

3963
JHN 1/9/99
100 1/100

23 1/2

HEATING SURFACE

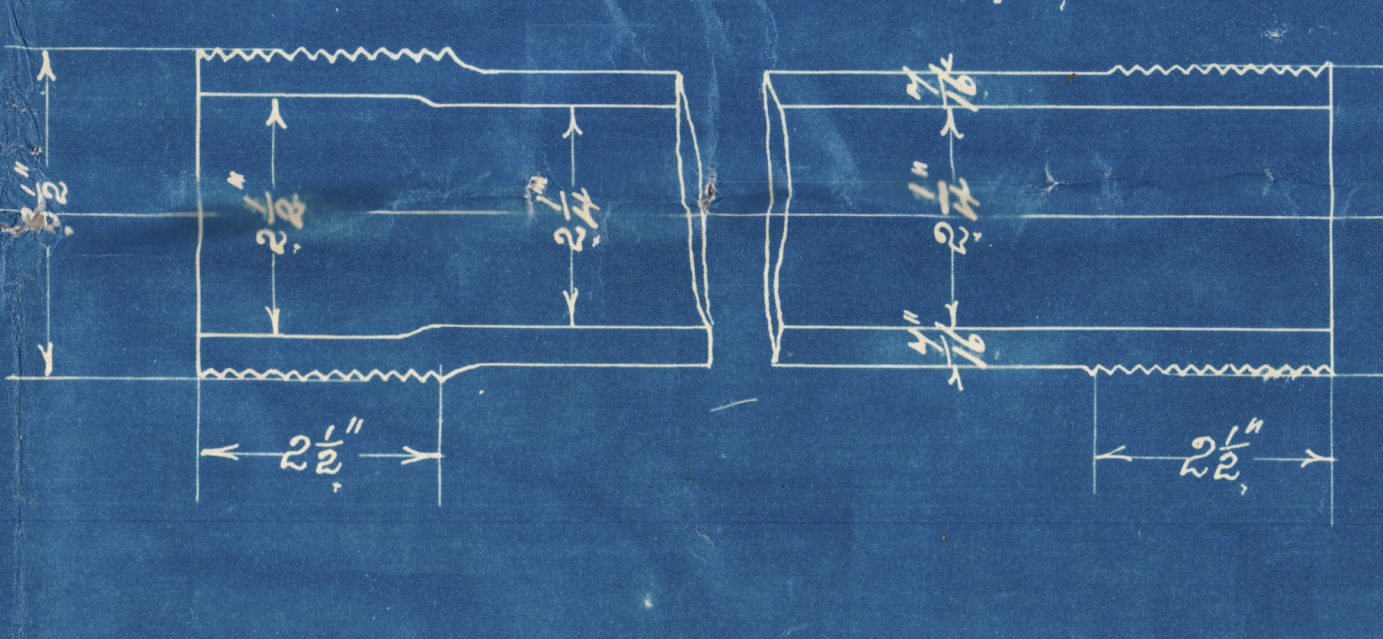
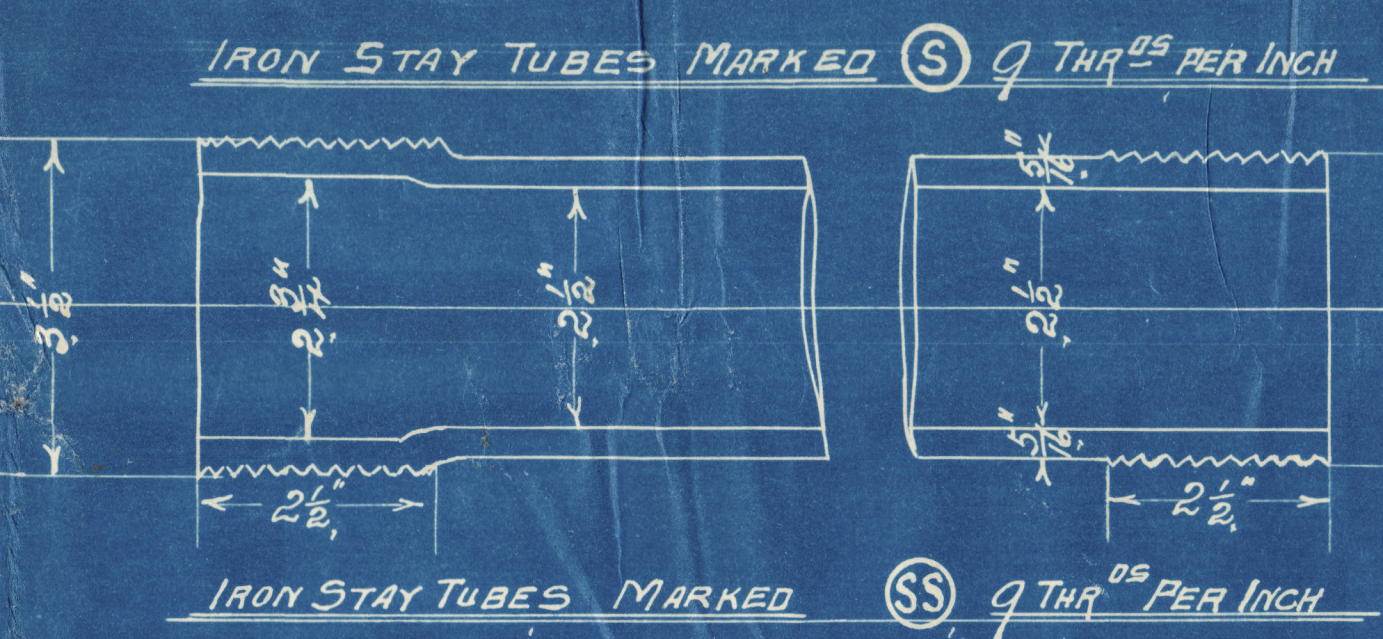
656 TUBES 3 1/2" EXT. DIA. 43' LONG 4050
8 FURNACES MEAN DIA 41 1/2" 3143
COMBUSTION CHAMBERS TANGS 2275
BACK TUBE PLATE 72
FRONT 44
TOTAL H.S. IN ONE BOILER 4786.5
" " " THREE BOILERS 14359.5

GRATE SURFACE

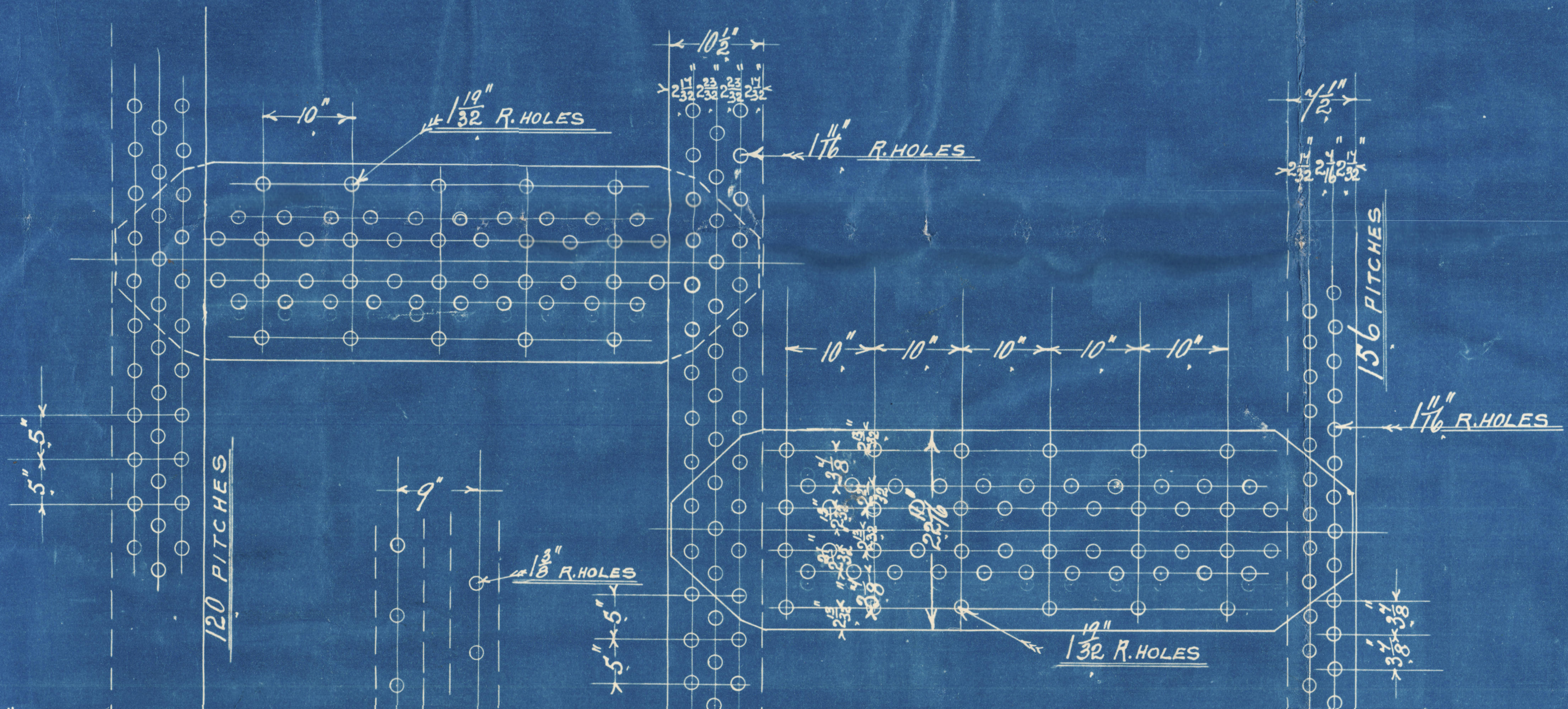
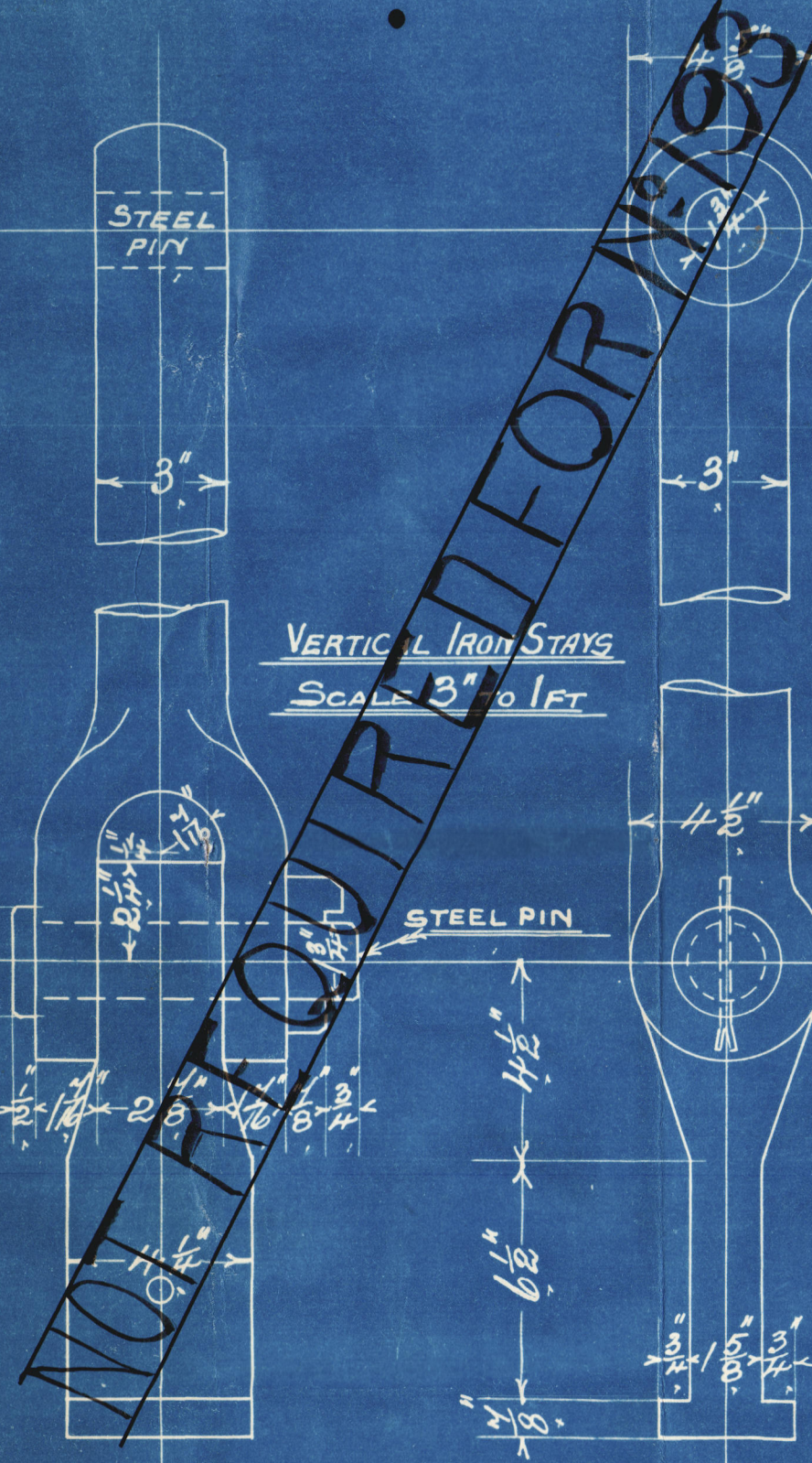
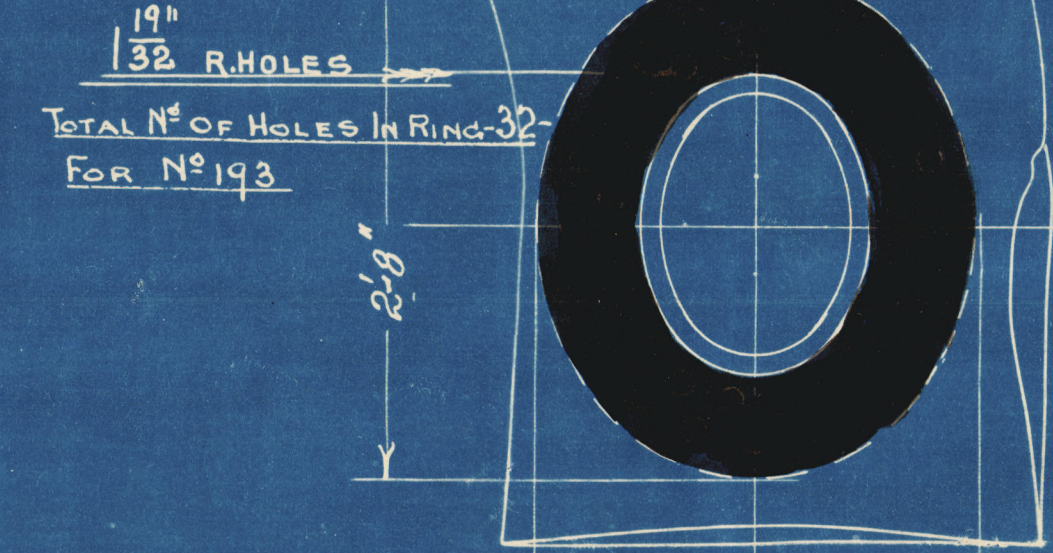
8 FURNACES 3' 3" x 5' 0" BAR = 130
TOTAL IN THREE BOILERS = 390

$\frac{H.S.}{G.S.} = 36.8$ $\frac{T.S.}{G.S.} = 31.2$

IRON SLING STAYS FOR COMBUSTION
CHAMBER TOP - N° 193
SCALE 3" = 1 FOOT



STEAM SPACE STAYS
3 1/2" DIA. 6 THREADS EFF. AREA 1.240
WASHERS RIVETTED TO PLATE



LONGITUDINAL JOINT
PLATE 1 1/2" R. HOLES 1 1/2" PITCH 10"
PLATE % 84.07
RIVET % 86.8 B.T. BUTT STRAP OUTER 1 1/2"
RIVET % 73.1 LLOYDS " " INNER 1 1/2"
COMBINED PAND R 85.5 %
WORKING PRESS 2017 B.T. 232 LLOYDS
FACTOR SAFETY 4.5

CENTRE CIRC JOINT
PLATE 1 1/2" R. HOLES 1 1/2" PITCH 5"
PLATE % 66.25
RIVETS % 66.4 B.T.
" " 71.5 LLOYDS

END CIRC JOINT
PLATE % 56.5
RIVET % 57.5 B.T.
RIVET % 61.6 LLOYDS
PLATE 1 1/2" R. HOLES 1 1/2" PITCH 3 1/2"
NOTE: RIVET HOLES DRILLED IN PLACE
TENSILE STRENGTH SHELL PLATES 29 TO 33 TONS
" " OTHER " 26 TO 30 "

THICKNESS OF PLATES

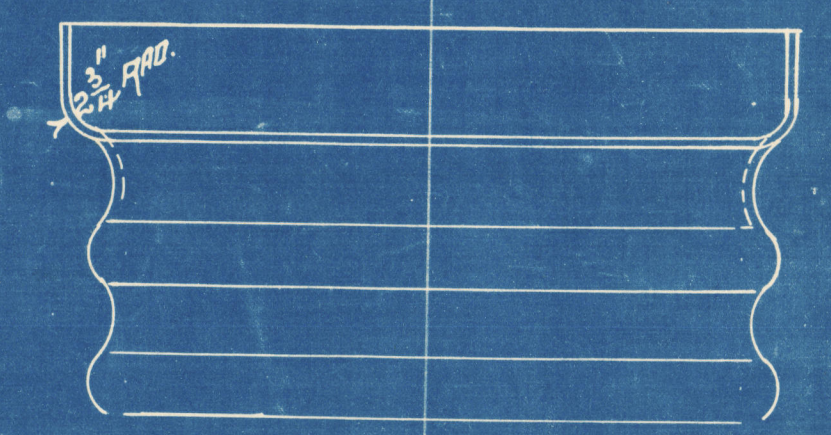
SHELL	1 1/2"
INNER BUTT STRAP	1 1/2"
OUTER	1 1/2"
TOP FRONT PLATE	1 1/2"
FURNACE FRONT	1 1/2"
FRONT TUBE PLATE	1 1/2"
BACK	1 1/2"
CHAMBER TANGS	1 1/2"
CHAMBER BOTTOM	1 1/2"
TUBE PLATE DOUBLING	1 1/2"
CHAMBER STAY PLATES	1 1/2"
FURNACE FRONT DOUBS	1 1/2"

PLATE LIST

NO	DESCRIPTION	LENGTH	WIDTH	THICK
3A	SHELL	53' 3 1/2"	16' 0"	1 1/2"
3B	"	16' 0"	16' 0"	1 1/2"
12A	"	25' 0"	16' 0"	1 1/2"
12B	BUTT STRAPS (OUTER)	6' 6"	22' 0"	1 1/2"
12C	"	5' 6"	22' 0"	1 1/2"
6F	"	5' 6"	22' 0"	1 1/2"
6G	"	6' 6"	22' 0"	1 1/2"
6H	TOP FRONTS	16' 0"	16' 0"	1 1/2"
6I	FRONT TUBE PLATE	16' 0"	16' 0"	1 1/2"
6J	FURNACE FRONTS	16' 0"	16' 0"	1 1/2"
12A	C/E BACK TUBE PLATE	4' 0"	16' 0"	1 1/2"
12L	WING	5' 6"	16' 0"	1 1/2"
6M	C/E CHAM TANGS	19' 0"	16' 0"	1 1/2"
6N	WING	14' 0"	16' 0"	1 1/2"
6O	C/E CHAM BOTTOM	6' 6"	16' 0"	1 1/2"
6P	WING	4' 0"	16' 0"	1 1/2"
12I	DOUBLINGS	5' 6"	16' 0"	1 1/2"
6Q	WASHERS	1' 0"	16' 0"	1 1/2"
6R	GRAPES	1' 0"	16' 0"	1 1/2"
12J	"	1' 0"	16' 0"	1 1/2"
3K	GUSSET PLATES	1' 0"	16' 0"	1 1/2"

STAY BOLTS

5M	STEEL BOLTS	18' 0"	5 1/2" DIA
6P	"	10' 0"	1 1/2"
23	"	10' 0"	1 1/2"
4	1901	10' 0"	1 1/2"



TENSILE STRENGTH OF FURNACES TO BE
AS NEAR 26 TONS AS POSSIBLE BUT NOT UNDER
- MORISON SUSPENSION TYPE -
Furnaces for 10000 H.P. / 10000 H.P.



INNER STRAP CENTRE STRAKE
HOLES MARKED @ TAKE STAYS
HOLES FOR THIS STRAP ARRANGED AS SHOWN
VIEW LOOKING FROM INSIDE OF BOILER

- 3 OFF -

STEEL MAIN BOILERS

18' 0" LONG 16' 0" DIA WORKING PRESS 200 LBS
TO PASS BOARD OF TRADE LLOYD'S AND AMERICAN PASSNGR SURVEY
TUBES, VERTICAL STAYS, AND TOP ROWS OF CC STAYS TO BE OF IRON
- ALL OTHER PARTS OF STEEL -

ALL PLATES TO HAVE MAKERS BRAND OUT SIDE
Edges of Shell Plates to be Bevelled

N° 193

MADE IN BELFAST
OF SHIPBUILDERS

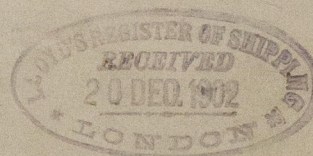
5900-658M

RETAIN

5900-658M

Belfast
Workman Clark 143
Main Register
S.S. "Irak"

Del 537



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Lloyd's Register
Foundation