

REPORT ON BOILERS.

No. 34565.

WED. NOV. 18. 1914

Date of writing Report 1914 When handed in at Local Office 1914 Port of Glasgow
No. in Survey held at Glasgow Date, First Survey 19/12/13 Last Survey 10/1/14 1914
Reg. Book. on the S.S. Mahanada (Number of Visits 37) Gross 7196 Tons Net 4522
Master Built at Glasgow By whom built C. Connell & Co (No 361) When built 1914
Engines made at Newcastle-on-Tyne By whom made Parsons Marine Steam Turbine Co When made 1914
Boilers made at Glasgow By whom made D. Rowan & Co (No 612) When made 1914
Registered Horse Power 729 Owners J. & J. Brookbank & Co Port belonging to Liverpool

MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. Manufacturers of Steel Shul Company of Scotland Ltd
Letter for record (7) Total Heating Surface of Boilers 2195 sq ft Is forced draft fitted No No. and Description of
Boilers 1 Single ended cylindrical Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 7/9/14
No. of Certificate 12859 Can each boiler be worked separately Yes Area of fire grate in each boiler 49 sq ft No. and Description of
Safety valves to each boiler 1 pair direct spring Area of each valve 4.9 sq in Pressure to which they are adjusted 180 lb
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' 0" Mean dia. of boilers 15' 0" Length 10' 7 1/2"
Material of shell plates Steel Thickness 1 3/32 Range of tensile strength 28-32 Are the shell plates welded or flanged No
Descrip. of riveting: cir. seams lap double long. seams butt tube Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 8 3/8"
Gap of plates or width of butt straps 19 1/2" Per centages of strength of longitudinal joint rivets 93.2 Working pressure of shell by
rules 182 Size of manhole in shell 16" x 12" Size of compensating ring 2' 6 1/2" x 2' 10 1/2" No. and Description of Furnaces in each
boiler 3 Morrison's Material steel Outside diameter 48 3/4" Length of plain part top Thickness of plates crown 19" bottom 32"
Description of longitudinal joint welded No. of strengthening rings Working pressure of furnace by the rules 196 Combustion chamber
plates: Material steel Thickness: Sides 21" Back 39" Top 21" Bottom 28" Pitch of stays to ditto: Sides 8 3/4" x 9 3/8" Back 8 1/2" x 8 1/4"
top 9 7/8" x 8 1/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 185 Material of stays iron Area
smallest part 2' 0" Area supported by each stay 80 sq in Working pressure by rules 194 End plates in steam space: Material steel Thickness 1 3/8"
Pitch of stays 20 1/2" x 22 1/2" How are stays secured 2 nuts Working pressure by rules 183 Material of stays steel Area Diameter at smallest part 8.29
Area supported by each stay 460 Working pressure by rules 180 Material of Front plates at bottom steel Thickness 61 Material of
lower back plate steel Thickness 13/16" Greatest pitch of stays 13 1/8" Working pressure of plate by rules 187 Diameter of tubes 3 1/4"
Pitch of tubes 4 3/8" x 4 3/8" Material of tube plates steel Thickness: Front 61 Back 38 Mean pitch of stays 9 3/32 Pitch across wide
water spaces 13 3/8" Working pressures by rules 187, 190 Girders to Chamber tops: Material steel Depth and thickness of
order at centre 8 1/4" x 7/16" double Length as per rule 2' 6 3/4" Distance apart 8 1/4" Number and pitch of Stays in each (2) 9 5/8"
Working pressure by rules 188 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
holes - 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 David Rowan & Co Manufacturer.

Dates During progress of work in shops - - - See accompanying machinery Report. Is the approved plan of boiler forwarded herewith Yes
while During erection on board vessel - - - Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey, the materials & workmanship are good

Survey Fee ... £ : : When applied for, 191
Travelling Expenses (if any) £ : : When received, 191

Committee's Minute GLASGOW 17 NOV. 1914
Assigned See minute on accompanying machinery report

A. M. McLean
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

