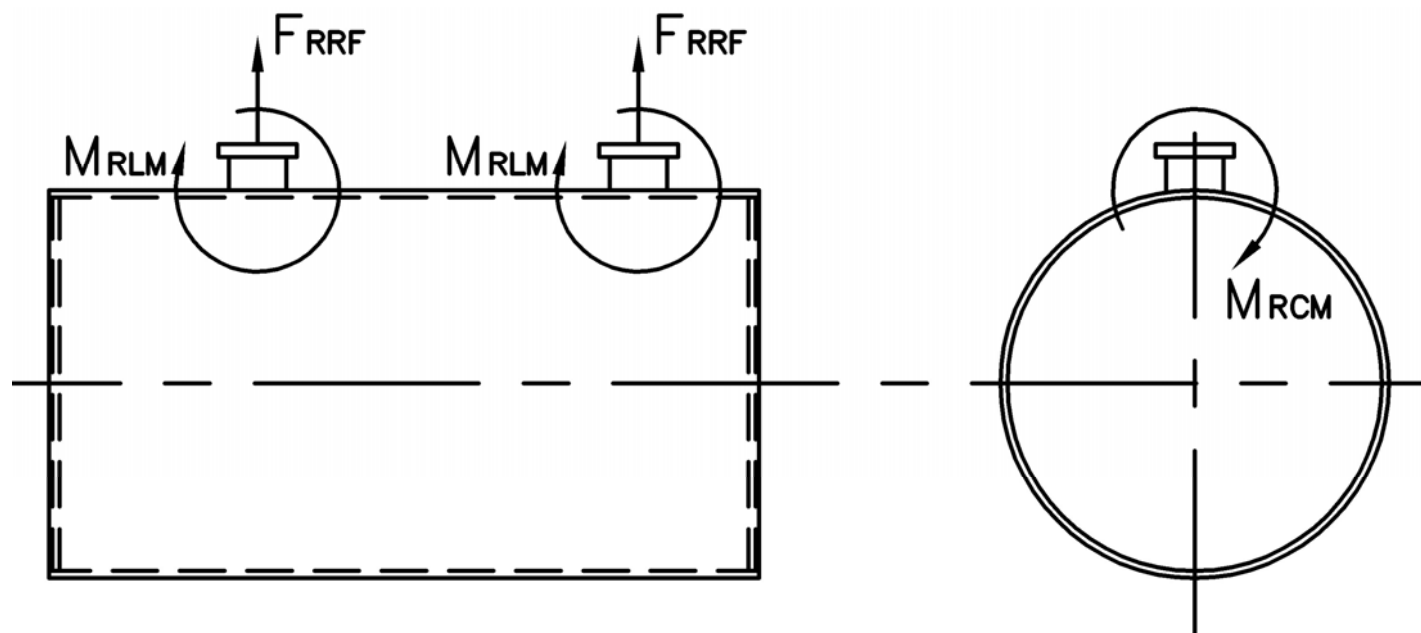


MODEL: PFTX 300-4

Nozzle Loadings

Maximum Allowable Load on Outlet & Return Nozzles				
	30# Design	60# Design	125# Design	160# Design
F_{RRF} , lb	6,140	5,150	3,565	3,855
M_{RCM} , in-lb	35,605	35,600	41,335	37,695
M_{RLM} , in-lb	46,635	39,145	31,770	36,020



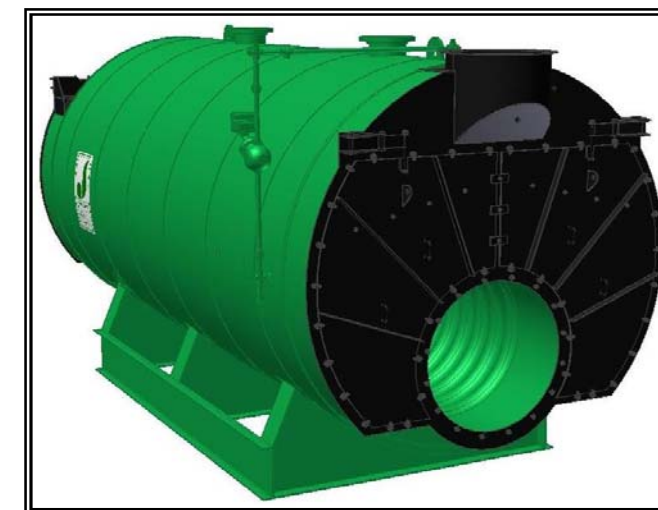
Distributed By:



300 Pine Street
 P.O. Box 300
 Ferrysburg, MI 49409-0300
 Telephone: (616) 842-5050
 Net: www.johnstonboiler.com

MODEL: PFTX 300-4

4-Pass Hot Water Packaged Firetube Boiler



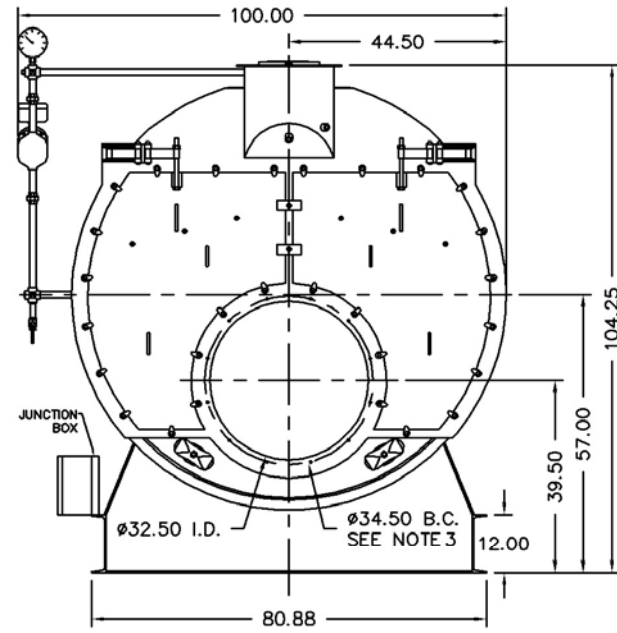
Ratings & Performance Data

Horsepower 300		Natural Gas Flow, SCFH (1,000 Btu/ft ³)**	11,694
Total Heating Surface, ft ²	1,527	Combustion Air (15% Excess), SCFM***	2,140
Furnace Outside Diameter, in	38.0	Flue Gas Flow Rate, lb/hr***	10,197
Furnace Heat Release Rate, Btu/ft ³ hr**	140,000	Stack Flue Gas Velocity, ft/min***	1,787
Total Combustion Volume, ft ³	120.8	#2 Oil Flow, gal/hr (140,000 Btu/gal)**	80.6
Total Heat Release Rate, Btu/ft ³ hr**	97,000	#6 Oil Flow, gal/hr (150,000 Btu/gal)**	74.6
Water Content Flooded, gal	2,453	Flue Gas Side Pressure Drop, in. H ₂ O	4.0
Approx. Dry Weight 30#, lb	22,600	Approx. Operating Weight 30#, lb	43,400
Approx. Dry Weight 60#, lb	22,700	Approx. Operating Weight 60#, lb	43,500
Approx. Dry Weight 125#, lb	23,200	Approx. Operating Weight 125#, lb	44,000

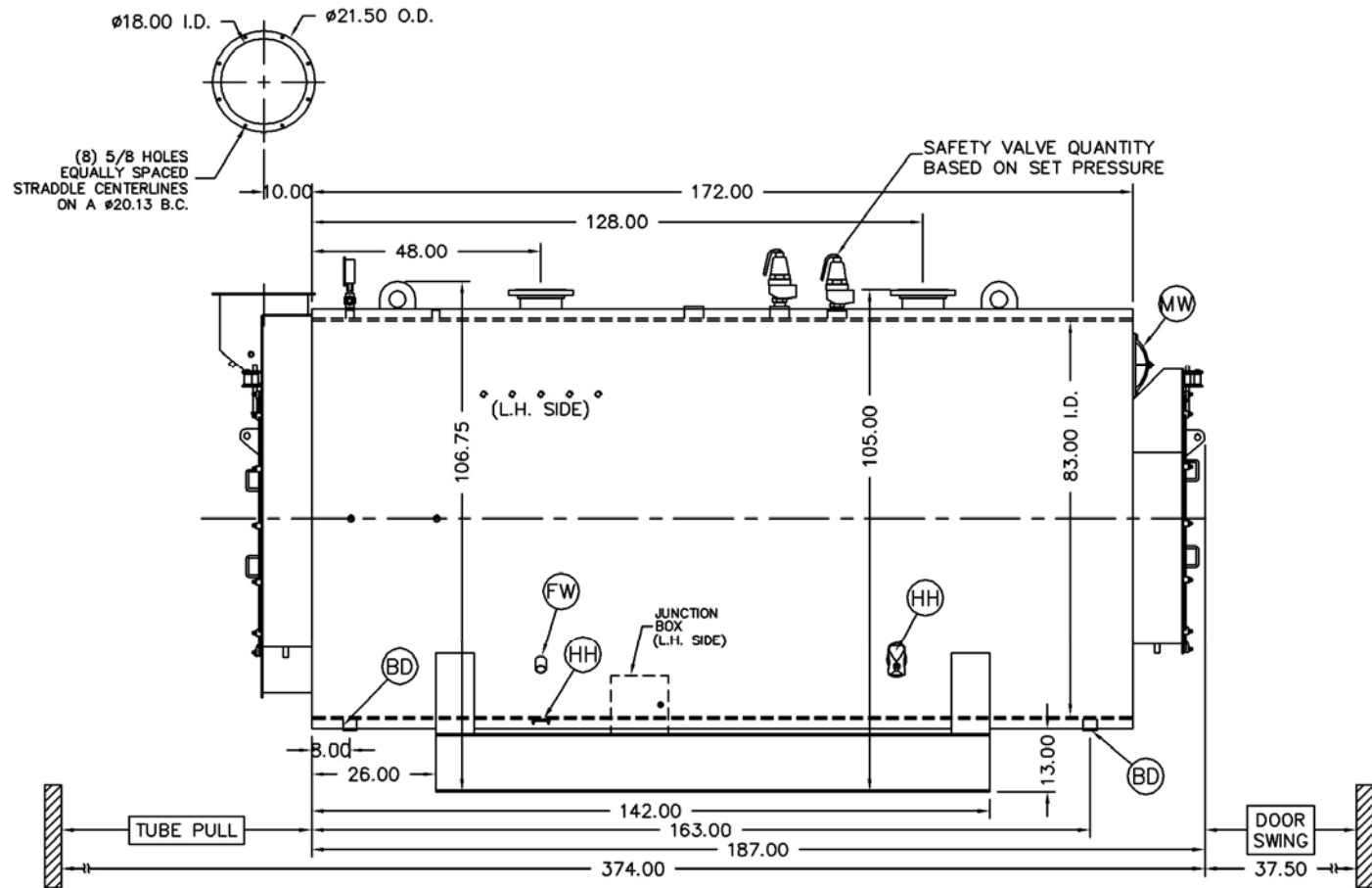
Performance Data						
Operating Temperature (F)	Natural Gas		#2 Oil		#6 Oil	
	Stack Temp (F)	%Eff	Stack Temp	%Eff	Stack Temp (F)	%Eff
180	238	86.4	249	89.5	254	90.2
200	257	85.9	268	89.0	274	89.7
220	277	85.4	288	88.5	294	89.2
240	296	84.9	307	88.0	314	88.7

*Based on 20°F difference in supply/return, ** Values calculated at 200°F operating temperature, ***Calculated Firing Natural Gas

Connection & Opening Schedule			
Conn.	Description	Type	Qty
FW	Feedwater Inlet	1.50 FNPT	2
WS	Water Supply	8.00 150#RF	1
WR	Water Return	8.00 150#RF	1
DO	Drain Outlet	2.00 FNPT	2
MW	Manway	12 X 16	1
HH	Hand Hole	4 X 6	7
Supply and return outlets ASME flanged drilling			

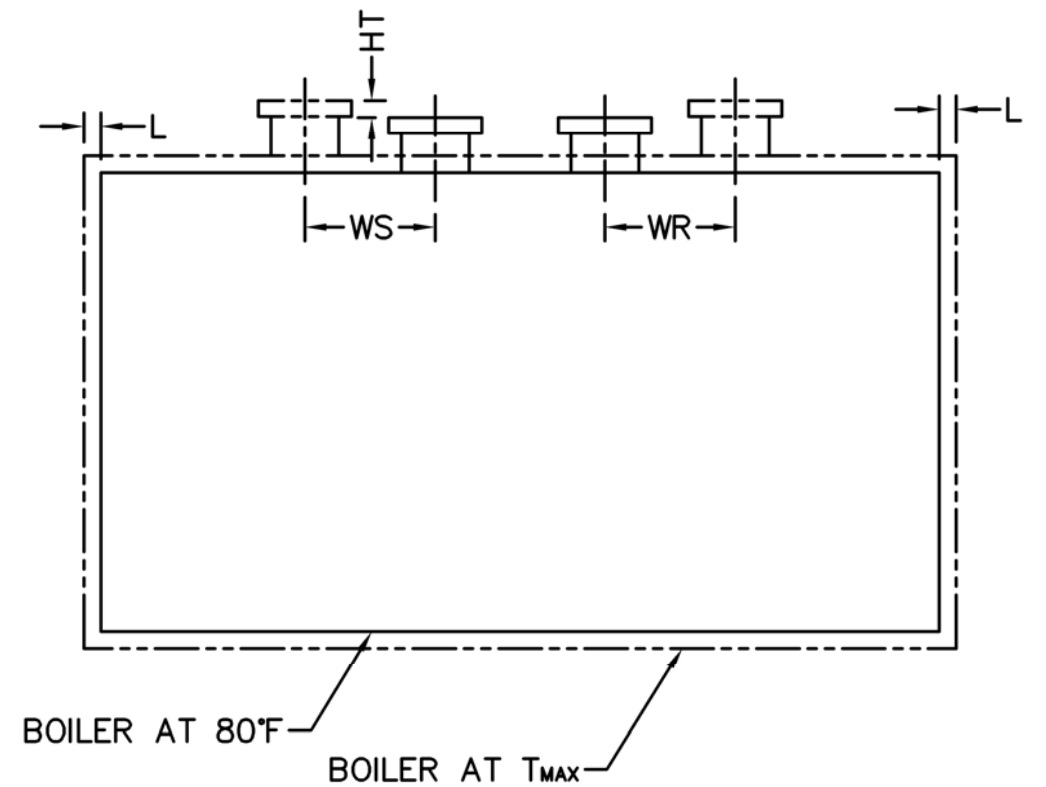
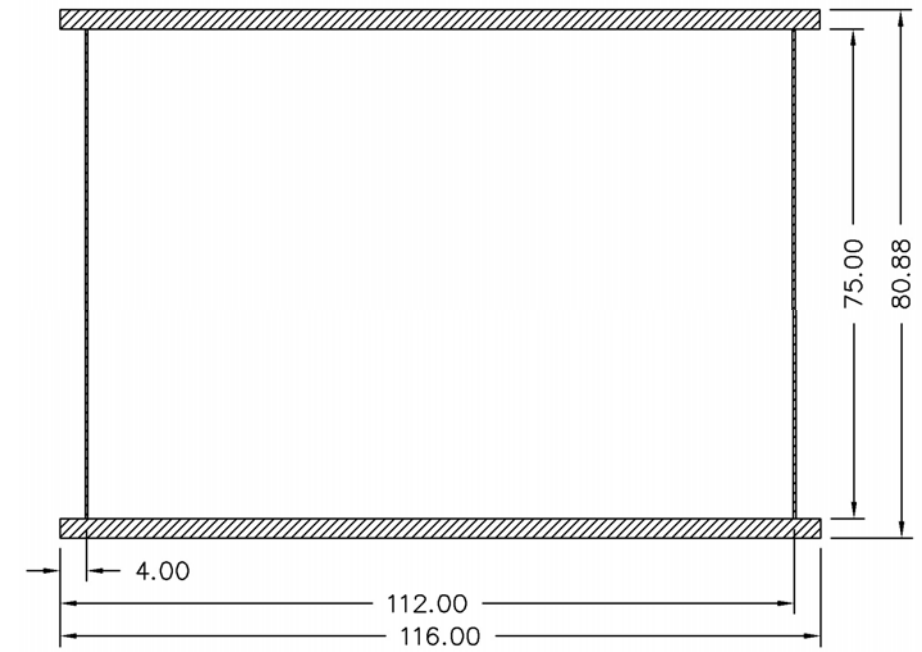


NOTE: (12) 1/2 UNC X 1.375 LONG STUDS EQUALLY SPACED STRADDLE CENTERLINES. STUDS FOR BURNER REFRACTORY (DRY OVEN) MOUNTING. REFRACTORY MUST EXTEND 14.50" MINIMUM PAST MOUNTING FLANGE.



Notes:
 30# Hot Water design shown, all dimensions given in inches.
 Fuel piping and/or optional boiler trim may increase overall width.
 Specifications subject to change to incorporate engineering advances.

Base Diagram



Thermal Expansion				
Metal T _{MAX} (F)	180	200	220	240
L (in)	0.052	0.062	0.072	0.083
WS (in)	0.023	0.027	0.032	0.036
WR (in)	0.025	0.030	0.035	0.040
HT (in)	0.050	0.060	0.070	0.080