

STEEL BOILERS N^o 466-7-8-9.

Working Pressure 200 lbs.

Scale 1 Inch = 1 ft.

Plan of Shell Riveting

1 1/4" Holes 3/4" Pitch.

Percentage of Plate = 85.0%

Strength of Joint rivets = 105.5 (Stays 89.6)

NOTE-

all plates rivets & stays to be of Siemens martin steel. The shell plates & butt straps are not to be less than 29 tons per sq inch tensile strength. All rivet holes in the shell & furnaces to be drilled after bending the plates, all punched or flanged plates to be annealed afterwards. The screw stays are 1 1/2", 1 1/2" & 1 3/8" effect diam screwed into both plates & riveted at each end. The tubes are of iron the ordinary tubes are 3 1/2" ext diam x No 8 L.S.G thick. The stay tubes are of iron 2 1/4" int diam x 1/4" thick effect. are and screwed at ends to 3 1/2" x 3 1/2" diam 10 threads per inch. A manhole in shell 16 x 12 with shorter axis longitudinally and a doubling plate 2' 7" diam x 1 1/2" thick fitted round it. All plates & stays to be made by Stay tubes marked A. are 1/4" thick effect x 2 3/8" int diam.

Doubling Plate
around manhole.
1 1/2" thick.



all 1 1/4" rivet holes.
Inner row counter sunk
& flush rivetted.

1 1/4" Holes.
3 1/2" Pitch.

Dimensions

Length of Fire Bars.	
Area of Fire grate.	
Diam of Tubes outside.	3 1/2" inches.
Length of Tubes (over plates)	6' 4 1/2"
Number of Tubes.	156.
Are a through tubes.	6' 8" sq ft.
Surface of Tubes.	830 sq ft.
Total Heating Surface.	1050
Working Pressure.	200 lbs.
Diam of Safety tubes.	

Shell 1 1/2" thick. Butt Straps
Inside 15 1/2" x 1 1/2" Outside 15 1/2" x 2 1/2"

Inside strength of shell

Plates & Butt Straps
not to be less than
29 tons per sq in.

Shell.

Top Plate = 37 pitches.
Bottom Plate = 85
Total 122

Steel Stays 2 3/8" effect dia. 2 3/4" dia in body

Screwed 7 threads per "inside 2 1/2" to 32 tons"

6' 4 1/2" over plates.

Iron ordinary tubes 3 1/2" ext diam x No 8 L.S.G thick. Screwed 1/4" at front end.
Iron Stay tubes 3 1/2" ext dia x 1/4" thick off. except those marked A which are 1/4" thick off. screwed at ends to 3 1/2" x 3 1/2" ext diam. Stub to be fitted on stay tubes at front ends where shown.

2" dia in body steel stays

1" Holes.
2 3/8" Pitch.

Holmes Patent
Furnaces welded longitudinally

2 1/4" Screwed Iron Stay.

1/2" Bar 5 x 4 x 1/2

Double Steel
Girders 1/2" x 7/8"
rivetted together.

All 1 1/2" steel screw
stays, except those
shown in section
which are 1 1/4" diam
all stays 10 threads per"

Inside doubling
plate 1 1/2" thick.
rivetted on.



N^o 466-7-8-9.

Earle's 466. 7. 8. + 9.

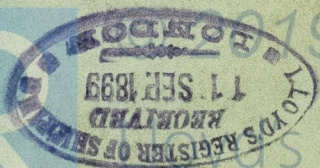
s/s *Harriet Hull* Report No. 13088

s/s *Swallow* - - -

s/s *Connie* - - -

s/s *Kathleen* - - -

HUL422-0017



Lloyd's Register
Foundation