

Appendix 10A. Tables

Table 10-1. Design and Performance Characteristics of the Major Equipment and Tanks

Name	Number	Capacity/Design
Condenser	3	One-third capacity shells
Condenser Hotwell	1	170,000 gallons
Hotwell Pumps	3	One-half system requirement
Condensate Booster Pumps	3	One-half system requirement
Feedwater Pumps	2	One-half system requirement
Condensate Polishing Demineralizer	5	One-fourth system requirement
Condensate Feedwater Heaters		
G	3	One-third system requirement
F	3	One-third system requirement
E	2	One-half system requirement
D	2	One-half system requirement
C	2	One-half system requirement
B	2	One-half system requirement
A	2	One-half system requirement
Steam Generators	4	One-fourth system requirement 3,963,000 lb/hr design flow
Turbine-Generator	1	Tandem compound - six flow turbine with a 1,450,000 KVA generator and moisture separator reheater units
Upper Surge Tanks	2	85,000 gallons total
Condensate Storage Tank	1	30,000 gallons

Table 10-2. Turbine Speed Control System Protection Devices

Component	Function	Design Operating Speed in % of Rated Speed
Primary speed control processor	control	0 - 110%
Backup speed control processor	control	0 - 110%
Mechanical overspeed trip	trip	110%
Backup "electrical" overspeed trip	trip	111.5% (Primary Processor) 111.5% (Backup Processor)

Table 10-3. Turbine Speed Control System Valve Closure Time

Valve	Closure Time (Seconds)
Main stop	0.12
Main control	0.19
Intermediate stop	0.20
Intercept	0.17
Extraction check	2 (maximum)

Table 10-4. Turbine Speed Control System Component Failure Analysis

Component	Malfunction	Overspeed Prevented By
Main control valve	Fail to close	Closure of stop valves
Main stop valve	Fail to close	Closure of control valves
Intercept valve	Fail to close	Closure of intermediate stop valve
Intermediate stop valve	Fail to close	Closure of intercept valve
Primary speed control processor	Fails	Backup speed control processor
Mechanical overspeed trip	Fails	Backup "electrical" overspeed trip
24 volt "electrical" trip solenoid valve (dual solenoids)	Fails	125 volt "mechanical" trip solenoid valve
A mechanical trip	Fails	An electrical trip
Fast acting solenoid valves	Fail	Emergency Trip Fluid System

Table 10-5. Branch Steam Paths Active After Postulated Accident of Break in Safety Grade Portion of Main Steam Line and a Single Non-closable Main Steam Isolation Valve

Branch Line	System	Equipment Supplied Or Use Of Steam	Maximum Flow	Type Isolation Valve ¹	Size	Closure Time	Actuation ²
Main Steam to Auxiliary Steam Header	Auxiliary Steam	Auxiliary Steam	291,000 lb/hr	Gate	12 in	60 sec	E
Main Steam to Steam Seal Header	Main And FWP Turbine Steam Seal	Sealing Steam	36,000 lb/hr	Gate	4 in	30 sec	E
Turbine Bypass Header	Main Steam Bypass To Condenser	Low Point Drain Trap And Orifices	6,430 lb/hr	Gate	24 in	-	M
Two Main Steam Equalization Header Low Point Drains	Main Steam	Drain Traps	680 lb/hr	Gate ³	1 in	-	M
Four Main Steam Line Low Point Drains	Main Steam	Drain Orifices	280 lb/hr	Gate ³	1 in	-	M
FWP Turbine Supply Header	Steam Supply To FWP Turbine	Drain Orifice And Traps	155 lb/hr	Gate	6 in	-	M

Notes:

1. All valves are Duke Class G.
2. E - Electric motor operator with manual controls in control room. M – Manual handwheel.
3. One valve per drain.

Table 10-6. Main Condenser Design Parameters

Manufacturer	Foster Wheeler
Type	3 shell - 3 pressure - Double Flow
Duty	7.9 x 10 ⁹ BTU/HR
Heat Transfer Surface	969,213 Sq. Ft. (3 shells)
Hotwell Capacity	7,670 Cu. Ft. (per shell)
Circulating Water Design Inlet Temp.	89°F
Circulating Water Flow	658,334 GPM
Circulating Water Temp. Rise	24°F (8°F/shell)
Total Pressure Drop	34 Ft. (includes crossovers)
Backpressure - HP	3.73 In. Hg.
IP	2.94 In. Hg.
LP	2.40 In. Hg.
Tube Gauge	22 BWG
Tube Material	304 SS
Tube Diameter	1.25 In.
Effective Tube Length	42 Ft.
Tube Velocity	8.0 FPS
Number of Tubes	23, 506 (per shell)
Cleanliness Factor	0.95
Shell Material	A-285 Grade C CS
Support Plate Material	A-285 Grade C CS
Tube Sheet Material	A-516 Grade 70 CS
Waterbox Material	SA-516 Grade 70 CS
Overall Length	104' - 5"
Overall Width	64' - 8 3/4"
Overall Height	59' - 5"
Free Oxygen In Condensate	0.005cc/liter
Normal Steam Flow	10,082,000 lb/hr
Maximum Steam Flow	10,519,000 lb/hr
Normal CCW Inlet Temperature	79°F
Maximum CCW Inlet Temperature	91°F
Normal Turbine Exhaust Steam Temperature Without Bypass Flow	112.2°F

Maximum Turbine Exhaust Steam Temperature Without Bypass Flow	123.1°F
Normal Turbine Exhaust Steam Temperature With Bypass Flow	133.6°F
Maximum Turbine Exhaust Steam Temperature With Bypass Flow	144.1°F

Table 10-7. Main Condenser Evacuation System Component Design Parameters

CONDENSER STEAM AIR EJECTORS	
Manufacturer	Foster Wheeler
Type	Steam Jet
Number	3 per unit
Design flow rate	
20 SCFM air	90 LB/HR
Associated water vapor	198 LB/HR
Total air vapor mixture	288 LB/HR
Design pressure	1.0 IN. HB. ABS.
Design temperature	71.5°F
MAIN VACUUM PUMPS	
Manufacturer	Nash
Model	CL-3002
Type	Liquid Ring
Number	2 per station
Design flow rate	3050 ACFM
Design pressure	20.0 IN. HG. VAC.
Design temperature	80°F
Speed	530 RPM
Design brake horsepower	180 HP

Table 10-8. Turbine Bypass System Failure Mode And Effects Analysis

Malfunction	Effect
Partial or complete loss of steam dump capability	Overpressure protection provided by main steam safety/relief valves. Reactor and subsequent turbine trip may occur on load reduction.
Stuck open dump valve	Flow less than 970,000 lbm/hr through valve. Turbine and reactor operation not affected.
Large break in bypass system piping	Main steam isolation with subsequent reactor and turbine trip.

Table 10-9. Condenser Circulating Water System Component Design Parameters

CONDENSER CIRCULATING WATER PUMPS	
Manufacturer	Allis-Chalmers
Quantity	4 per unit
Type	Francis Wheel
Model	84 x 72 SSCV
Number of Stages	1
Design Flow	172,500 GPM
Design Head	110 Ft.
Speed	293 RPM
Design Brake Horsepower	5320 HP
COOLING TOWERS	
Manufacturer	Marley
Quantity	3 per unit
Type	Round Mechanical Draft
Model	700
Design Flow per Unit	630,000 GPM ¹
Design Wet Bulb Temperature	76°F
Design Approach	12.6°F
Design Range	22.9°F
Note:	
1. Measured flow per tower is 210,000 GPM with three CCW pumps operating and 245,000 GPM per tower with four CCW pumps operating.	

Table 10-10. Condensate Cleanup System Component Design Parameters

CONDENSATE POLISHING DEMINERALIZERS	
Manufacturer	DeLaval
Quantity	5 per unit
Type	powdered resin
Design flow	5450 GPM
Design pressure	380 PSIG
Design temperature	180°F
Maximum pressure drop	41 PSI
CONDENSATE POLISHING DEMINERALIZER BACKWASH TANK	
Quantity	one per unit
Design capacity	20,000 Gal
Design temperature	180°F
Design external pressure	0 PSIG
Design internal pressure	0 PSIG
CONDENSATE POLISHING DEMINERALIZER BACKWASH TANK PUMP	
Manufacturer	Ingersoll-Rand
Quantity	two per unit
Type	Vertical In-line
Model	4 x 3 x 8 VOC
Number of stages	1
Design flow	400 GPM
Design head	180 FT
Speed	3550 RPM
Design Brake horsepower	26.7 HP
CONDENSATE POLISHING DEMINERALIZER HOLDING PUMPS	
Manufacturer	Goulds
Quantity	5 per unit
Type	centrifugal
Model	3196
Number of stages	1
Design flow	750 GPM
Design head	35 FT

Speed	1200 RPM
Design brake horsepower	10 HP
CONDENSATE POLISHING DEMINERALIZER PRECOAT PUMP	
Manufacturer	Goulds
Quantity	one per unit
Type	centrifugal
Model	3196
Number of stages	1
Design flow	2250 GPM
Design head	40 FT
Speed	1200 RPM
Design brake horsepower	30 HP
CONDENSATE POLISHING DEMINERALIZER RESIN FEED TANK	
Quantity	One per unit
Design capacity	900 Gal
Design external pressure	0 PSIG
Design internal pressure	0 PSIG
CONDENSATE POLISHING DEMINERALIZER RECIRCULATION TANK	
Quantity	one per unit
Design capacity	2250 Gal
Design external pressure	0 PSIG
Design internal pressure	0 PSIG

Table 10-11. Condensate and Feedwater System Component Design Parameters

HOTWELL PUMP STRAINERS	
Manufacturer	Zurn
Quantity	3 per unit
Type	Simplex
Model	36" 514 VBB
Design flow	12,720 GPM
Design pressure	0 PSIA and 50 PSIA
Design temperature	200°F
Strainer medium	60 x 60 mesh
Maximum pressure drop	0.2 PSI
HOTWELL PUMPS	
Manufacturer	Ingersoll-Rand
Quantity	3 per unit
Type	Vertical Can
Model	36 - APKD - 4
Number of stages	4
Design flow	12,720 GPM
Design head	585 FT
Speed	1180 RPM
Design brake horsepower	2265 HP
Minimum continuous flow	2400 GPM
G FEEDWATER HEATERS	
Manufacturer	SWECO
Quantity	3 per unit
Type	Horizontal - Straight Tube
Feedwater terminal temperature difference	3°F
Drain cooler approach temperature	8°F
Tube side design pressure	380 PSIG
Tube side design temperature	300°F
Shell side design pressure	50 PSIG & Full Vacuum
Shell side design temperature	300°F
F FEEDWATER HEATERS	

Manufacturer	SWECO
Quantity	3 per unit
Type	Horizontal - Straight Tube
Feedwater terminal temperature difference	2°F
Drain cooler approach temperature	8°F
Tube side design pressure	380 PSIG
Tube side design temperature	300°F
Shell side design pressure	50 PSIG & Full Vacuum
Shell side design temperature	300°F
CONDENSATE BOOSTER PUMPS	
Manufacturer	Bingham
Quantity	3 per unit
Type	Horizontal Centrifugal
Model	14 x 14 x 16 1/2 HSB
Number of stages	1
Design flow	12,720 GPM
Design head	750 Ft.
Speed	3600 RPM
Design brake horsepower	2689 H.P.
Minimum continuous flow	1600 GPM
E FEEDWATER HEATERS	
Manufacturer	SWECO
Quantity	2 per unit
Type	Horizontal - U Tube
Feedwater terminal temperature difference	3°F
Drain cooler approach temperature	8°F
Tube side design pressure	865 PSIG
Tube side design temperature	310°F
Shell side design pressure	65 PSIG & Full Vacuum
Shell side design temperature	310°F
D FEEDWATER HEATERS	
Manufacturer	SWECO
Quantity	2 per unit

Type	Horizontal - U Tube
Feedwater terminal temperature difference	4°F
Drain cooler approach temperature	8°F
Tube side design pressure	865 PSIG
Tube side design temperature	350°F
Shell side design pressure	110 PSIG & Full Vacuum
Shell side design temperature	450°F
C FEEDWATER HEATERS	
Manufacturer	SWECO
Quantity	2 per unit
Type	Horizontal - U Tube
Feedwater terminal temperature difference	5°F
Drain cooler approach temperature	NA
Tube side design pressure	856 PSIG
Tube side design temperature	390°F
Shell side design pressure	200 PSIG & Full Vacuum
Shell side design temperature	390°F
STEAM GENERATOR FEEDWATER PUMPS	
Manufacturer	Bingham
Quantity	2 per unit
Type	Centrifugal
Model	16 x 18 x 17 CD
Number of stages	1
Design flow	18,040 GPM
Design head	2,040 FT
Design speed	5200 RPM
Design brake horsepower	9250 HP
Minimum continuous flow	4000 GPM
B FEEDWATER HEATERS	
Manufacturer	SWECO
Quantity	2 per unit
Type	Horizontal - U Tube
Feedwater terminal temperature difference	5°F

Drain cooler approach temperature	8°F
Tube side design pressure	1385 PSIG
Tube side design temperature	500°F
Shell side design pressure	325 PSIG & Full Vacuum
Shell side design temperature	480°F
A FEEDWATER HEATERS	
Manufacturer	SWECO
Quantity	2 per unit
Type	Horizontal - U Tube
Feedwater terminal temperature difference	3°F
Drain cooler approach temperature	8°F
Tube side design pressure	1385 PSIG
Tube side design temperature	500°F
Shell side design pressure	500 PSIG & Full Vacuum
Shell side design temperature	570°F

Table 10-12. Deleted Per 2009 Update

Table 10-13. Steam Generator Blowdown System Component Design Parameters

STEAM GENERATOR BLOWDOWN PUMPS	
Number Per Unit	2
Type	Vertical Inline
Design Pressure, PSIG	635
Design Temperature, °F	400
Head at Design Flow, Ft	500
Temperature of Pumped Fluid, °F	110-365
Capacity at Design Head, GPM	360
STEAM GENERATOR BLOWDOWN TANK	
Number per Unit	1
Volume, Gallons (approx.)	3000
Normal Operating Pressure, PSIA	1.3-160
Design Pressure, PSIG	205
Design Temperature, °F	390
Construction Material	Carbon Steel
STEAM GENERATOR BLOWDOWN RECOVERY HEAT EXCHANGERS	
Number per Unit	2
Manufacturer	Joseph Oat Corp.
Type	CGU
Tube Side:	
Design Pressure, PSIG	485
Design Temperature, °F	430
Design Flow, lbm/hr	203,000
Inlet Temperature, °F	365
Outlet Temperature, °F	130
Fouling Factor	.001
Pressure Drop at Design Flow, PSI	8.1
Material	Stainless steel
Shell Side:	
Design Pressure, PSIG	380

Design Temperature, °F	180
Design Flow, lbm/hr	1,985,000
Inlet Temperature, °F	110
Outlet temperature, °F	134.4
Fouling Factor	0005
Pressure drop at design flow, PSI	8.8
Material	Carbon steel
STEAM GENERATOR BLOWDOWN DEMINERALIZER PREFILTER	
Number per Unit	2
Manufacturer	Pall Trinity
Type	Cartridge
Design Pressure, PSIG	485
Design Temperature, °F	430
Design Flow, GPM	500
Retention Size, Microns	2-10
Clean Pressure Drop at Design Flow, PSI	2
Cartridge Structural Design Max. Pressure Drop, PSI	75
Material of Construction	Carbon Steel
STEAM GENERATOR DEMINERALIZER	
Number per Unit	2
Manufacturer	Graver
Type	Mixed-bed, non-regenerative
Design Pressure, PSIG	485
Design Temperature, °F	430
Operating Temperature, °F	130
Design Flow, GPM	500
Clean Pressure Drop at Design Flow, PSI	5
Flow Loading at Design Flow, GPM/ft ²	17.7

Total Resin Volume, Ft ³	85
Anion to Cation Ratio	~ 1:1
Resin Bed Depth, in.	36
Material of Construction	Stainless Steel
STEAM GENERATOR BLOWDOWN DEMINERALIZER RESIN TRAP	
Number per Unit	2
Manufacturer	Mueller
Type	Y-strainer
Design Pressure, PSIG	485
Design Temperature, °F	430
Design Flow, GPM	500
Clean Pressure Drop at Design Flow, PSI	1
Retention Size, Mesh	100
Material of Construction	Carbon Steel

Table 10-14. Failure Analysis, Steam Generator Blowdown System

	Failure	Consequences	Action
(1)	Rupture of blowdown line between steam generator and isolation valve inside containment.	Hot water under pressure partially flashes to steam. Pressure in lower compartment increases, and vapor passes through ice beds. Water level in affected steam generator increases. Radioactivity present in steam generator remains inside containment.	Same action taken for small steam break.
(2)	Rupture of blowdown line from outside containment to flash tank.	Hot water under pressure escaped into Doghouse or Turbine Building and partially flashes to steam. Some of the radioactive material in blowdown is carried out with building ventilation exhaust.	When the leak is discovered, the operator closes blowdown isolation valves.
(3)	Rupture of blowdown line down stream of flash tank.	Water or steam under pressure escapes into Turbine Building and water is collected by floor drains.	When the leak is discovered, the operator closes all blowdown isolation valves.

	Failure	Consequences	Action
(4)	Loss of instrument air	<p>The following valves will fail as listed below:</p> <p>BB65 Fail Close</p> <p>BB69 Fail Close</p> <p>BB24 Fail Close</p> <p>BB73 Fail Close</p> <p>BB39 Fail Open</p> <p>BB86 Fail Open</p> <p>BB27 Fail Close</p> <p>BB48 Fail Close</p> <p>BB175 Fail Open</p> <p>BB178 Fail Open</p> <p>BB188 Fail Close</p> <p>BB250 Fail Open</p> <p>No activity will be released to the atmosphere if a primary to secondary leak is present.</p>	<p>No action is required from the operator. Blowdown will be reestablished once instrument air is obtained.</p>
(5)	One blowdown pump is inoperable.	Second blowdown pump can be used.	Second blowdown pump is aligned for operation.

Table 10-15. Auxiliary Feedwater System Motor Driven Pump Design Data

Quantity per Unit	2
Type	Centrifugal, Horizontal
Fluid	Water
Design temperature, °F	160
Design flow rate, GPM	500
Design head, ft. H ₂ O	3210
NPSH required, at design flow, ft.	15
Rated RPM	3600
Driver:	
Type	Direct coupled, electric motor
Rated BHP	600
Rated RPM	3600
Service Factor	1.25
Power Requirements	4000 VAC, 3 Phase, 60 Hz

Table 10-16. Auxiliary Feedwater System Turbine Driven Pump Design Data

Quantity per Unit	1
Type	Centrifugal, Horizontal
Fluid	Water
Design temperature, °F	160
Design flow rate, GPM	1000
Design head, ft. H ₂ O	3217
NPSH required, at design flow, ft.	15
Rated Set RPM	Up to 3800
Driver:	
Type	Direct coupled, Single stage turbine
Rated BHP	1160
Rated Set RPM	Up to 3800
Steam inlet pressure, max/min, psig	1210 - 110
Back pressure, psig	3
The auxiliary feedwater pump turbine is qualified to Seismic Category I.	

Table 10-17. Auxiliary Feedwater System Component Failure Analysis

Component	Malfunction	Comment
Condensate supplies	Failure of all normal condensate supplies	Water can be supplied automatically from the Nuclear Service Water System or the Condenser Circulating Water System
Motor Driven Auxiliary Feedwater Pump	Either pump failure	Use the turbine driven auxiliary feedwater pump or the redundant motor driven auxiliary feedwater pump
Turbine Driven Auxiliary Feedwater Pump	Fail	Use motor driven auxiliary feedwater pumps
Control Room	No access to control room	The system can be monitored and controlled from the auxiliary shutdown control panels.
Electrical Power	Failure of normal auxiliary and offsite A.C. power	All necessary components will automatically switch to operation from power supplied by the emergency diesel generators
	Failure of power supply to components associated with one of the motor driven pumps	Components associated with the redundant motor driven pump are supplied power from physically separated switchgear and cabling
	Failure of all normal and emergency A.C. power	The turbine driven auxiliary feedwater pump will operate with all necessary electrical components operating from a battery-backed D.C. power source

Table 10-18. Auxiliary Feedwater System Instrumentation and Control

Indicators	Control Room	Local
Steam generator A,B,C,D levels (wide range)	X	X
Steam generator A,B,C,D pressures (wide range)	X	X
Turbine driven pump suction and discharge pressures	X	X
Motor driven pump A suction and discharge pressures	X	X
Motor driven pump B suction and discharge pressures	X	X
Turbine steam inlet pressure	X	X
Turbine speed	X	X
Auxiliary feedwater isolation motor operated valves CA38A, CA42B, CA46B, CA50A, CA54B, CA58A, CA62A, CA66B open/close position	X	X
Auxiliary feedwater turbine stop valve and main steam supply valves open/close position	X	X
Upper surge tank supply valve CA4 open/close position	X	X
Condenser hotwell supply valve CA2 open/close position	X	X
Auxiliary feedwater condensate storage tank supply valve CA6 open/close position	X	X
Main feedwater bypass to AFW nozzle isolation valves open/close position	X	
Condensate sources low level indicating lights	X	X
Local/remote control indicating lights	X	
Loss of condensate source indicating lights		X
Auxiliary feedwater pump loss of condensate source indicating lights		X
Auxiliary feedwater pump suction valves CA7A, CA9B, CA11A, CA15A, CA18B, CA85B, CA116A open/close position	X	X
Nuclear service water supply valves RN250A, RN310B open/close position	X	X
Auxiliary feedwater flows to A,B,C,D steam generators	X	X
Individual auxiliary feedwater pump discharge flows	X	
Main feedwater pressure	X	
Upper surge tank level	X	X
Auxiliary feedwater condensate storage tank level	X	X
Hotwell level	X	X
Condensate storage tank level	X	
Nuclear service water pond level	X	
Auxiliary feedwater pumps running lights	X	X

Indicators	Control Room	Local
Auxiliary feedwater pumps automatic start defeat indicating lights	X	
Auxiliary feedwater pumps recirculation flow indicating lights	X	
Check valves CA37, CA41, CA45, CA49, CA53, CA57, CA61, CA65 upstream temperature	X	
Auxiliary feedwater nozzle piping temperature	X	
Motor driven pump A stop/start	X	X
Motor driven pump B stop/start	X	X
Turbine driven pump stop/start	X	X
Individual valve position controls for pump discharge flow control valves CA36, CA40, CA44, CA48, CA52, CA56, CA60, CA64	X	X
Individual auxiliary feedwater motor operated isolation valves CA38A, CA42B, CA46B, CA50A, CA54B, CA58A, CA62A, CA66B open/close	X	X
Local/remote control transfer switch		X
Auxiliary feedwater condensate storage tank supply valve CA6 open/close/auto	X	X
Upper surge tank supply valve CA4 open/close	X	X
Condenser hotwell supply valve CA2 open/close	X	X
Auxiliary feedwater pump suction valves CA7A, CA9B, CA11A open/close	X	X
Nuclear service water supply valves RN250A, RN310B, open/close/auto	X	X
Turbine trip and reset control	X	X
Auxiliary feedwater turbine main steam supply valves open/close	X	X
Main feedwater bypass to auxiliary feedwater nozzle isolation valves open/close	X	
Auxiliary feedwater pump suction valves CA15A, CA18B, CA85B, CA116A open/close/auto	X	X
Auto start defeat switch (motor driven pumps only)	X	
Auxiliary Feedwater Pump trip on low suction pressure defeat switch	X	
Specific control room alarms for the Auxiliary Feedwater System:		
Low hotwell level		
Low upper surge tank level		
Low-low auxiliary feedwater condensate storage tank level		
Aux. Feedwater System Loss of Condensate source		
Turbine stop valves not open		

Indicators	Control Room	Local
Control room control overridden by local panel control		
Any auxiliary feedwater pump discharge motor operated isolation valve not open		
Any nuclear service water supply valve not closed (RN250A, RN310B, CA15A, CA18B, CA85B, CA116A)		
High temperature alarms for pump and driver bearings and motors		
Any auxiliary feedwater pump suction valve CA7A, CA9B, CA11A not open		
Low auxiliary feedwater condensate storage tank level		
Low auxiliary feedwater condensate storage tank level coincident with low upper surge tank level		
Less than recommended inventory in upper surge tanks		
Loss of condensate source		
Low temperature differential between CA nozzle piping and corresponding Loop main steam temperature		
High temperature upstream of check valves CA37, CA41, CA45, CA49, CA53, CA57, CA61, CA65 indicating backleakage		

Table 10-19. Moisture Separator/Reheater and Feedwater Heater Drains System C Feedwater Heater Drain Tank Pump Design Data

Quantity per unit	2
Type	Centrifugal, Vertical
Fluid	Condensate
Hydrotest pressure, discharge, psig	1500
Design temperature, °F	370
Design flow rate, GPM @ 370°F	6220
Design head, ft. H ₂ O @ 370°F	1150
NPSH required, at design flow, ft. H ₂ O @ 370°F	18
Minimum NPSH available, at design flow, ft. H ₂ O @ 370°F	25
Rated RPM	1800
Driver:	
Type	Direct coupled, electric motor
Rated BHP	2250
Rated RPM	1800
Service Factor	1.25
Power Requirements	6600 VAC, 3 Phase, 60 Hz