

DESCRIPTION OF UNIT

MAXIMUM CONTINUOUS HIGH PRESSURE STEAM OUTPUT

lb/hr 525,000

STEAM CONDITIONS AT SUPERHEATER OUTLET

Temperature, F: 1,005

Pressure, psi: 1,510

STEAM CONDITIONS AT REHEATER OUTLET

Temperature, F: 1,005

Pressure, psi: 380

DESIGN PRESSURE, PSI

Boiler 1,725

Economizer 1,775

Reheater 550

HEATING SURFACE, SQ. FT.

Boiler 6,475

Water Cooled Walls: 5,208

Primary Superheater 9,817

Secondary Superheater 3,610

Reheater: 5,266

Economizer: 15,362

STEAM, ACTUAL, M LB/HR	525		260	525
REHEAT MLB/HR	449		225	449
TYPE OF FUEL	Oil		Nat.	Gas
RATE AND LOAD DURATION, HR	Cont.		Cont.	Cont.
FURNACE LIBERATION, KB/CU FT-HR				
EXCESS AIR LEAVING ECON. %	15		25	11
BURNERS, NO. IN USE PER FURNACE	12		6	12
QUANTITIES M LB/HR	FUEL (GAS IN MCFH)	39.3	367	999
	FLUE GAS ENT. AH	672	379	644
	FLUE GAS LEAVING AH	721	415.5	692
	AIR LEAVING A H	623	360	610
PRESSURES LB/SQ IN	STEAM AT S H OUTLET	1510	1510	1510
	MIN OPER IN BOILER DRUM	1598	1532	1598
	DROP, DRUM TO S H OUTLET	88	22	88
	DROP THRU ECON	10	2	10
TEMPERATURES F	SUPERHEATED STEAM	1005	1005	1005
	FLUE GAS LEAVING BLR EC	635	500	642
	FLUE GAS LEAVING AH NOLK	275	220	280
	FLUE GAS LEAVING A H+LK	262	210	268
	WATER ENTERING ECON	446	387	446
	WATER ENTERING BLR	582	538	575
	AIR ENTERING A H	100	100	100
	AIR LEAVING A H	515	420	526
DRAFT LOSSES IN. OF WATER	FURNACE	.1	.1	.1
	BOILER AND SUPERHEATER	5.8	1.9	5.3
	ECONOMIZER			
	AIR HEATER	4.0	1.3	3.7
	DAMPERS			
	FLUES TO AH INLET	.4	.1	.3
	NET DRAFT LOSS			
AIR RESIS. IN. OF WATER	BURNERS AND WINDBOX	4.2	4.1	4.0
	DUCTS FROM AH OUTLET	.4	.1	.3
	AIR HEATER	3.7	1.3	3.6
	NET RESISTANCE	18.6	8.9	17.3
HEAT LOSSES %	DRY GAS	3.57	2.47	3.26
	H ₂ AND H ₂ O IN FUEL	6.94	10.34	10.60
	MOISTURE IN AIR	.10	.07	.09
	UNBURNED COMBUSTIBLE			
	RADIATION	.34	.67	.34
	UNACCOUNTED FOR & MERS MARG	1.50	1.50	1.50
	TOTAL HEAT LOSS	12.45	15.05	15.79
EFFICIENCY OF UNIT, %	87.55	84.95	84.21	
REHEAT PRESS.	400/380	235/230	400/380	
REHEAT TEMP.	695/1005	605/963	635/1005	
AIR ENT. AH. MLB/HR	672	396.5	658	
MAX ALLOWABLE BOILER CONC, PPM	750	750	750	
SOLIDS IN STEAM	1	1	1	
PULVERIZER	NO. IN USE PER FURNACE			
	AIR TEMP TO PULV, F			
	TOTAL POWER, KW HR/TON			
	% THRU NO. 200 U.S. SIEVE			
	% THRU NO. 50 U.S. SIEVE			

EXPECTED PERFORMANCE