

Section 1

Bill of Materials

Table of Contents

Section 1	Bill of Materials
Section 2	Orenco Buildings
2.1	<i>Compressor Building 1</i>
2.2	<i>Park 2022 Chlorine Building 1</i>
2.3	<i>Park 2024 Chlorine Building 1</i>
Section 3	FCBS Control Panel
Section 4	Tidal Wave Mixer
Section 5	Depolox 400 M Analyzer
Section 6	Chemical Feed Skids
6.1	<i>D&H Skid Brochure</i>
6.2	<i>Skid Drawings</i>
6.3	<i>Skid Components</i>
Section 7	Sample Return System
7.1	<i>SRS Drawing</i>
7.2	<i>SRS Components</i>
Section 8	Chemical Storage Tanks
8.1	<i>Tank Drawings</i>
8.2	<i>Tank Brochure</i>
Section 9	Radar Level Sensor
Section 10	Tankless Water Heater
Section 11	Emergency Eyewash & Shower

Section 12 Static Flow Mixer

12.1 Mixer Drawing

12.2 Injection Quill

Section 1

Bill of Materials

1. Compressor Building

1.1 Orenco Fiberglass Shelter

Quantity	MFG Part Number	Description
1	Compressor Building 1	Orenco Fiberglass Shelter

2. FCBS (Reservoir Site)

2.1 Orenco Building

Quantity	MFG Part Number	Description
1	Park 2022 Chlorine Building 1	Orenco Fiberglass Shelter

2.2 FCBS Control Panel

Quantity	MFG Part Number	Description
1	FP-1S-P1	FCBS Control Panel

2.3 TWM Mixer

Quantity	MFG Part Number	Description
1	TWM15-230-33-V4050-3	TWM Mixer w/NEMA 4

2.4 Depolox 400 M Analyzer

Quantity	MFG Part Number	Description
1	W3T441932	E02 MODULE ELECTRONIC 400 M
1	W3T440611	FLOW CELL MODULE VARIASENS
1	W3T441936	E02 Sensor MEASURING MODULE - FC2
1	W3T441938	E02 Sensor MEASURING MODULE - PH
1	W3T391868	ORP MEASUREMENT MODULE

2.5 Chemical Feed Skid

Quantity	MFG Part Number	Description
1	DFXAUS0530SPTLQ100UDC130EN	Metering Pump
7	50021-005 (VIT)	1/2" PVC Type 546 TU Ball Valve
1	PRM2050-P-S	Pressure Relief Valve
1	CC1000-S-S	Calibration Column
1	CKM050VS-PV	Check Valve
1	FI-100-8SV	Flow Indicator
1	TG-25ST100SS-PVC	Pressure Gauge
1	TG-55STB424B100-PVC	Pressure Switch
1	Big Wave Junction Box (Single)	Big Wave Junction Box

2.6 Venturi Sample Recovery

Quantity	MFG Part Number	Description
1	JP13-03-137	Grundfos Sample Pump
1	MAZZ 0484-X PVDF	Mazzei Injector
1	51091G-007	3/4" Check Valve
1	50611-005	1/2" Ball Valve
3	50611-007	3/4" Ball Valve
1	YS075-P-S	Wye Strainer
1	53161-005	Needle Valve

2.7 Chemical Storage Tank

Quantity	MFG Part Number	Description
2	IMT0120X19/X19	120 GAL TANK
2	MK07	7" MANWAY
2	BHPVV200	2" BULKHEAD FOR LEVEL SENSOR
2	BHPVV075	3/4" BULKHEAD CONNECTOIN FOR PUMP SUCTION
2	UVAV8400	4" PVC SCH 80 U-VENT ASSY/VITON

2.8 ProMinent Radar Level Sensor

Quantity	MFG Part Number	Description
2	DULCOLEVEL	Liquid Level Radar Sensor

2.9 Water Heater

Quantity	MFG Part Number	Description
1	AP054480 EFD (EEMAX)	Tankless Electric Water Heater

2.10 Emergency Eyewash & Shower

Quantity	MFG Part Number	Description
1	GFR1902 (GUARDIAN)	Freeze-Resistant Safety Station

3. FCBS (Well Site)

3.1 Orenco Fiberglass Shelter

Quantity	MFG Part Number	Description
1	Park 2024 Chlorine Building 1	Orenco Fiberglass Shelter

3.2 FCBS Control Panel

Quantity	MFG Part Number	Description
1	FP-1S-P1	FCBS Control Panel

3.3 Analyzer

Quantity	MFG Part Number	Description
1	W3T441932	E02 MODULE ELECTRONIC 400 M
1	W3T440611	FLOW CELL MODULE VARIASENS
1	W3T441936	E02 Sensor MEASURING MODULE - FC2
1	W3T441938	E02 Sensor MEASURING MODULE - PH
1	W3T391868	ORP MEASUREMENT MODULE

3.4 Chemical Feed Skid

Quantity	MFG Part Number	Description
1	GMXA1602PVE2Q00UDC0300EN	Gamma X Diaphragm Pump
7	50021-005 (VIT)	1/2" PVC Type 546 TU Ball Valve
1	PRM2050-P-S	Pressure Relief Valve
1	CC1000-S-S	Calibration Column
1	CKM050VS-PV	Check Valve
1	FI-100-8SV	Flow Indicator
1	TG-25ST100SS-PVC	Pressure Gauge
1	TG-55STB424B100-PVC	Pressure Switch
1	BPM050-P-S	Back Pressure Valve
1	PD0012PH01S	Pulsation Dampener
1	Big Wave Junction Box (Single)	Big Wave Junction Box

3.5 Venturi Sample Recovery

Quantity	MFG Part Number	Description
1	ICT0040X19	40 GAL TANK
1	Smart Trak AX23	Flow Line Level Sensor
1	JP13-03-137	Grundfos Sample Pump
1	MAZZ 0484-X PVDF	Mazzei Injector
2	839-101	3/4" X 1/2" MPT x FPT Reducer Bushings
1	51091G-007	3/4" Check Valve
1	50611-005	1/2" Ball Valve
3	50611-007	3/4" Ball Valve
2	3857S-805	1/2" Unions (PVC, EPDM)
1	YS075-P-S	Wye Strainer
1	53161-005	Needle Valve

3.6 Sodium Hypo Tank

Quantity	MFG Part Number	Description
1	IMT0250X19/X19	250 GAL TANK
1	MK07	7" MANWAY
1	BHPVV200	2" BULKHEAD FOR LEVEL SENSOR
1	BHPVV075	3/4" BULKHEAD CONNECTION FOR PUMP SUCTION
1	UVAV8400	4" PVC SCH 80 U-VENT ASSY/VITON
1	DWTDMV100	1" DOUBLE MALE OUTLET

3.7 Prominent Radar Level Sensor

Quantity	MFG Part Number	Description
1	DULCOLEVEL	Liquid Level Radar Sensor

3.8 Water Heater

Quantity	MFG Part Number	Description
1	AP054480 EFD (EEMAX)	Tankless Electric Water Heater

3.9 Emergency Eyewash & Shower

Quantity	MFG Part Number	Description
1	GFR1902 (GUARDIAN)	Freeze-Resistant Safety Station

3.10 Static Flow Mixer

Quantity	MFG Part Number	Description
1	8-10S-3-3-7.I(.50)	8" KOFLO Static Mixer
1	QR-.5S-.5PV-4.5	KOFLO Injection Quill

Section 2

Skids



CHEMICAL FEED SKIDS



High Quality Skids for all Water and Wastewater Applications

(760) 722-6893

www.dandhwatersystems.com

Our chemical feed skids are engineered from the highest quality materials and are completely customizable to meet any specification. Our skids are designed for simple installation and are operator friendly with easy component access. All chemical feed skids are pressure tested prior to leaving the factory and guaranteed to be leak-free.

STANDARD FEATURES

- Single, dual, and triple pump systems
- Manufactured from marine grade high density polyethylene with 100% UV inhibitor
- Built-in spill containment
- Socket welded joints and unions
- 5 year leak free warranty

STANDARD COMPONENTS

- Pressure Relief Valve
- Check Valve
- Flow Indicator
- Calibration Cylinder
- Pressure Gauge

OPTIONAL COMPONENTS

- Inlet Y Strainer
- Pulsation Dampener
- Flow Verification Sensor
- Flow Meters
- Pressure Switch





CUSTOMIZABLE OPTIONS

- Size (height x width)
- Custom control panels
- Piping material (PVC, CPVC, PFA, PTFE)
- Mounting options
- Doors, covers, enclosures
- Product manufacturer preference
- Standard or customer preferred accessories



PRODUCT APPLICATIONS

Aluminum Sulfate (Alum), Ammonium Sulfate (LAS), Brine Solutions, Calcium Hypochlorite 20%, Ferric Chloride, Hypochlorous Acid, Sodium Hydroxide 50%, Sodium Bisulfite, Sodium Hypochlorite 12.5%, Sulfuric Acid up to 98%, and more

ProMinent®



**Blue-White®
Industries, Ltd.**



+GF+



HAYWARD®

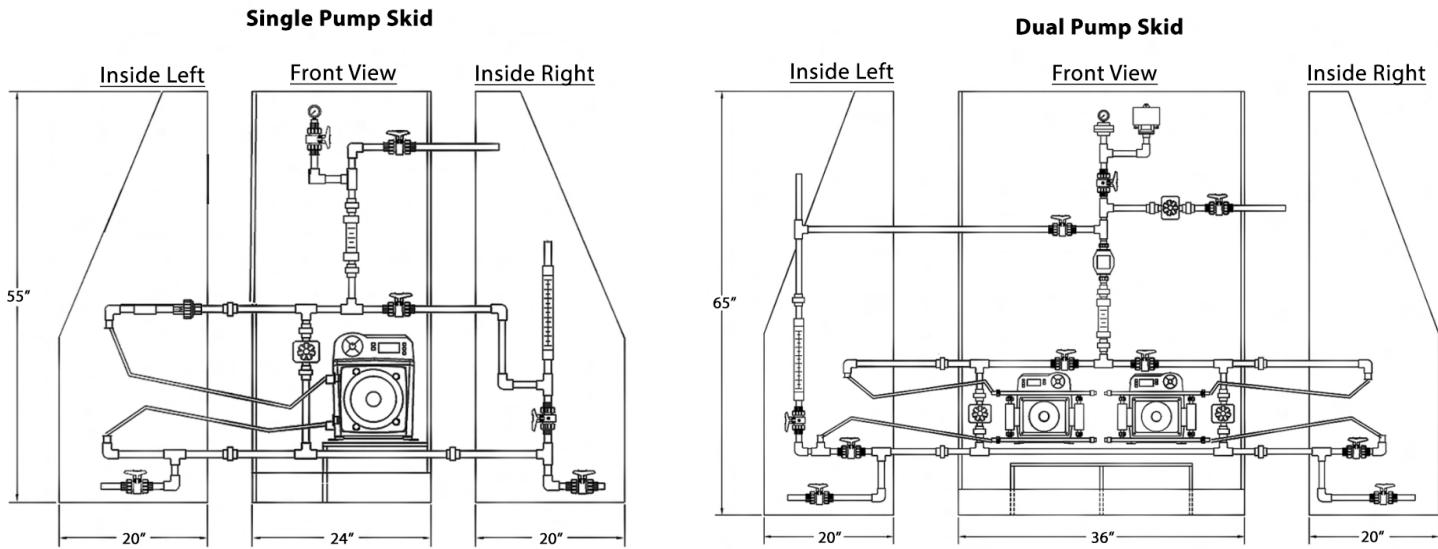


STANDARD SKID SPECIFICATIONS

STANDARD DIMENSIONS:

Single pump skid: 24" (w) x 55" (h) x 20" (d)

Dual pump skid: 36" (w) x 65" (h) x 20" (d) - 24" (d) with larger pumps)



PIPING: SCH80 PVC or CPVC - other materials are available upon request

UNIONS: PVC body, SCH80, Viton or EPDM seals

BALL VALVES: True union ball, PVC body, PTFE shaft bearings and seats, Viton or EPDM seals

PRESSURE RELIEF VALVE: Built-in pressure relief for safety to prevent system over-pressurization

CHECK VALVE: Protects the pump and user from back-flow

FLOW INDICATOR: Machine cast acrylic, PVC connection, ceramic ball, polypropylene ball stop, polypropylene half unions, Viton or EPDM seals

CALIBRATION CYLINDER: Polypropylene, PVC, or glass cylinders

PRESSURE GAUGE: Liquid filled, stainless steel, optional guards

MAXIMUM WORKING PRESSURE: 175 PSI (MC-2/MC-3)

OPERATING TEMPERATURES: 14F to 115F (-10C to 45C)