

REC'D NEW YORK OCT 10 1921

pt. 5.

REPORT ON BOILERS.

No. 1030
FRI. 18 NOV. 1921

Received at London Office

Title of writing Report Mandis 1921 When handed in at Local Office March 19 1921 Port of Seattle Wash U.S.A.
 No. in Survey held at Seattle Date, First Survey January 27th Last Survey February 28th 1921
 Reg. Book. on the One Donkey Boiler for the Union Construction Co., Oakland, Cal. Hull No. 23 Tons ^{Gross} _{Net}
 (Number of Visits 6)
 Master Built at Oakland By whom built Union Construction Co When built 1921
 Engines made at Hamilton Ohio By whom made Horren Owen & Reichenbach when made 1921
 Boilers made at Seattle By whom made Commercial Boiler Works when made 1921
 Registered Horse Power Owners Anglo Saxon Petrol Co Port belonging to London.

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR~~ DONKEY. — Manufacturers of Steel Lucas Iron & Steel Co.
 Letter for record New York Nov. 3-1920 Total Heating Surface of Boilers 1304 sq ft Is forced draft fitted NO No. and Description of Boilers One Scotch Marine Working Pressure 120 lbs Tested by hydraulic pressure to 180 lbs Date of test Feb. 28-1921
 No. of Certificate 50 Can each boiler be worked separately — Area of fire grate in each boiler OIL BURNER No. and Description of Safety valves to each boiler 2 Spring Loaded Area of each valve 7.06 Pressure to which they are adjusted 120
 Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler NO
 Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 11-3 1/16" Length 10-7 3/4"
 Material of shell plates Steel Thickness 4/16 Range of tensile strength 71500 Are the shell plates welded or flanged NO
 Descrip. of riveting: cir. seams Double Lap long. seams Triple-Butt Diameter of rivet holes in long. seams 1 1/16 Pitch of rivets 6"
 Top of plates width of butt straps 14" Per centages of strength of longitudinal joint 92.9 Working pressure of shell by rules 126 Size of manhole in shell 12" x 16" Size of compensating ring 28" x 30" x 1/2" No. and Description of Furnaces in each boiler Two Morrison Material Steel Outside diameter 40" Length of plain part Thickness of plates
 top bottom crown 7/16
 Description of longitudinal joint Welded No. of strengthening rings — Working pressure of furnace by the rules 157 Combustion chamber plates: Material Steel Thickness: Sides 1/2" Back 5/8" Top 1/2" Bottom 5/8" Pitch of stays to ditto: Sides 7' x 7 1/2' Back 7' x 7 3/4'
 Top 7' x 7 1/2' If stays are fitted with nuts or riveted heads Other Riveted Working pressure by rules 121.6 Material of stays Iron Diameter at smallest part 1.227 Area supported by each stay 54.25 Working pressure by rules 121.6 End plates in steam space: Material Steel Thickness 3/4"
 Pitch of stays 13 1/2" x 14" How are stays secured Double Nuts Working pressure by rules 133 Material of stays Steel Diameter at smallest part 2.76
 Area supported by each stay 189" Working pressure by rules 183 Material of Front plates at bottom Steel Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays 10" x 18" Working pressure of plate by rules 124 Diameter of tubes 2 3/4"
 Pitch of tubes 3 3/4" x 3 3/8" Material of tube plates Steel Thickness: Front 3/4" Back 5/8" Mean pitch of stays 9.5 Pitch across wide water spaces 13.5 Working pressures by rules 124 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8" x (5/8" + 5/8") Length as per rule 30" Distance apart 7" Number and pitch of Stays in each 3- 7' x 7 1/2'
 Working pressure by rules 180 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
 If 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

VERTICAL DONKEY BOILER — No. Description Manufacturers of steel
 Made at By whom made When made Where fixed Working pressure
 tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of safety valves
 No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter the donkey boiler Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets
 Lap of plating Per centage of strength of joint Rivets Working pressure of shell by rules Thickness of shell crown plates
 Radius of do. No. of Stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace
 Thickness of furnace plates Description of joint Working pressure of furnace by rules Thickness of furnace crown plates Radius of do. Stayed by Diameter of uptake Thickness of uptake plates
 Thickness of water tubes

The foregoing is a correct description,
Commercial Boiler Works Manufacturer.
J. H. J. J.

Dates of Survey while building
 During progress of work in shops - Jan. 24 - Feb 5 - 9 - 16 - 21 - 28
 During erection on board vessel - - -
 Total No. of visits Shop 6

Is the approved plan of main boiler forwarded herewith
 " " " donkey "
 " " " "



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

This Donkey Boiler has been built under special survey and in accordance with the approved plan, the material tested is required by the rules of the Society and the workmanship of good quality, tested by hydraulic pressure and found to be sound. When installed in a vessel classed in Lloyd's Register of Shipping will be eligible, in my opinion, to be noted in the Register Book.

Marks and Numbers

Nº 266
LLD TEST
T.P. 150 1/2
H.P. 130
JF 22-2-21

Certificate (if required) to be sent to
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee...	£	:	:	When applied for,
Special survey "	#	43	46	March 17, 1921
Donkey Boiler Fee ...	£	:	:	When received,
Travelling Expenses (if any) £	:	:	:	Yes

James Fowler
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute New York NOV - 1 1921
 Assigned see S. to. 3629