

REPORT ON BOILERS.

No. 76680

Received at London Office

Date of writing Report May 1st 1923 When handed in at Local Office May 2nd 1923 Port of NEWCASTLE FIRTH MAY 1923

No. in Survey held at Newcastle on Tyne Date, First Survey Oct 7th 1919 Last Survey April 28th 1923

Reg. Book. 67692 on the TWINSCREW STEAMER "MONGOLIA." (Number of Visits see other sheet) Gross 16385 Tons Net 10255

Master _____ Built at Newcastle on Tyne By whom built Sir W. G. Armstrong Whitworth & Co. Ltd. When built 1922

Engines made at Newcastle on Tyne By whom made Sir W. G. Armstrong Whitworth & Co. Ltd. When made 1922

Boilers made at Newcastle on Tyne By whom made Sir W. G. Armstrong Whitworth & Co. Ltd. When made 1922

Registered Horse Power 3567 Owners Peninsular & Oriental S. Nav. Coy. Ltd. Port belonging to London

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Sons Ltd.

(Letter for record 5) Total Heating Surface of Boilers See front sheet Is forced draft fitted Yes No. and Description of Boilers Three Double End & Four Single End Cylinders Working Pressure 200 lb Tested by hydraulic pressure to 350 Date of test 16.9.21 30.9.21

No. of Certificate 9603 Can each boiler be worked separately Yes Area of fire grate in each boiler 75 sq ft No. and Description of safety valves to each boiler Two Direct Spring Loaded Area of each valve 12.56 sq in Pressure to which they are adjusted 205 lb

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 See front sheet Mean dia. of boilers 17" Length 11'6"

Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 30 to 33 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams Lap Double long. seams OT Shape Rivets Diameter of rivet holes in long. seams 1 9/16" Pitch of rivets 10 1/2"

Lap of plates or width of butt straps 22 3/4" Per centages of strength of longitudinal joint 90 Working pressure of shell by rules 214 lb Size of manhole in shell 16 x 12" Size of compensating ring 37 x 33 x 1 1/2" No. and Description of Furnaces in each boiler 4: Morrison Material Steel Outside diameter 44 1/2" Length of plain part 37'8" Thickness of plates 2 1/2" 32"

Description of longitudinal joint Weld No. of strengthening rings None Working pressure of furnace by the rules 240 lb Combustion chamber plates: Material Steel Thickness: Sides 5" Back 1 1/2" Top 5" Bottom 1" Pitch of stays to ditto: Sides 8' x 8 1/4" Back 8 1/2' x 8 3/4"

Top 8' x 8" If stays are fitted with nuts or riveted heads None Working pressure by rules 204 lb Material of stays Steel Area at smallest part 1.73 Area supported by each stay 66" Working pressure by rules 210 lb End plates in steam space: Material Steel Thickness 1 1/4"

Pitch of stays 21 x 16 1/2" How are stays secured Washers Working pressure by rules 205 lb Material of stays Steel Area at smallest part 7.06"

Area supported by each stay 344" Working pressure by rules 213 lb Material of Front plates at bottom Steel Thickness 1" Material of Lower back plate Steel Thickness 3/8" Greatest pitch of stays 14 1/4" Working pressure of plate by rules 203 lb Diameter of tubes 2 3/4"

Pitch of tubes 4' x 4' Material of tube plates Steel Thickness: Front 1" Back 3/4" Mean pitch of stays 9 1/4" Pitch across wide water spaces 14 1/4" Working pressures by rules 202 lb 237 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9' x 1 1/2" Length as per rule 31 1/2" Distance apart 8" Number and pitch of Stays in each 3: 8"

Working pressure by rules 211 lb Steam dome: description of joint to shell None % of strength of joint Yes

Diameter Yes Thickness of shell plates Yes Material Yes Description of longitudinal joint Yes Diam. of rivet holes Yes

Pitch of rivets Yes Working pressure of shell by rules Yes Crown plates Yes Thickness Yes How stayed Yes

SUPERHEATER. Type See front sheet 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 2" for SE boilers Pressure to which each is adjusted 280 lb Is Easing Gear fitted Yes

For The foregoing is a correct description,
SIR W. G. ARMSTRONG, WHITWORTH & CO. LIMITED. Manufacturer.

Dates of Survey see front sheet Is the approved plan of boiler forwarded herewith _____

while building see front sheet Total No. of visits see front sheet

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

see remarks on the front sheet.

Survey Fee ... £ See Mr. Austin's report. When applied for, 19

Travelling Expenses (if any) £ When received, 19

Committee's Minute _____

Assigned _____

TUE 15 MAY 1923

Wm. Austin Maurice Pitson
Engineer Surveyor to Lloyd's Register of Shipping.

