

REPORT ON BOILERS.

Gothenburg No. 8586
No. 14249

Received at London Office 28 OCT 1930 2 JAN 1932

Gothenburg 28.12.1931.

Port of MIDDLESBROUGH - Gothenburg
Date, First Survey 31 July Last Survey 24-10-1930
Boiler for Aktiebolaget Gotaverken "ANNA KNUDSEN"
Built at Gothenburg By whom built AB. Gotaverken Yard No. 442 When built 1931
By whom made AB. Gotaverken Engine No. 1935 When made 1931
By whom made Riley Bros. (Boiler-makers) Ltd Boiler No. 5978 When made 1930.
Owners Knut Knutson O.A.S. Port belonging to Hagensund
Horse Power 708

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Witkowitz Bergbau- und Eisenhütten-Gesellschaft (Letter for Record S. ✓)
Heating Surface of Boilers 1374 sq. ft. Is forced draught fitted Yes Coal or Oil fired oil ✓
Description of Boilers 1 S.B. Working Pressure 150 lbs.
Tested by hydraulic pressure to 275 lbs. Date of test 24-10-30 No. of Certificate 6828 Can each boiler be worked separately Yes
No. and Description of safety valves to each boiler Double spring loaded
Pressure to which they are adjusted 154 lbs. Are they fitted with easing gear Yes
No main boilers fitted.
Is oil fuel carried in the double bottom under boilers Yes
Is the bottom of the boiler insulated Yes
Shell plates: Material steel Tensile strength 28/32.
Description of riveting: circ. seams end D.R.
inter. 3/8" x 6 1/4"
Pitch of rivets 6 3/8"
Percentage of strength of circ. end seams plate 66.0.
rivets 44.9.
Percentage of strength of circ. intermediate seam plate 84.7.
rivets 111.0.
combined 91.5.
Working pressure of shell by Rules 150 lbs.
No. and Description of Furnaces in each Boiler 2 C.F. ✓
Tensile strength 26/30. Smallest outside diameter 3'-3 3/8"
Description of longitudinal joint weld.
Working pressure of furnace by Rules 159 lbs.
Thickness 25/32. Pitch of stays 16" x 13 3/4"
Working pressure by Rules 150 lbs.
Thickness 13/16.
Pitch across wide water spaces 13 1/2" x 7 1/2"
Working pressure front 173 lbs.
back 212.
Material steel Tensile strength 28/32. Depth and thickness of girder
Length as per Rule 2'-5" Distance apart 8" No. and pitch of stays
Working pressure by Rules 156 lbs.
Combustion chamber plates: Material steel
Thickness: Sides 5/8" Back 19/32 Top 5/8 Bottom 5/8
Are stays fitted with nuts or riveted over nuts.
Front plate at bottom: Material steel Tensile strength 26/30.
Thickness 25/32.
Lower back plate: Material steel Tensile strength 26/30. Thickness 25/32.
Are stays fitted with nuts or riveted over nuts.
Main stays: Material steel Tensile strength 28/32.
No. of threads per inch 6. Area supported by each stay 216 sq. in.
Screw stays: Material steel Tensile strength 26/30.
No. of threads per inch 9. Area supported by each stay 83.7 sq. in.

Working pressure by Rules 150 lb. Are the stays drilled at the outer ends no. Margin stays: Diameter ^{At turned off part,} 1 5/8"
No. of threads per inch 9. Area supported by each stay 98 sq. Working pressure by Rules 155 lb.
Tubes: Material iron External diameter ^{Plain} 2 3/4" to 2 1/2" Thickness ^{10 wgs.} 5/16" No. of threads per inch 9.
Pitch of tubes 3 3/4" x 3 3/4" Working pressure by Rules p. 160 lb. s. 206 lb. Manhole compensation: Size of opening in
shell plate 20" x 16" Section of compensating ring 7" x 1" No. of rivets and diameter of rivet holes 40 - 1 1/2"

Outer row rivet pitch at ends 7" Depth of flange if manhole flanged _____ Steam Dome: Material _____
Tensile strength _____ Thickness of shell _____ Description of longitudinal joint _____
Diameter of rivet holes _____ Pitch of rivets _____ Percentage of strength of joint ^{Plate} _____
Internal diameter _____ Working pressure by Rules _____ Thickness of crown _____ No. and diameter of
stays _____ Inner radius of crown _____ Working pressure by Rules _____
How connected to shell _____ Size of doubling plate under dome _____ Diameter of rivet holes and pitch
of rivets in outer row in dome connection to shell _____

Type of Superheater _____ Manufacturers of ^{Tubes} _____
Number of elements _____ Material of tubes _____ Internal diameter and thickness of tubes _____
Material of headers _____ Tensile strength _____ Thickness _____ Can the superheater be shut off and
the boiler be worked separately _____ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler
Area of each safety valve _____ Are the safety valves fitted with easing gear _____ Working pressure as per
Rules _____ Pressure to which the safety valves are adjusted _____ Hydraulic test pressure _____
tubes _____ castings _____ and after assembly in place _____ Are drain cocks or valves fitted
to free the superheater from water where necessary _____

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with Ye.
RILEY BROS. (BOILERMAKERS) LIMITED.
The foregoing is a correct description,
J. H. Shields SECRETARY Manufacturer

Dates of Survey ^{During progress of} 1930: July 31, Aug. 26, Sep. 3, 8, 9, 11, 16, 23, 29 Are the approved plans of boiler and superheater forwarded herewith Ye.
^{while} Oct. 18, 24 (If not state date of approval.)
building ^{During erection on} 1930: 4th Dec. 1931: 11th Aug. 16th Dec. Total No. of visits 11 + 3.
^{board vessel - - -}

Is this Boiler a duplicate of a previous case no. If so, state Vessel's name and Report No. ✓

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
The Materials & workmanship are good
This boiler has been built under special survey in accordance
with the Rules & approved plans.

This Donkey boiler has been fitted on board this vessel under
my inspection and to my satisfaction.

Survey Fee ... £ 9.4.0. When applied for, Monthly
Travelling Expenses (if any) £ : : When received, 19
S. Boddy G. Brande
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 8 JAN 1932
Assigned See Log. 2 E 8586