ 18 : 0 : 0 When received, 19

Committee's Minute Deferred for completion

Assigned Deferred for completion

Engineer Surveyor to Lloyd's Register of Shipping.

See F.E. Mckay. rpt.

002978-002988-0099 1/2

The two steam drums (see Glasgow cert N° 61013) have now been drilled for mounting pads, pads fitted & rivetted, the drums were then tested by hydraulic pressure to 380 lbs/sq. in. & found tight & sound. The tube holes were drilled in the drums.

The headers (see Glasgow cert N° 61014) have now been assembled, tubes fitted & expanded, each header on completion was tested by hydraulic pressure. The above parts together with the furnace framings & casings, air heater return tubes, header nipple tubes & down corner tubes have been despatched to Smith's Dock Co. Middlesbrough for installation in their Contract N° EW 655.

Babcock & Wilcox will supply the mountings

Charles H. Hunter

The erection of these boilers has been completed on board at Smith's Dock, after which they were hydraulically tested to 380 lbs/sq. in. and found satisfactory. These boilers have been securely fitted into place.

E. Hawey.

Safety valves adjusted under steam to 220 lbs/sq. in. WP
Accumulation test carried out with satisfactory results.

J. Grieve

Sunderland