

# AIR PREHEATER DATASHEET

<b>PURCHASER / OWNER:</b>		<b>ITEM NO.:</b>
<b>SERVICE:</b>		<b>LOCATION:</b>
1	MANUFACTURER:	
2	MODEL:	
3	NUMBER REQUIRED:	
4	RADIATION LOSS [Percent]	2
5	NOMINAL AIR PREHEATER LMTD [C]	97.51
6	NOMINAL AIR PREHEATER UA VALUE [kW/C]	81.8006

## PERFORMANCE DATA

8	OPERATING CASE:	<b>AS SIMULATED</b>
9	AIR SIDE: FLOW RATE ENTERING [kg/hr]	98354.6
10	INLET TEMPERATURE [C]	23.33
11	OUTLET TEMPERATURE [C]	307.9
12	PRESSURE DROP: ALLOWABLE, [mmH2O]	By Vendor
13	PRESSURE DROP: CALCULATED, [mmH2O]	N/A
14	HEAT ABSORBED, [kW]	7976.5958
15	FLUE GAS SIDE: FLOW RATE ENTERING [kg/hr]	105559.9
16	INLET TEMPERATURE [C]	387.41
17	OUTLET TEMPERATURE [C]	141.37
18	PRESSURE DROP: ALLOWABLE, [mmH2O]	By Vendor
19	PRESSURE DROP: CALCULATED, [mmH2O]	N/A
20	HEAT EXCHANGED, [kW]	8139.3835
21	AIR BYPASS RATE [kg/hr]	9136.8
22	TOTAL AIR FLOW RATE TO BURNERS [kg/hr]	107491.3
23	MIX AIR TEMPERATURE [C]	285
24	TOTAL FLUE GAS FLOW RATE TO STACK / ID FAN [kg/hr]	113505.3
25	MIX FLUE GAS TEMPERATURE [C]	159.67
26	FLUE GAS COMPOSITION, Mole Fraction, (O2/N2/H2O/CO2/SOx) [Percent]	4.5506 / 73.4581 / 10.1191 / 10.8745 / 0.1246
27	FLUE GAS SPECIFIC HEAT [kJ/kg.K]	1.1056
28	FLUE GAS ACID DEW-POINT TEMPERATURE [C]	141.78
29	MINIMUM METAL TEMPERATURE: ALLOWABLE [C]	155.78 (1)
30	MINIMUM METAL TEMPERATURE: CALCULATED [C]	155.78 (1)

## MISCELLANEOUS:

32	MINIMUM AMBIENT AIR TEMPERATURE [C]	23.33
33	SITE ELEVATION ABOVE SEA LEVEL [m]	806.9
34	RELATIVE HUMIDITY [Percent]	0
35	EXTERNAL COLD-AIR BYPASS (YES/NO)	By Vendor
36	COLD-END THERMOCOUPLES (YES/NO): NUMBER REQUIRED	By Vendor
37	ACCESS DOORS: NUMBER / SIZE / LOCATION	By Vendor
38	INSULATION (INTERNAL / EXTERNAL)	By Vendor
39	CLEANING MEDIUM: STEAM OR WATER	By Vendor
40	PRESSURE, [bar]	
41	TEMPERATURE, [C]	