

CHILLED WATER PLANT  
EQUIPMENT DATA SHEETS

## CHILLER

GENERAL	67	67	69	2001 69	1999
Equipment #	1	2	3	4	5
Manufacturer	Carrier	Carrier	Carrier	Carrier	York
Capacity- tons	1500	4500	4500	4500	6300
Machine type	open-drive Centrifugal	open- drive centrifugal	open- drive centrifugal	open- drive centrifugal	centrifugal
Model #	17 CA	17 DA	17 DA	17 DA	OM6300
Refrigerant	R-11	R-12	R-12	R-134A	R-134A
Compressor Brake HP (Design)	1400	4370	4370	4370	4953
EVAPORATOR- COOLER					
Model #	81	83-22	83-22	83-22	
Chilled Water Discharge temp	40 F	40 F	40 F	40 F	40 F
Diff Temp	16 F	16 F	16 F	16 F	16 F
Chill water flow GPM	2250	6750	6750	6750	9450
Fouling factor	.00050	.00050	.00050	.00050	
Pressure drop FT water side	22	30	30	30	
# of passes	2	2	2	2	2
Design Pressure	150 psi	150 psi	150 psi	150 psi	150 psi

CONDENSER	1	2	3	4	5
MODEL #		83-15	83-15	83-15	
Cond water Entering F	82	82	82	82	82
Cond water Leaving F	91	93.7	93.7	93.7	94
Water flow GPM	3750	11250	11250	11250	14786
Heat duty MMBTU/ HR		65320	65320	65320	88177
Pressure Drop Feet		15.1	15.1	15.1	36.6
Fouling factor	.00075	.00075	.00075	.00075	.00075
# of passes	2	2	2	2	2
Design Pressure PSI	150	150	150	150	150

#### REFRIGERANT CYCLE

Comp model #		83-T	83-T	83-T	255A86D
Cond temp	101.1	100.5	100.5	100.5	
Cond Pressure PSIA	23.5	131.8	131.8	131.8	
Subcooling		9 F	9 F	9 F	
Comp speed		4632	4632	4632	3733
Ref Charge - LBS		15600	15600	15600	<del>15600</del> 16000
Comp suction Temp	34.9	33.7	33.7	33.7	
Comp suction press PSIA	6.25	46	46	46	
Comp discharge Temp					

CHILLER TURBINES

Equip #	1	2	3	4	5
Manufacturer	Terry	Terry	terry	Terry	Murray
Model #	<i>type</i> GHF-7	F-8	F-8	F-8	KD8M
Ser #	34818	34859	T36786 B	T 36786 A	T-5513
Speed- RPM	3540	4520	4520	4520	3734
Brake HP	1575	4800	4800	4800	5490
Inlet steam Press- PSIG	175	175	175	175	165
Inlet steam temp	sat	sat	sat	sat	373 F
Exhaust – HG	26"	26"	26"	26"	26"
Steamflow rate LB/ HR					

TURBINE SURFACE CONDENSER

Equip #	1	2	3	4	5
Manufacturer	American Standard	American Standard	American Standard	American standard	ITT Standard
Type	S-1000	S-1000	S- 1000	S-1000	S-1000R
Size	2517-9S-1000	4218-S-1000	4218-S-1000	4218-S-1000	51153
Steam exhaust HG	26"	26"	26"	26"	26"
Steam flow LB/ HR	19950	59000	59000	59000	
Heat Duty BTU/ HR	19000000	56000000	56000000	56000000	59331876
Surface Area SQ FT	1575	4730	4730	4730	3489
Water flow GPM	3750	11250	11250	11250	14798
Water temp Entering	92.7	93.5	93.5	93.5	94
Water temp Leaving	102.8	103.45	103.45	103.45	102
Pressure drop Waterside FT	10	9.8	9.8	9.8	11.1
# of passes	1	1	1	1	1
tube size OD	3/4"	3/4	3/4	3/4	3/4

SER #

1-07023-013-1

1-07023-01-1

6-02493-013-1

6-02493-013-2

# CHILLED WATER DIST PUMPS

PUMP #	1	2	3	4
Manufacturer	Buffalo Forge	Buffalo Forge	Buffalo Forge	Worthington
Type	horizontal	Split Case	double suction	Split case
Ser #	360618	360619		B0983100-1
Model #	20-SLH	16-SLH	16-SLH	20LN28
Impeller size	23"	15"	23"	28"
Design flow GPM	13500	6750/3000	13750	18000
Design head FT	90	70/18	72	104
orsepower	342	150	300	554
Pump speed RPM	900	1180/580	900	710

## MOTOR DATA

Manufacturer	GE	westinghouse	westinghouse	westinghouse
Type	K			
Model	5K511AN493M	150-375		ASHA-LN001
HP	400	150	300	600
Frame Size				6808B
Volts-phase-cycles	4160/3/60	460/3/60	460/3/60	4160/3/60
Service factor	1.15	1.15	1.15	1.15
Speed	cont duty	1184/589	900	706

UID DRIVE	1	2	3	4	
Manufacturer	American-Davidson Gyrol fluid drive		American-Davidson Gyrol fluid drive		
Ser #	73-270-E-3-2R		73-270E-2R-F6		
Maximum HP			300		
Max speed RPM	1200		900		
Model #	270-CL-2		270VS-CL.2		
CHILLER PUMPS	1	2	3	4	5
Motor make	GE	GE	GE	GE	GE
Model	5KS364AL305ARP	5KS445AL309RP	5KS445AL309RP	5KS445AL309RP	5KS449AS463
HP	40	150	150	150	200
Volt/phase/cycle	230/3/60	460/3/60	460/3/60	460/3/60	460/3/60
Service factor	1.15	1.15	1.15	1.15	1.15
Type	KS	KS	KS	KS	350-LNN-475
RPM	1185	1180	1180	1180	890
Pump make	goulds	goulds	goulds	goulds	ing-Dresser
IMP size	11.75	14.5	14.5	14.5	
Model #	3405	3415	3415	3415	
Ser #	285B503	285B504.1	285B504.2	285B504.3	023021
GPM	2250	6750	6750	6750	9450
Size	10x12-12	14x16-18	14x16-18	14x16-18	
Head Ft	50	62	62	62	
RPM	1185	1180	1180	1180	

# PUMPHOUSE DATA SHEET

COND PUMPS	N-350	C-350	S-350	NewS-350
Manufacturer	Aurora	Aurora	Aurora	Ing – Dresser
Type	vertical turbine Wet pit	vertical turbine wet pit	vertical turbine wet pit	vertical turbine wet pit
Ser	956-70367	956-70367	9807MP001260-1	9903ME
Model #	28SKKS-1100	28SKKS-1100	28H980-1	305PM-1
Size	28"	28"	28"	
Design Flow GPM	12000	12000	12000	15000
Design Head FT	82	82	82	24HLF
Speed	1185	1185	1185	900
HP	313	313	313	

## OTOR DRIVE

Manufacturer	westinghouse	westinghouse	westinghouse	GE
Motor HP	350	350	350	350
Frame	587.5PH	587.5PH	587.5PH	L5011TP24
Service factor	1.15	1.15	1.15	1.15
Volts/phase/cycle	460/3/60	460/3/60	460/3/60	460/3/60
RPM	1170	1170	1174	1185

**COND PUMPS**

N-125

S-125

Manufacturer

worthington

Worthington

Type

vertical turbine  
Wet pitvertical turbine  
wet pit

Ser #

18049

18048

Model #

Size

24M425E

24M4251-1

Design flow GPM

7500

7500

Design head

Speed

HP

**MOTOR DRIVE**

Manufacturer

westinghouse

westinghouse

Motor HP

125

125

Frame

504-UPH

504-UPH

Service factor

1.15

1.15

Volts/phase/cycles

460/3/60

460/3/60

RPM

1180

1180



RIVER WATER BOOSTER  
PUMP

SCREEN WASH  
PUMP

Manufacturer	goulds	goulds
Type	horizontal split case	horizontal split case
Ser #	704E136	767A774
Model #	3755	3189
Size	3x4-11	3x4-11
Design flow GPM		225
Design head FT	35	80
Brake HP	5	15
Speed	1150	1750

MOTOR DRIVE

Manufacturer	reliance	US Electric
Motor HP	5	15
Frame	215T	254T
Service factor	1.15	1.15
Volt/phase/cycles	208/3/60	
RPM	1140	1750

TRAVELING SCREENS

Manufacturer	link-belt
Model #	45A
Ser #	JK8074

**PUMP HOUSE AIR COMPRESSORS**

<b>EQUIP #</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>Manufacturer</b>	<b>Ing-Rand</b>	<b>Ing-Rand</b>	<b>worthington</b>
<b>Type</b>		<b>30</b>	
<b>Model #</b>		<b>23ANLFI</b>	<b>3CJ6</b>
<b>Ser #</b>	<b>101704</b>	<b>255956</b>	<b>CJ524</b>
<b>Design flow SCFM</b>			
<b>Design pressure PSIG</b>			
<b>Brake HP</b>	<b>7.5</b>	<b>1</b>	<b>3</b>
<b>RPM</b>	<b>1760</b>	<b>1750</b>	<b>1745</b>
<b>Receiver size GAL</b>			

# CHILLER PUMPOUTS

## PUMPOUT COMPRESSOR

Equipment #	2	3	4	5
Manufacturer	carrier	carrier	carrier	york
Model #	17R3-804-69		17R3-804-69	FS32
Ser #	703614837		703614837.6	GHGR223931
Size				
Design Flow				
Design pressure				
Brake HP				

## TANK

Model #	1709-608-7	1708-618-4	1709-608-7	
Ser #	15460	15173	15462	1298-684110
Tank capacity				
Tank size (WxL)				