

Summary

Station		Heat	Cooling	Temp.	Level	Rectifier	Anode	Anodes or	Push/Pull	Filter	Recirc	PH	Tank	Chemical
No.	Process	Coil	Coil	Control	Safety	Qty/Amps/Volts	Bars	Baskets	Exhaust	GPH	Pump	Monitor	Covers	Feed
1	Load/Unload													
2	Wax													
3-5	Triple Counterflow Rinse													
6	Chromic Acid Dip								Yes			Yes		
7	Pre-Soak Clean	304 SS		RTD	Yes				Yes		Skimmer			
8	Soak Clean	304 SS		RTD	Yes				Yes		Skimmer			
9	Electro Clean PR	304 SS		RTD	Yes	1/1000/12 PR	Cu.		Yes					
10	Electro Clean PR	304 SS		RTD	Yes	1/1000/12 PR	Cu.		Yes					
11-13	Triple Counterflow Rinse													
14	Acid								Yes					
15-16	Counterflow Rinse													
17-19	Triple Counterflow													
20	Drag Out Rinse													
21-26	Nickel Plate	Titanium	Titanium	RTD	Yes	6/1000/12	Cu.	Titanium	Yes	6500	Filter		Yes	Yes
27-32	Nickel Plate	Titanium	Titanium	RTD	Yes	6/1000/12	Cu.	Titanium	Yes	6500	Filter		Yes	Yes
Off Line														
Spin Dryers														

Process	Tank	Station		Temp.	Time	No. of	Tank	Tank Size	Capacity	Tank	Overflow	Bottom	Rinse	City	Drain
Steps	No.	No.	Process	°F	(min.)	Stations	DOT	w" x d"	(gals.)	Lining	Weir	Drain	Control	Water	Header
1-23		1	Load/Unload		Max	1	38	62" x 60"		304 SS					
		2	Hoist Adjust				6"								
22	1	3	Wax		2	1	34	62" x 36"	301	Poly				Yes	
19-21	2	4-6	Triple Counterflow Rinse		1-2 per station	3	100	62" x 36"	886	Poly	3"	2"	Yes	Yes	Cr.
18	3	7	Chromic Acid Dip		2	1	34	62" x 36"	301	PVC/Poly				Yes	
2	4	8	Pre-Soak Clean	160	5-6	1	43	62" x 36"	381	Poly	6"	2"		Yes	Cleaner
3	5	9	Soak Clean	160	5-6	1	43	62" x 36"	381	Poly	6"	2"		Yes	Cleaner
4	6	10	Rinse / Cleaner	Future	1-2	1	43	62" x 36"	381	Poly	6"	2"	Yes	Yes	A/A
5	7	11	Electro Clean PR	150	5-6	1	40	62" x 36"	354	Poly		2"		Yes	Cleaner
6	8	12	Electro Clean PR	150	5-6	1	40	62" x 36"	354	Poly		2"		Yes	Cleaner
7-9	9	13-15	Triple Counterflow Rinse		1-2 per station	3	100	62" x 36"	886	Poly	3"	2"	Yes	Yes	A/A
10	10	16	Acid	Ambient	2-3	1	34	62" x 36"	301	Poly		2"		Yes	Acid
11-12	11	17-18	Counterflow Rinse		2-3 per station	2	67	62" x 36"	593	Poly	3"	2"	Yes	Yes	A/A
15-17	12	19-21	Triple Counterflow		1-2 per station	3	100	62" x 36"	886	Poly	3"	2"	Yes	Yes	A/A
14	13	22	Drag Out Rinse		1-2	1	30	62" x 36"	266	Poly				Yes	
13	14	23-28	Nickel Plate	140	57-60	6	224	62" x 36"	1984	Poly				Yes	
13	15	29-34	Nickel Plate	140	57-60	6	224	62" x 36"	1984	Poly				Yes	
		35	Anode Service				12"	62" x 36"		Poly		2"		Yes	A/A
Off Line															
(4) Spin Dryers															
Loading System															
Material Handling System by Client															

Station Break Down

Station 1 - Load / Unload

Dimensions - 38" x 62" x 55" High

Area includes the following:

- Plastic locating saddles.
- Barrel rotator assembly.
- Twin Directional chutes.

- Emergency STOP pull cord switch.
- Emergency STOP push button

Station 2 - Hoist Adjust

6" DOT

This area allows the hoist to adjust for the elevated load unload stand.

Station 3 - Wax

Dimension - 34" x 62" x 36" Deep

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated.
- Water inlet ball valve.
- Plastic locating saddles
- Barrel rotator assembly.

Stations 4,5 & 6 - Triple Counterflow Rinse

Dimensions - 100" x 62" x 36" Deep

- Constructed of 1" thick stress relieved natural polypropylene and includes:
- Welded tubular steel girth band polypropylene encapsulated. 2" side bottom drain outlets to ball valves and Cr. drain.
- 3" full depth overflow weir with outlet to Cr. drain. Water inlet ball valves.
- Plastic locating saddles. Barrel rotator assemblies.
- Water solenoid controlled by PLC with adjustable "on time" from the HMI and Dwyer flow meter

Station 7 - Chromic Acid Dip

Dimensions - 34" x 62" x 36" Deep

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. PVC tank liner.
- Push/Pull exhaust hoods. Water inlet ball valve.
- Plastic locating saddles Barrel rotator assembly.

Station 8 - Pre-Soak Clean

Dimensions - 43 x 62" x 36" Deep

Temperature - 160°F

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. 6" overflow sump.
- 2" side bottom drain outlet to ball valve and Cleaner drain. T304 stainless steel electric immersion heaters.
- RTD temperature probe. Push/Pull exhaust hoods. Water inlet ball valve.
- Plastic locating saddles Barrel rotator assembly. Pump with skimmer.
- Liquid level safety controller.

Station 9 - Soak Clean

Dimensions - 43 x 62" x 36" Deep

Temperature - 160°F

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. 6" overflow sump.
- 2" side bottom drain outlet to ball valve and Cleaner drain. T304 stainless steel electric immersion heaters.
- RTD temperature probe. Push/Pull exhaust hoods. Water inlet ball valve.
- Plastic locating saddles Barrel rotator assembly. Pump with skimmer.
- Liquid level safety controller.

Station 10 - Rinse Future Soak Clean

Dimensions - 43 x 62" x 36" Deep

Temperature - 160°F

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. 6" overflow sump.
- 2" side bottom drain outlet to ball valve and A/A drain. Space for T304 stainless steel electric immersion heaters. Space for RTD temperature probe.
- Space for Push/Pull exhaust hoods. Water inlet ball valve.
- Plastic locating saddles Barrel rotator assembly.
- Tank coupling for Pump with skimmer. Space for Liquid level safety controller.

Station 11 - Electro Clean

Dimensions - 40" x 62" x 36" Deep

Temperature - 150°F

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. 2" side bottom drain outlet to ball valve and alkaline drain.
- T304 stainless steel electric immersion heaters. RTD temperature probe.

- Push/Pull exhaust hoods. Water inlet ball valve.
- Cast bronze electrified locating saddles.
- DC buss from both ends for 1000 amps per station. Two (2) solid copper anode bars.
- T304 stainless steel anodes Barrel rotator assembly.
- Liquid level safety controller.

Station 12 - Electro Clean

Dimensions - 44" x 62" x 36" Deep

Temperatures - 150°F

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. 2" side bottom drain outlet to ball valve and alkaline drain.
- Two (2) 12 Kw T304 stainless steel electric immersion heaters. RTD temperature probe.
- Push/Pull exhaust hoods. Water inlet ball valve.
- Cast bronze electrified locating saddles.
- DC buss from both ends for 1000 amps per station. Two (2) solid copper anode bars.
- T304 stainless steel anodes Barrel rotator assembly.
- Liquid level safety controller.

Stations 13, 14 & 15 - Triple Counterflow Rinse

Dimensions - 100" x 62" x 36" Deep

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. 2" side bottom drain outlets to ball valves and A/A drain.
- 3" full depth overflow weir with outlet to A/A drain. Water inlet ball valves.
- Plastic locating saddles. Barrel rotator assemblies.
- Water solenoid controlled by PLC with adjustable "on time" from the HMI and Dwyer flow meter

Station 16 - Acid

Dimensions - 34" x 62" x 36" Deep

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated.

- 2" side bottom drain outlet to ball valve and Acid drain. Push/Pull exhaust hoods.
- Water inlet ball valve. Barrel rotator assembly.

Station 17 & 18 - Counterflow Rinse

Dimensions - 67" x 62" x 36" Deep

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. 2" side bottom drain outlets to ball valves and A/A drain.
- 3" full depth overflow weir with outlet to A/A drain. Water inlet ball valves.
- Plastic locating saddles. Barrel rotator assemblies.
- Water solenoid controlled by PLC with adjustable "on time" from the HMI and Dwyer flow meter

Stations 19, 20 & 21 - Triple Counterflow Rinse

Dimensions - 100" x 62" x 36" Deep

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. 2" side bottom drain outlets to ball valves and A/A drain.
- 3" full depth overflow weir with outlet to A/A drain. Water inlet ball valves.
- Plastic locating saddles. Barrel rotator assemblies.
- Water solenoid controlled by PLC with adjustable "on time" from the HMI and Dwyer flow meter

Station 22 - Drag Out Rinse

Dimensions - 30" x 62" x 36"

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. Water inlet ball valve.
- Plastic locating saddles. Barrel rotator assembly.
- Pump with push button (dead man) fill to nickel tank.

Stations 23, 24, 25, 26, 27 & 28 - Nickel Plate

Dimensions - 224" x 62" x 36" Deep

Temperature - 140°F

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. 2" side bottom drain outlet to ball valve and filter.
- Titanium electric immersion heaters. Titanium cooling coil with solenoid.
- RTD temperature probe with heating and cooling feature. Push/Pull exhaust hoods.
- Water inlet ball valve.
- Cast bronze electrified locating saddles.
- DC buss from both ends for 1000 amps per station. Barrel rotator assemblies.
- Twelve (12) solid copper anode bars.
- Eighty four (84) Titanium anode baskets with bags.
- Five (5) current shields. 6500 GPH filter system. Liquid level safety controller.

Stations 29, 30, 31, 32, 33 & 34 - Nickel Plate

Dimensions - 224" x 62" x 36" Deep

Temperature - 140°F

Constructed of 1" thick stress relieved natural polypropylene and includes:

- Welded tubular steel girth band polypropylene encapsulated. 2" side bottom drain outlet to ball valve and filter.
- Eight (8) 15 Kw Titanium electric immersion heaters. One (1) 15 ft² Titanium cooling coil with solenoid.
- RTD temperature probe with heating and cooling feature. Push/Pull exhaust hoods.
- Water inlet ball valve.
- Cast bronze electrified locating saddles.
- DC buss from both ends for 1000 amps per station. Barrel rotator assemblies.
- Twelve (12) solid copper anode bars.
- Eighty four (84) Titanium anode baskets with bags.
- Five (5) current shields. 6500 GPH filter system. Liquid level safety controller.