



“RENTECH Boilers for people who know and care.”®

**B. 400 psi HRSG – Fired**

Gas Side	Units	-10 °F Ambient	20 °F Ambient	40 °F Ambient	60 °F Ambient	80 °F Ambient	100 °F Ambient
Gas Flow	lb/hr	448,583	435,360	425,037	414,604	396,229	367,026
Gas Inlet Temperature	F	901	909	915	923	940	968
Stack Temperature	F	295	293	291	289	287	282
Gas Pressure Drop	in of Water	10.00	9.56	9.23	8.90	8.34	7.50
Firing Temperature	F	1871	1910	1942	1972	2029	2122
Burner Duty (LHV)	MMBtu/hr	134.6	135.5	136.3	136.7	137.3	138.2
Fuel Flow	lb/hr	6,515	6,559	6,594	6,616	6,643	6,687
<b>FLUE GAS ANALYSIS - Turbine Exhaust</b>							
CO2	% vol	3.21	3.12	3.07	3.00	2.95	2.88
H2O	% vol	6.19	6.19	6.34	6.82	7.79	10.05
N2	% vol	75.64	75.58	75.39	74.99	74.20	72.38
O2	% vol	14.05	14.20	14.27	14.28	14.17	13.82
Ar	% vol	0.90	0.90	0.90	0.90	0.89	0.87
NOx	ppmvd @ 15% O2	9	9	9	9	9	9
CO	ppmvd @ 15% O2	15	15	15	15	15	15
<b>FLUE GAS ANALYSIS - Stack</b>							
CO2	% vol	5.57	5.56	5.59	5.58	5.65	5.78
H2O	% vol	10.86	11.03	11.31	11.91	13.08	15.67
N2	% vol	73.83	73.71	73.49	73.03	72.17	70.25
O2	% vol	8.86	8.82	8.74	8.60	8.24	7.45
Ar	% vol	0.88	0.88	0.88	0.88	0.87	0.84
NOx	ppmvd @ 15% O2	14.8	15.0	15.1	15.3	15.5	15.8
CO	ppmvd @ 15% O2	24.4	24.7	25.0	25.2	25.6	26.1
<b>Water/Steam Data</b>							
Final Steam Flow	lb/hr	200,000	200,000	200,000	200,000	200,000	200,000
Final Steam Pressure	psi(g)	400	400	400	400	400	400
Final Steam Temperature	F	448	448	448	448	448	448
Attemperator Flow	lb/hr	0	0	0	0	0	0
Process Steam Flow		0	0	0	0	0	0
Steam Drum Exit Flow	lb/hr	200,000	200,000	200,000	200,000	200,000	200,000
Steam Drum Exit Pressure	psi(g)	408	408	408	408	408	408
Steam Drum Exit Temperature	F	450	450	450	450	450	450
Blowdown Flow	lb/hr	4,082	4,082	4,082	4,082	4,082	4,082
Feedwater Flow	lb/hr	204,082	204,081	204,081	204,081	204,081	204,081
Feedwater Pressure	psi(g)	439	439	439	439	439	439
Feedwater Temperature	F	228	228	228	228	228	228
Evaporator Pinch	°F	58	57	56	54	52	48
Economizer Approach	°F	102	105	107	109	113	119