

**Sample CIP System Assessment**

**THIS IS A 2 PAGE SAMPLE OF THE 4 PAGE CIP ASSESSMENT**

**Plant:** CIP System Assessment Sample **Date:**

**Location:** Sample

**CIP System Designation:** CIP #1 Raw

**Yes = Y, No = N, Not Applicable = N/A, Note = (#)**

**System Type:**

Single / Reuse	S
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**P&ID Drawings:**

Are there P&ID drawings?	N (#9)
Are they accurate?	

**Pinning Chart:**

Are pinning charts available?	N (#10)
Do they match program?	

**Tanks:**

Fresh Water?	Y
Alkali?	N/A
Acid?	N/A
Rinse Recovery?	Y
Motive?	N/A

**Fresh Water Tank:**

Dimensions L, W, H / Volume	48" X 23" x 32" 153 gal
Level Control: Style:	Probe, Warwick
Overflow: Side / Center	Side 140 gal to overflow
Level: Low / Medium / High	4", 14", 24"
Volume: Low / Medium / High	19 gal, 67 gal, 114 gal
Vortex Breaker?	N
Does water supply keep up?	Y
Is there rust in top of tank?	N
Adequate air break on inlet?	Y

**Alkali Tank: N/A**

Dimensions / Volume	
Level Control: Mfg: / Style:	
Overflow: Side / Center	
Volume: Low / Medium / High	
Vortex Breaker?	
Is high level set to skim tank?	
Is solution clean?	
Is scum built up in top of tank?	

**Acid Tank: N/A**

Dimensions / Volume	
Level Control: Mfg: / Style:	
Overflow: Side / Center	
Volume: Low / Medium / High	
Vortex Breaker?	
Is high level set to skim tank?	
Is solution clean?	
Is scum built up in top of tank?	

**Post Rinse Recovery Tank:**

Dimensions / Volume	48" X 23" x 32" 153 gal
Level Control: Style:	Probe, Warwick
Overflow: Side / Center	Side 140 gal to overflow
Level: Low / Medium / High	4", 14", 24"
Volume: Low / Medium / High	19 gal, 67 gal, 114 gal
Vortex Breaker?	N
Is high level set to skim tank?	N
Is solution clean?	Y
Is scum built up in top of tank?	N

**Motive Tank: N/A**

Dimensions / Volume	
Level Control: Mfg: / Style:	
Overflow: Side / Center	
Volume: Low / Medium / High	
Vortex Breaker?	
Is high level set to skim tank?	
Is solution clean?	
Is scum built up in top of tank?	
Is there rust in top of tank?	Y

**Fresh Water Valves:**

<b>Cold:</b>	
MFG:	Asco
Style:	Y type
Size:	2"
Leaks?	N
Working correctly?	
<b>Hot:</b>	<b>N/A</b>
MFG:	
Style:	
Size:	
Leaks?	
Working correctly?	

**Supply Tank Outlet Valves:**

MFG:	WCB
Style:	M61 SERIES
Size:	2.5"
Leaks?	Y #1
Air Leaks?	N
Working correctly?	Y #1

**Air Eliminator: N/A**

Air Eliminator installed?	
Does it suck air when running?	
Does it leak solution when not running?	
Condition of gaskets good?	

Supply Pump:	
MFG:	Fristam
Model:	FPX3532
Inlet:	2.5"
Outlet:	2"
Impeller Size:	175 mm
Horsepower:	15
RPM:	3450
Max Capacity: Flow / Pressure	
Max Actual: Flow / Pressure	
VFD?	Y
Does pump cavitate?	Y
Leaks?	N
Unusually noisy?	N

Burst Valve N/A	
MFG:	
Style:	
Size:	
Leaks?	
Working correctly?	

Air Blow: N/A	
MFG:	
Size:	
Air pressure	
Single service filter?	
Is filter clean?	
Signs of check valve leaking?	

Strainer / Filter	
MFG:	
Style:	T:
Size:	2.5"
Filter media metal / fabric?	Perf.. Metal
Filter clean?	
Location?	in return line

Flow Control:	
VFD / Throttling Valve	VFD

Sample Port:	
Supply Line Sample Port?	Y
Does Sample Port Leak?	Y

Notes
1) Fresh water tank outlet valve leaking at stem seal
2) This meter has a reducer directly on the discharge side instead of the required 5 pipe diameters of straight pipe. This will have a negative affect on the accuracy of this meter.
3) Recovery Tank inlet valve leaking at stem seal.
4) The temperature on the chart recorder is swinging up and down continually while the temperature on the graph is holding steady.
5) The trend chart does not record the supply pressure. Having this added will make the trend charts more useful.
6) When running a line circuit the supply pump slows down quickly and recovers slowly when a valve shift occurs.
7) The average delay to temp on tanks is 13 min. and lines is 8 min. If hot water were piped to the CIP system this time could be reduced by an average of 10 min. on tanks and 6 min. on line circuits.
8) The valve sequencing on the Long Raw Line Circuit appears to be alternating paths to frequently to be efficient.
9) P&ID drawings are not available for the line circuits.
10) Pinning Charts are not available for tank of line circuits.

Steam Control Valve: N/A	
MFG:	
Style:	
Size:	
Working correctly?	
Leaks?	

Heat Exchanger:	
MFG:	Enerquip
Style:	Shell & Tube
Size:	7" X 9'
Steam Pressure:	
Condensate Return?	N
Is steam trap bypass open?	N
Average time to get to Temp.	Tk 13 min. In. 8 min. (#7)
Steam Leaks?	N
Solution Leaks?	N

Supply Temperature Sensor:	
MFG:	Klenzade
Style:	RTD
Size:	2'
Working correctly?	Y

Supply Flow meter :	
MFG:	Foxboro
Model:	Vortex
Size:	2"
Calibrated Correctly?	?
Working correctly?	? #2

Motive Pump: N/A	
MFG:	
Model:	
Inlet:	
Outlet:	
Impeller Size:	
Horsepower:	
RPM:	
Max Capacity: Flow / Pressure	
Does pump cavitate?	
Leaks?	
Unusually noisy?	