

ALL PLATES, LONGIT. STAYS & RIVETS OF  
SIEMENS MARTIN MILD STEEL.  
ALL SKEW STAYS OF TESTED IRON.  
ALL RIVET HOLES TO BE DRILLED AFTER PLATES  
ARE SET & FITTED TOGETHER, THEN PLATES TAKEN  
APART & BURRS REMOVED.  
RIVETING TO BE DONE BY HYDRAULIC PRESSURE  
WHERE PRACTICABLE.

STRENGTH OF MATERIAL.		
PART	TENSILE STRENGTH.	
SNELL PLATES.	28 TO 32 TONS.	STEEL
BUTT STRAPS.	28 TO 32 "	"
MANHOLE COMPENSATING.	26 TO 30 "	"
FURNACES.	26 TO 30 "	"
GIRDERS.	28 TO 32 "	"
BOILER END PLATES.	26 TO 30 "	"
COMB. CHAMBER PLATES.	26 TO 30 "	"
LONGIT. STAYS.	28 TO 32 "	"
SCREW	NOT LESS THAN 21 1/2 TONS.	IRON

LONGITUDINAL SEAMS.

$$\frac{100(p-d)}{p} = \frac{100(4.9375 - .906)}{4.9375} = 81.6\%$$

$$\frac{100(S_2 \times a \times n \times c)}{S_1 \times p \times t} = \frac{100(23 \times .645 \times 3 \times 1.875)}{28 \times 4.9375 \times .71875} = 84.0\%$$

$$\text{WORKING PRESSURE} = \frac{(t-2) S \times J}{C \times D} = \frac{(23-2) 28 \times 81.6}{2.75 \times 144} = 121 \text{ LBS.}$$

218- TUBES 3" EXT. DIA. x 7'-3" LONG = 1240 sq. ft.  
FURNACES. = 85  
TOPS & SIDES OF COMB. CHAMBER. = 75  
COMB. CHAMBER BACKS. = 48  
BACK TUBE PLATE. = 29  
TOTAL 1477 Sq. Ft.  
GRATE AREA WITH 5'-6" FIREBARS = 39 Sq. Ft.  
WORKING PRESSURE 120 LBS. PER SQ. INCH.  
TEST " 230 " " " "  
To Pass LLOYDS SURVEY.

