

## REPORT ON BOILERS.

No. 7120.

Received at London Office

15 OCT 1925

Date of writing Report 5/10 1925. When handed in at Local Office

Port of Copenhagen

No. in Survey held at  
Reg. Book.

Elsinore

Date, First Survey

10/1

Last Survey

26/9

19125

on the S.S. "Aaro"

(Number of Visits 17.)

Gross 1426.26

Net 837.88

Master Built at Elsinore

By whom built 9/8 Elsinore Jernskibs-og Maskinbyggeri. When built 1925.

Engines made at Elsinore

By whom made 9/8 Elsinore Jernskibs-og Maskinbyggeri. When made 1925

Boilers made at Elsinore

By whom made 9/8 Elsinore Jernskibs-og Maskinbyggeri. When made 1925

Registered Horse Power 700

Owners Dampskibsselskabet Heimdal

Port belonging to Elsinore.

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

PLATES: GUTEHOFFNUNGSHÜTTE, D. R. H. S. N.  
FURNACE: WILL. BEARDMORE & CO. L. D. PARKHEAD.  
STAYS: KLÖCKNER WERKE, G. GEORG. MARIENHÜTTE.  
TUBES: WITKOWITZ BERGHAUSEN HÜTTEN GEW.

(Letter for record S.) Total Heating Surface of Boilers 2430 sq. ft. Is forced draft fitted No. No. and Description of

Boilers 2 off single ended, return tubular Working Pressure 185 lbs. Tested by hydraulic pressure to 328 lbs. Date of test 12/8 1925.

No. of Certificate 450-451. Can each boiler be worked separately yes. Area of fire grate in each boiler 28.16 sq. ft. No. and Description of

safety valves to each boiler 2 off, spring loaded. Area of each valve 4.90 sq. in. Pressure to which they are adjusted 185 lbs. per sq. in.

Are they fitted with easing gear yes. In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No donkey boiler.

Smallest distance between boilers or uptakes and bunkers or woodwork 14" Mean dia. of boilers 11'-9" Length 10'-1/2"

Material of shell plates S. M. steel Thickness 1 1/8" Range of tensile strength 29-31.8 t. Are the shell plates welded or flanged No.

Descrip. of riveting: cir. seams lap, 2 1/2" riv. long. seam. 2 1/2" butt. 4. 3 1/2" riv. Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 6 7/8"

Lap of plates or width of butt straps 15 5/8" Per centages of strength of longitudinal joint rivets 97.4 Working pressure of shell by

rules 205 lbs. Size of manhole in shell 15 1/2" x 19 1/2" Size of compensating ring 28 1/2" x 32 1/2" x 1 1/8" No. and Description of Furnaces in each

boilers 2 off, Morrison type Material S. M. steel. Outside diameter 3'-7" Length of plain part 6'-7 1/4" Thickness of plates 7/16"

Description of longitudinal joint welded. No. of strengthening rings Working pressure of furnace by the rules 189.7 lbs. Combustion chamber

plates: Material S. M. steel. Thickness: Sides 1 1/8" Back 1 1/8" Top 1 1/8" Bottom 3/4" Pitch of stays to ditto: Sides 9 1/2" x 8 7/8" Back 8 1/2" x 9 3/4"

Top 8 7/8" x 9 1/2" stays are fitted with nuts or riveted heads nuts Working pressure by rules 189 lbs. Material of stays steel. Area at

smallest part 74 sq. in. Area supported by each stay 87 sq. in. Working pressure by rules 208 lbs. End plates in steam space: Material S. M. steel Thickness 1 3/16"

Pitch of stays 9 1/2" x 15" How are stays secured nuts inside Working pressure by rules 217 lbs. Material of stays steel. Area at smallest part 6.097 sq. in.

Area supported by each stay 293 sq. in. Working pressure by rules 230 lbs. Material of Front plates at bottom S. M. steel. Thickness 1 1/8" x 1/2" Material of

Lower back plates S. M. steel. Thickness 1 1/8" x 1/2" Greatest pitch of stays 19 1/2". Working pressure of plate by rules 286 lbs. Diameter of tubes 3 1/2" outside.

Pitch of tubes 4 3/4" x 4 3/4" Material of tube plates S. M. steel. Thickness: Front 1 1/8" x 1/2" Back 7/8" x 1/2" Mean pitch of stays 9 1/2" x 9 1/2" Pitch across wide

water spaces 14 1/2". Working pressures by rules 201 lbs. Girders to Chamber tops: Material S. M. steel. Depth and thickness of

girder at centre 7 1/2" x 34" Length as per rule 27 1/2" x 29 1/2" Distance apart 9 3/16" Number and pitch of Stays in each 2 off, 8 7/8"

Working pressure by rules 193.7 lbs. Steam dome: description of joint to shell % of strength of joint

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

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

SUPERHEATER. Type Schmidt's. Date of Approval of Plan Tested by Hydraulic Pressure to 555 lbs. per sq. in.

Date of Test 20th March 1925. Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler yes.

Diameter of Safety Valve 2". Pressure to which each is adjusted 185 lbs. per sq. in. Is Easing Gear fitted yes.

The foregoing is a correct description.

Helsingørsk Jernskibs-og Maskinbyggeri Manufacturer.

Dates of Survey During progress of work in shops - 10/1, 17/2, 27/2, 13/3, 20/3, 17/6, 20/6, 30/7, 12/8 25. Is the approved plan of boiler forwarded herewith yes.

while building During erection on board vessel - 20/8, 26/8, 29/8, 9/9, 16/9, 18/9, 21/9, 26/9 25. Total No. of visits 17.

## GENERAL REMARKS

(State quality of workmanship, opinions as to class, &amp;c.)

These boilers have been built under special survey and in accordance with the Rules, the approved plan and the requirements contained in the Secretary's letter 2 dated 25/10/24. The material used has been tested and examined as required by the Rules, and the workmanship is good.

Survey Fee ... charged on the machinery report. When applied for, 191.

Travelling Expenses (if any) £ : : When received, 191.

Committee's Minute

TUES. 20 OCT 1925

FRI. 23 JUL 1925

Engineer Surveyor to Lloyd's Register of Shipping.

Assigned

W229-0122