

REPORT ON BOILERS.

No. 16346

15 JUN 1925

Received at London Office

of writing Report 30th May 1925 When handed in at Local Office

10 Port of HAMBURG

No. in Survey held at

TIEL

Date, First Survey 2. December 24. Last Survey 3rd May. 1925

Book.

on the STEEL SC. Motor V. "PERSEPHONE"

(Number of Visits 10)

Gross 8956

Net 5041.

at TIEL

By whom built FRIED. KRUPP GERMANIAWERFT. Yard No. 470. When built 1925

ines made at TIEL

By whom made FRIED. KRUPP GERMANIAWERFT. AG. Engine No. 1760 When made 1925

x. & DONKEY

ers made at TIEL

By whom made FRIED. KRUPP GERMANIAWERFT. AG. Boiler No. 3633 When made 1925

ers BALTISCH-AMERIKANISCHE PETROLEUM IMPORT G.m.b.H. Port belonging to DANZIG.

VERTICAL DONKEY BOILER.

de at Tiel. By whom made Fried. Krupp. Germania Werft. Boiler No. 3668-3669. When made 1925. Where fixed ^{engine room, continuation of fore engine's exhaust gas line in height of} ~~in height of~~

Manufacturers of Steel Fried. Krupp. F. G. Essen.

Heating Surface of Boiler 25 sq. m. - each Is forced draught fitted Coal or Oil fired

and Description of Boilers 2 exhaust gas fired, vertical-cylindrical shell - vertical, tubular. Working pressure 5 kg (71 lb)

ted by hydraulic pressure to 10 kg (142 lb) Date of test 25. 2. 25. No. of Certificate 379-380.

a of Firegrate in each Boiler No. and Description of safety valves to each boiler 2 spring loaded.

a of each set of valves per boiler per rule 2 valves ^{from 29/6/25} Pressure to which they are adjusted 5 kg (71 lb) Are they fitted with easing gear ^{yes}e whether steam from ^{aux.} ~~main~~ boilers can enter the donkey boiler no - non return valve fitted. Smallest distance between boiler or uptake and bunkers

woodwork 1600 mm. Is oil fuel carried in the double bottom under boiler Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated ^{yes} Largest internal dia. of boiler 1250 mm. Height 2000 mm.

plates: Material Steel. Tensile strength 34-41 kg. Thickness 12 mm.

the shell plates welded or flanged ^{no} flanged. Description of riveting: circ. seams ^{outer} ~~inner~~ ^{long} ~~double~~ ^{single} long. seams ^{double}of rivet holes in ^{circ. seams} ~~long. seams~~ 24 mm. Pitch of rivets ^{67 mm.} ~~72 mm.~~ Percentage of strength of circ. seams ^{plate 64.2 %} ~~rivets 61.5 %~~ of Longitudinal joint ^{plate 66.7 %} ~~rivets 111 %~~ combined.Working pressure of shell by rules 8.7 kg. Thickness of butt straps ^{outer} ~~inner~~Crown: Whether complete hemisphere, dished partial spherical, or flat ^{flat} (Saucer plate) Material Steel.

ile strength 34-41 kg. Thickness 24 mm. Radius Working pressure by rules

cription of Furnace: Plain, spherical, or dished crown Material Tensile strength

ckness External diameter ^{top} ~~bottom~~ Length as per rule Working pressure by rules

h of support stays circumferentially and vertically Are stays fitted with nuts or riveted over

meter of stays over thread Radius of spherical or dished furnace crown Working pressure by rule

ckness of Ogee Ring Diameter as per rule ^D ~~d~~ Working pressure by rule

abustion Chamber: Material Tensile strength Thickness of top plate

lius if dished Working pressure by rule Thickness of back plate Diameter if circular

gth as per rule Pitch of stays Are stays fitted with nuts or riveted over

meter of stays over thread Working pressure of back plate by rules

e Plates: Material ^{top} ~~bottom~~ Steel. Tensile strength 34-41 kg. Thickness 24 mm. Mean pitch of stay tubes in nests 289 mm.omprising shell, Dia. as per rule ^{front} ~~back~~ Pitch in outer vertical rows ^{47.81 mm.} ~~48 mm.~~ Dia. of tube holes FRONT ^{stay 51.99 mm.} ~~plain 49 mm.~~ BACKach alternate tube in outer vertical rows a stay tube ^{no} Working pressure by rules ^{front} ~~back~~

lers to combustion chamber tops: Material Tensile strength

th and thickness of girder at centre Length as per rule

tance apart No. and pitch of stays in each Working pressure by rule

© 2019

Lloyd's Register
Foundation

W207-0092

Crown stays: Material _____ Tensile strength _____ Diameter { at body of stay, or over threads _____
No. of threads per inch _____ Area supported by each stay _____ Working pressure by rules _____
Screw stays: Material _____ Tensile strength _____ Diameter { at turned off part, or over threads _____ No. of threads per inch _____
Area supported by each stay _____ Working pressure by rules _____ Are the stays drilled at the outer ends _____
Tubes: Material seamless mild steel. ✓ External diameter { plain 48 1/2 ✓ stay 48 1/2 ✓ Thickness { 3 ✓
No. of threads per inch 9 Pitch of tubes 72 1/2 Working pressure by rules 8.8 kg. - 61.5 kg.
Manhole Compensation: Size of opening in shell plate 280 x 380 1/2 Section of compensating ring 440 x 340 x 25 1/2 No. of rivets and diameter of rivet holes 16 - 26 1/2 Outer row rivet pitch at ends 80 1/2 Depth of flange if manhole flanged ✓
Uptake: External diameter 976 1/2 Thickness of uptake plate 18 1/2 (cast iron uptake)
Cross Tubes: No. ✓ External diameters { ✓ Thickness of plates ✓
Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with yes.

The foregoing is a correct description,
FRIED. KRUPP
GERMANIAWERKE
Manufacturers.

Dates of Survey { During progress of work in shops - 2/12 - 16/12 - 23/12/24 - 12/1 - 30/1 - 25/2/25 Is the approved plan of boiler forwarded herewith (If not state date of approval.) yes
while building { During erection on board vessel - 27/2 - 15/4 - 27/4 - 3/5/25 Total No. of visits 10

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) Material + workmanship of these exhaust gas Donkey Boilers are of good quality. The materials used in the construction are made at works recognized by the Committee and used by the Surveyors to the Society. These Donkey Boilers having been made under Special Licence in conformity with the approved plan, the Secretary's letter and otherwise in accordance with the requirements of the Rules is eligible in my opinion for "N. Exhaust B.B.-25"

MARK on BOILERS
No 379 & 380
LOYD'S TEST.
142 LBS.
W.P 71 LBS.
F.W. 25.2.25.

THICKNESS OF FILLING WEARE.	
Port.	Starb.
Fore: <u>24 1/2</u>	<u>24 1/2</u>
Aft: <u>23.5 1/2</u>	<u>23 1/2</u>

Survey Fee £ 8. 8. } When applied for, 5th June, 1925
Travelling Expenses (if any) £ ✓ } When received, 18th July, 1925

Friedrich Hill

Committee's Minute FRI. 19 JUN 1925
Assigned See other report

Engineer Surveyor to Lloyd's Register of Shipping.
FRI. 14 AUG 1925
FRI. 20 NOV 1925
FRI. 4 SEP 1925
FRI. 27 NOV 1925
TUES. 2 JUN 1926
Lloyd's Register Foundation