11'-9" MEAN LENGTH

11'-1"

3⅛" UNWELDED STEEL STAYS — 6 THDS/INCH — EFF. AREA 6·66 □"

1¾" STAYS SCREWED 9 THDS/INCH EFFECTIVE AREA = 2·03 □"

2 — STEEL PLATES ¾ THICK

231 TUBES 2½" EXT DIA. x 9 W.G.
56 MARGINAL STAY TUBES 2½" EXT DIA x ½" THK. OVERALL
31 INNER STAY TUBES 2½" " x 3/16" "
318 TUBES PER BOILER

7'-7½" BETWEEN PLATES

14'-0" MEAN DIA.

9 PITCHES AT 8" = 6'-0"

7'-5¼" OVERALL

DEIGHTON FURNACE 19/32" THICK

3'-4" INT. DIA.

3'-8¼" EXT. DIA.

3'-8⅝" DIA. OF MANHOLE (MINIMUM)

2'-7½"

2'-6½"

3'-3" DIA. PLATES

10⅜" BETWEEN PLATES

5" RAD.

3" RAD.

1¾" STAYS SCRD 9 THDS/INCH EFF. AREA 2·03 □"

1⅞" RAD.

1'-9⅞" RAD.

INNER STAYS THUS

MARG. STAYS THUS

2" DIA. STEEL STAYS SCREWED 6 THDS/INCH EFF. AREA 2·51 □"

11'-1"

OUTER BUTT STRAP 15/16" THICK
INNER " " 1⅛" "
LONGITUDINAL SEAMS 1 3/16" RIVET HOLES { PLATE ⅞ = 85·906" / RIVET ⅞ = 67·4" / COMBINED ⅞ = 89·3" }
CIRCUMFERENTIAL " 1 3/16" RIVET HOLES { PLATE ⅞ = 67·25" / RIVET ⅞ = 43·3" }

12½ PITCHES AT 9 5/16" = 9'-8 3/8" + ½"

11'-1"

2'-8"

16" x 12" MANHOLE

2'-4½"

9½"

9½"

MANHOLE COMPENSATING RING
1 9/32 THICK 1 3/16 RIVET HOLES

38 PITCHES AT 4"

1'-7½" 1'-7½" 1'-7½" 1'-7½" 1'-7½"

11⅞" 11⅞" 9⅝" 10 10/16" 5⅜"

1'-3"

103 TUBES

11½" TUBES

1'-2½"

3'-4 3/32"

3'-1⅜"

1'-7"

9'-2¼" RAD.

3'-8¾" 3'-8¾"

PLATE LANDING

PLATE LANDING

4'-0" DIA.

2'-8 15/16"

2¼" STEEL STAYS
SCRD. THRO. COMBUSTION TUBE PLATE WITH NUT ON BOTH SIDES, AT 8 THDS/INCH EFF. AREA = 3·43 □"
SCRD. 6 THDS/INCH AT FRONT END AND FITTED WITH DOUBLE NUTS

2" DIA STEEL STAYS SCREWED 6 THDS/INCH EFF. AREA = 2·51 □"

SCR^D THRO. COMBUSTION TUBE PLATE WITH NUT ON BOTH SIDES AT 8 THDS/INCH EFF. AREA = 2·66 □
SCR^D 6 THDS/INCH AT FRONT END AND FITTED WITH DOUBLE NUTS

2" DIA. STEEL STAYS SCR^D 6 THDS/INCH EFF. AREA = 2·51 □"

1⅞" MARGINAL STAYS MARKED ⊗ SCR^D 9 THDS/INCH EFF. AREA = 2·03 □ NUTS ON BOTH ENDS

1⅜" INNER STAYS SCR^D 9 THDS/INCH EFF. AREA = 1·170 NUTS ON INNER END ONLY

9'-4 PITCHES AT 4"
132 PITCHES AT 4" ON CIRC AT 4'-0" DIA.

SADDLES TO BE 1 FOR JOINT

GRATE SURFACE

LENGTH OF BARS	ONE BOILER	THREE BOILERS

SCALE 3/4" = ONE FOOT

HEATING SURFACE SQ FT.

	ONE BOILER	THREE BOILERS
TUBES	1586·	4758·
OTHER	431·	1293·
TOTAL	2017·	6051·

MATERIAL :- ALL STEEL EXCEPT TUBES, TUBES TO BE OF WROT IRON
TENSILE STRENGTH OF SHELL PLATES, BUTT STRAPS, GIRDERS AND MANHOLE DOUBLERS 28 TO 32 TONS/□"
" " " END PLATES, FURNACES, AND COMBUSTION CHAMBER PLATES 26 TO 30 TONS/□"
STEAM SPACE, AND WATER SPACE LONG^L STAYS 28 TO 32 TONS TENSILE STRENGTH.
COMBUSTION CHAMBER SCREWED STAYS 26 TO 30 TONS TENSILE STRENGTH.
COMPENSATING PLATES OR SADDLES WILL BE FITTED UNDER STOP VALVES IF OPENING FOR THESE EXCEEDS 5¾" DIA"

Amended Plan
HSM 6/2/29

TO PASS LLOYDS SURVEY 200 LBS/□" W.P.

MAIN BOILERS

3 - OFF

Nº 441

15. FEB 1929

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