

Slay Tubes to be Serewed thro both plates
carefully Expanded & caulked inside & out.
When finished, boilers to be tested with cold
water to 350 Lbs/sq" in presence of Lloyds
Survivor & Owners Inspector

Surface	Area
Heating Surface Tubes (336)	224.0 Sq ft
" " Combustion Chambers	399.0 "
" " Furnaces	378.0 "
Total Heating Surface	997.0 Sq ft
Grate Area (5'-9" bar in 2 Lq's)	68.0 "
Tube Area	234.7 "
Water Area	350.0 "
Steam Space	380.0 Cub ft
Grate Area to Heating Surface	1 to 39.3
" " to Tube Area	4.7 to 1
" " to Water Area	1 to 2.18
" " to Steam Space	1 to 5.5
Weight of Water to W.L.	17.1 Tons
Weight of Boiler	Tons

Limits of Tensile Strength	
Shell Plates & Butt Straps	28 to 32 Tons
End Plates & Combustion Chamber Plates	26 to 30 Tons
Girders & Longitudinal Stays	28 to 32 Tons
Funnaces & C.C. Stairs.	26 to 30 Tons
Rivets	26 to 30 Tons

Percentages	Slend. Rules
Longitudinal Joint Plate.	85.63%
" " Rivet.	89.0%
Circumferential Joint Plate.	68.4%
" " Rivet.	43.4%

Marine R.T. Boiler Nos 1149-50.

— 15'-6" Int dia x 11'-6" Mean Lqth

- Working Press = 200 Lbs/in²

Test Press = 350 Lbs/in²

To Lloyds Survey.

Scale 1" = 1 Foot

BOW, McLACHLAN & CO.
ENGINEERS, SHIPBUILDERS, & IRON
THISTLE WORKS.

PAISLEY.

Trading No. 194/25 Date 6/3/25

Shop. Notes

CC Slays to be Screwed thro both plates
 & ruffled at Combustion Chamber End & as
 follows Girders (Both Ends) B/w CC's (Both End)
 Wings (Left $\frac{3}{8}$ " Long thro sheet & Caulked) Back Marg Row
 (Both Ends) Back Centre pitches (Left $\frac{3}{8}$ " Long thro back end
 & Caulked)

All Juts to be chamfered at both Ends
In Combustion Chamber Staying Bevel Washers only
to be used when Slays is not radial to Surface
No bedding Washers to be used with Steam Space Slays
No bedding Washers to be used with breast Slays
Bevel Washers to be used inside outside with bottom
Slays
Bolt Straps to be to same band as are drawn
for both Boilers

C. C. Staying.			
Position	Mark	Details	Ejff Area.
Top Girders	○	1 3/4" dia Screw 9%	2 03' 0"
Sides & Back in rest	○	1 3/4" " " "	2 03' 0"
Back Marginal Row.	⊗	2" " " "	2 71' 0"
Back Corner.	⊙	2 1/2" " " "	3 49' 0"

DWG. № H 5

Bore L 1149050

S.S. "Merel"

2 Main Boilers

Boss. The Lachlan & Co's. N^os 1149050

W.P. 200 lbs.

Merel

GLASGOW REPORT No. 45026

RETAIN