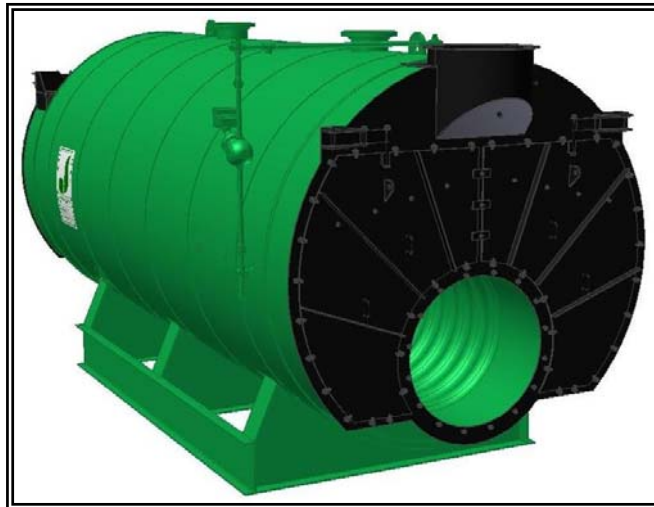


MODEL: PFTX 250-4

4-Pass Hot Water Packaged Firetube Boiler

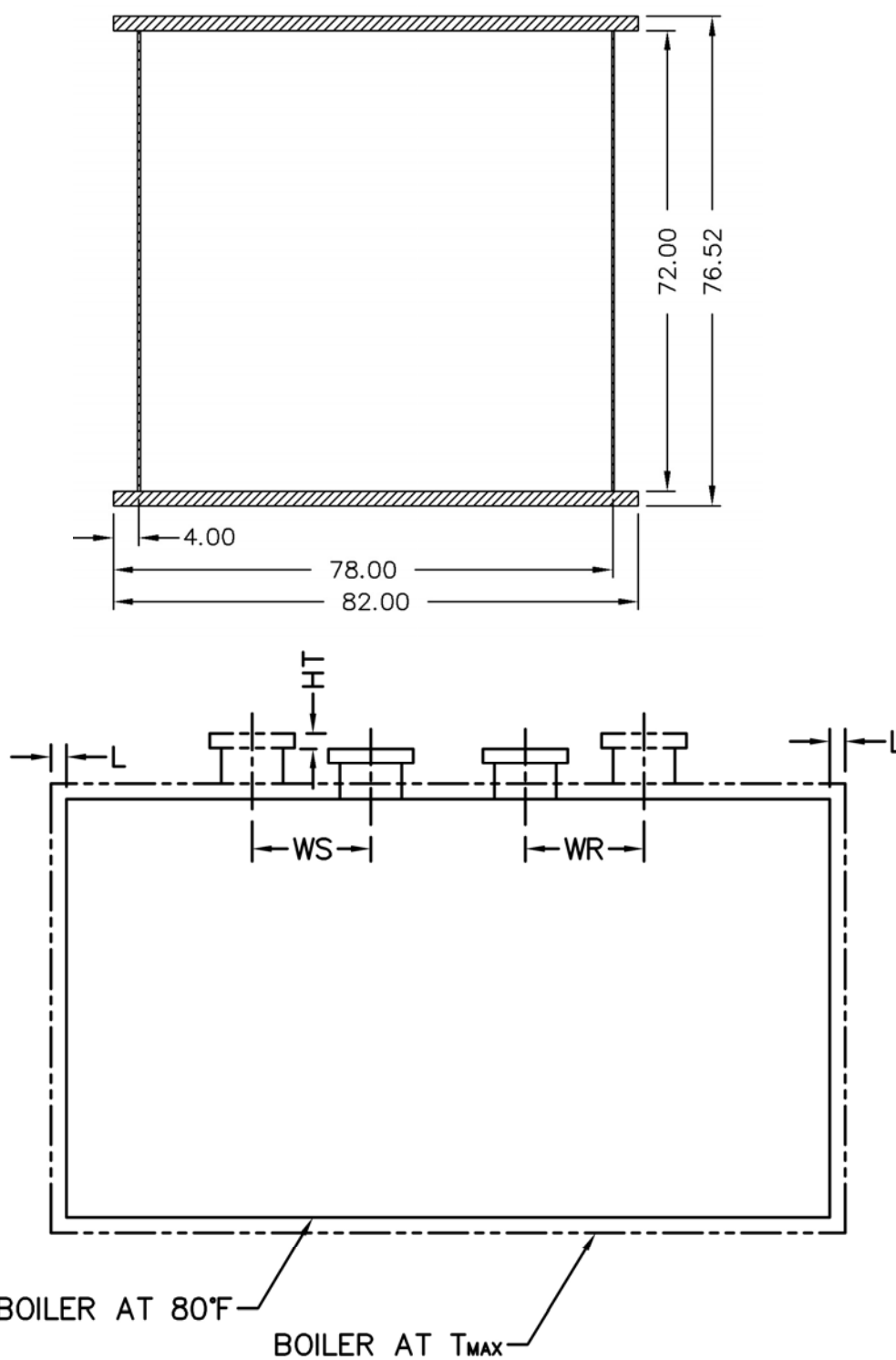


Ratings & Performance Data

Horsepower 250		Natural Gas Flow, SCFH (1,000 Btu/ft ³)**	9,814			
Total Heating Surface, ft ²	1,295	Combustion Air (15% Excess), SCFM***	1,796			
Furnace Outside Diameter, in	40.5	Flue Gas Flow Rate, lb/hr***	8,559			
Furnace Heat Release Rate, Btu/ft ³ hr**	157,000	Stack Flue Gas Velocity, ft/min***	1,548			
Total Combustion Volume, ft ³	97.4	#2 Oil Flow, gal/hr (140,000 Btu/gal)**	67.7			
Total Heat Release Rate, Btu/ft ³ hr**	101,000	#6 Oil Flow, gal/hr (150,000 Btu/gal)**	62.7			
Water Content Flooded, gal	1,988	Flue Gas Side Pressure Drop, in. H ₂ O	3.0			
Approx. Dry Weight 30#, lb	21,200	Approx. Operating Weight 30#, lb	36,200			
Approx. Dry Weight 60#, lb	21,300	Approx. Operating Weight 60#, lb	36,300			
Approx. Dry Weight 125#, lb	22,000	Approx. Operating Weight 125#, lb	37,000			
Performance Data						
Operating Temperature (F)	Natural Gas		#2 Oil		#6 Oil	
	Stack Temp (F)	%Eff	Stack Temp	%Eff	Stack Temp (F)	%Eff
180	261	85.8	275	88.8	283	89.5
200	280	85.3	294	88.3	303	89.0
220	300	84.8	314	87.8	323	88.5
240	319	84.3	333	87.3	343	88.0
*Based on 20°F difference in supply/return, ** Values calculated at 200°F operating temperature, ***Calculated Firing Natural Gas						

MODEL: PFTX 250-4

Base Diagram

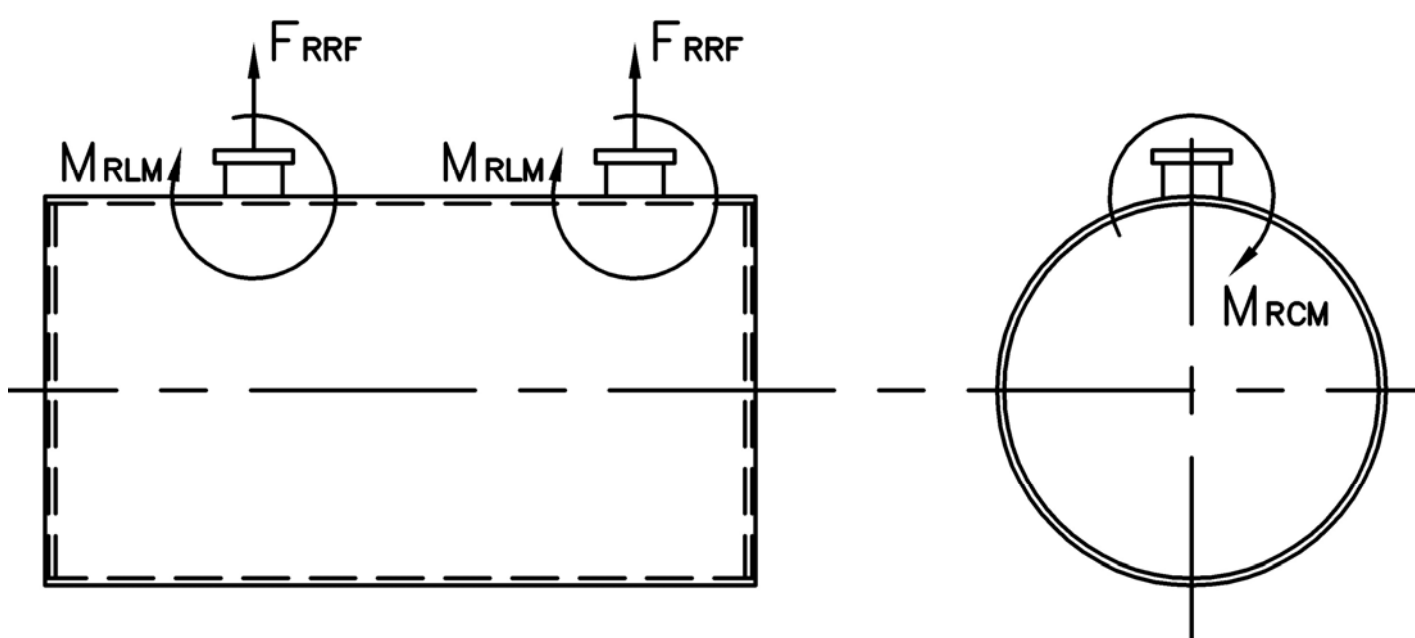


Thermal Expansion				
Metal T _{MAX} (F)	180	200	220	240
L (in)	0.036	0.043	0.050	0.057
WS (in)	0.014	0.017	0.020	0.023
WR (in)	0.016	0.019	0.022	0.025
HT (in)	0.054	0.064	0.075	0.086

MODEL: PFTX 250-4

Nozzle Loadings

Maximum Allowable Load on Outlet & Return Nozzles				
	30# Design	60# Design	125# Design	160# Design
F_{RRF} , lb	4,385	3,620	2,460	4,110
M_{RCM} , in-lb	21,710	21,710	22,115	37,415
M_{RLM} , in-lb	29,900	24,700	17,095	30,105



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