

REPORT ON BOILERS.

No. 64284

Received at London Office - 3 OCT 1941

Date of writing Report 19 When handed in at Local Office 29. 9. 19 41 Port of Glasgow

No. in Reg. Book. Survey held at Glasgow Date, First Survey 16. 10. 40 Last Survey 5. 9. 19 41

23259 on the *Minerva M.V. Empire Pride* (Number of Visits 18) Tons { Gross 9248 Net 5757

Master *R.S.* Built at Glasgow By whom built *Barclay & Co. Ltd.* Yard No. 680 When built 1941-9

Engines made at Glasgow By whom made *do* Engine No. 680 When made 1941

Boilers made at *do* By whom made *do* Boiler No. 80.1100 When made 1941

Nominal Horse Power 1421. Owners *Ministry of War Transport.* Port belonging to

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel *Bohiller Ltd.* (Letter for Record *S*)

Total Heating Surface of Boilers *1684 sq ft* Is forced draught fitted *Yes* Coal or Oil fired *oil*

No. and Description of Boilers *one single ended.* Working Pressure *120 lbs*

Tested by hydraulic pressure to *230 lbs* Date of test *2.4.41* No. of Certificate *20735* Can each boiler be worked separately *Yes*

Area of Firegrate in each Boiler *-* No. and Description of safety valves to each boiler *1 - double for Kirk lift.*

Area of each set of valves per boiler { per Rule *7.8 sq ft* as fitted *4.95 sq ft* Pressure to which they are adjusted *120 lbs* 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 *will be* Is oil fuel carried in the double bottom under boilers *No.*

Smallest distance between shell of boiler and tank top plating *-* Is the bottom of the boiler insulated *Yes*

Largest internal dia. of boilers *12'-9"* Length *11'-0"* Shell plates: Material *S* Tensile strength *29-33 Tons*

Thickness *23/32"* Are the shell plates welded or flanged *No.* Description of riveting: circ. seams { end *D.R. overlap* inner *2.414"*

long. seams *D.B.S. T.R.* Diameter of rivet holes in { circ. seams *13/16"* long. seams *15/16"* Pitch of rivets { *5-3/4"*

Percentage of strength of circ. end seams { plate *66-36* rivets *47-41* Percentage of strength of circ. intermediate seam { plate *85-86* rivets *93-28*

Percentage of strength of longitudinal joint { plate *85-86* rivets *93-28* combined *92-12* Working pressure of shell by Rules

Thickness of butt straps { outer *9/16"* inner *1/16"* No. and Description of Furnaces in each Boiler *3 Dighton*

Material *S* Tensile strength *26-30 Tons* Smallest outside diameter *3'-1 1/4"*

Length of plain part { top *-* bottom *-* Thickness of plates { crown *3/8"* bottom *3/8"* Description of longitudinal joint *hell.*

Dimensions of stiffening rings on furnace or c.c. bottom *-* Working pressure of furnace by Rules

End plates in steam space: Material *S* Tensile strength *26-30 Tons* Thickness *15/16"* Pitch of stays *18 1/2 x 18*

How are stays secured *Double Nuts* Working pressure by Rules

Tube plates: Material { front *S* back *S* Tensile strength { *26-30 Tons* Thickness { *23/32"* *11/16"*

Mean pitch of stay tubes in nests *10.5"* Pitch across wide water spaces *14"* Working pressure { front *-* back *-*

Girders to combustion chamber tops: Material *S* Tensile strength *28-32 Tons* Depth and thickness of girder at centre *8 x 1 1/16"* Length as per Rule *2'-9 3/4"* Distance apart *9 1/2"* No. and pitch of stays in each *20 10 1/2"* Working pressure by Rules

Tensile strength *26-30 Tons* Thickness: Sides *19/32"* Back *9/16"* Top *19/32"* Bottom *19/32"*

Pitch of stays to ditto: Sides *9 1/2 x 10 1/2"* Back *9 1/2 x 9 1/2"* Top *10 1/2 x 9 1/2"* Are stays fitted with nuts or riveted over *Nuts*

Working pressure by Rules

Front plate at bottom: Material *S* Tensile strength *26-30*

Thickness *23/32"* Lower back plate: Material *S* Tensile strength *26-30 Tons* Thickness *21/32"*

Pitch of stays at wide water space *14"* Are stays fitted with nuts or riveted over *Nuts*

Working Pressure

Main stays: Material *S* Tensile strength *28-32 Tons*

Diameter { At body of stay, *2 1/2"* or Over threads *-* No. of threads per inch *6* Area supported by each stay *18 1/2 x 18*

Working pressure by Rules

Screw stays: Material *S* Tensile strength *26-30 Tons*

Diameter { At turned off part, *1 1/2"* or Over threads *1 1/2 x 1 3/8"* No. of threads per inch *9* Area supported by each stay

