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RECORD NO.	REV. No.	TAG NAME	DESCRIPTION		MANUFACTURER	MODEL	POWER SUPPLY	CALIBRATED RANGE	MOUNTING	SUPPLIED BY	INSTALLED BY	COMMENTS	SPEC. DATA SHEET	P&ID DRAWING	INSTRUMENT LOOP DIA.	INSTALL-ATION DETAIL	LOCATION DWG.
			INSTRUMENT TYPE	SERVICE													
0001	0	FE-J001A	Flow Element	Softened Water Flow to Salt Saturators and Electrolysers	ABB	Magmaster		-25 to +130°C	Flange	Supply Contractor	Contractor	50 mm	Refer to shop drawings	CPG0465-I-01 Sheet 4	WB-A0453	WB-A0453	CPG0465-ML-01 Sheet 1
0002	0	FT-J001A	Flow Transmitter	Softened Water Flow to Salt Saturators and Electrolysers	ABB	Magmaster	120V	-25 to +130°C	Wall/Stand	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4	WB-A0453	WB-A0402	CPG0465-ML-01 Sheet 1
0003	0	AE-J001B	Analyser Element	Softened Water Hardness Monitor	Hach	SP-510	120V/60Hz/18W	5 to 40°C	Wall	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0004	0	AT-J001B	Analyser Indicator Transmitter	Softened Water Hardness Monitor	Hach	SP-510	120V/60Hz/18W	5 to 40°C	Wall	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0005	0	TE-J003A	Temperature Element	Softened Water to Electrolyser Temperature					Thermowell	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0006	0	TI-J003A	Temperature Indicator	Softened Water to Electrolyser Temperature						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0007	0	TT-J003A	Temperature Transmitter	Softened Water to Electrolysers Temperature						Supply Contractor	Contractor	Head mounted indicator/transmitter	Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0008	0	LE-J100A	Level Element	Salt Saturator TK-J100A Brine Level					Flange	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4	WB-A0455	WB-A0401	CPG0465-ML-01 Sheet 1
0009	0	LI-J100A	Level Indicator	Salt Saturator TK-J100A Brine Level						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0010	0	LT-J100A	Level Indicator Transmitter	Salt Saturator TK-J100A Brine Level			120V	TBC	Wall/ Stand	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0011	0	SOL-J100A	Solenoid Actuator	Softened Water Flow Control Valve to Salt Saturator TK-J100A						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0012	0	TE-J100A	Temperature Element	Salt Saturator TK-J100A Temperature						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0013	0	TT-J100A	Temperature Transmitter	Salt Saturator TK-J100A Temperature						Supply Contractor	Contractor	Head mounted indicator/transmitter	Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0014	0	LE-J100B	Level Element	Salt Saturator TK-J100A Salt Level	BinMaster	Smart Bob II			Flange	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4	WB-A0455	WB-A0401	CPG0465-ML-01 Sheet 1
0015	0	LI-J100B	Level Indicator	Salt Saturator TK-J100A Salt Level	BinMaster	Smart Bob II				Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0016	0	LT-J100B	Level Transmitter	Salt Saturator TK-J100A Salt Level	BinMaster	Smart Bob II	120V	TBC	Wall/ Stand	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0017	0	XA-J100A	Gas Alarm	Hydrogen Gas Detected Warning Lamp			120V			Supply Contractor	Contractor	Mounted at door of Hypochlorite Generation Room	Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0018	0	LE-J200A	Level Element	Salt Saturator TK-J200A Brine Level					Flange	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4	WB-A0455	WB-A0401	CPG0465-ML-01 Sheet 1
0019	0	LI-J200A	Level Indicator	Salt Saturator TK-J200A Brine Level						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0020	0	LT-J200A	Level Indicator Transmitter	Salt Saturator TK-J200A Brine Level			120V	TBC	Wall/ Stand	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0021	0	SOL-J200A	Solenoid Actuator	Softened Water Flow Control Valve to Salt Saturator TK-J200A						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0022	0	TE-J200A	Temperature Element	Salt Saturator TK-J200A Temperature						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0023	0	TT-J200A	Temperature Transmitter	Salt Saturator TK-J200A Temperature						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0024	0	LE-J200B	Level Element	Salt Saturator TK-J200A Salt Level					Flange	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4	WB-A0455	WB-A0401	CPG0465-ML-01 Sheet 1
0025	0	LI-J200B	Level Indicator	Salt Saturator TK-J200A Salt Level						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1
0026	0	LT-J200B	Level Indicator Transmitter	Salt Saturator TK-J200A Salt Level			120V	TBC	Wall/ Stand	Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 4			CPG0465-ML-01 Sheet 1

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			INSTRUMENT TYPE	SERVICE													
0027	0	FT-J400A	Flow Indicator	Softened Water Flow to Electrolyser EL-J400A					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0028	0	FT-J400B	Flow Switch	Softened Water Low Flow to Electrolyser EL-J400B					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0029	0	PI-J400A	Pressure Indicator	Softened Water Pressure to Electrolyser EL-J400A					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0030	0	PS-J400A	Pressure Switch	Brine Solution to Electrolyser EL-J400A High Pressure Alarm					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0031	0	SOL-J400A	Solenoid Actuator	Softened Water to Electrolyser ELC-J400A Control Valve Solenoid Operator					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0032	0	FS-J400C	Flow Switch	Electrolyser ELC-J400A/B Pressure Relief Valve Operating					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0033	0	PS-J400B	Pressure Switch	Electrolyser EL-J400A/B Rupture Disc Burst					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0034	0	TS-J400B	Temperature Switch	Electrolytic Cell ELC-J400B High Temperature Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0035	0	TS-J400C	Temperature Switch	Electrolytic Cell ELC-J400A High Temperature Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0036	0	LS-J400A	Level Switch	Electrolytic Cell ELC-J400A High Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0037	0	LS-J400B	Level Switch	Electrolytic Cell ELC-J400B High Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0038	0	TS-J400A	Temperature Switch	Electrolyser Rectifier RT-J400A High Temperature					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0039	0	FT-J420A	Flow Indicator	Softened Water Flow to Electrolyser EL-J420A					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0040	0	FT-J420B	Flow Switch	Softened Water Low Flow to Electrolyser EL-J420B					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0041	0	PI-J420A	Pressure Indicator	Softened Water Pressure to Electrolyser EL-J420A					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0042	0	PS-J420A	Pressure Switch	Brine Solution to Electrolyser EL-J420A High Pressure Alarm					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0043	0	SOL-J420A	Solenoid Actuator	Softened Water to Electrolyser ELC-J420A Control Valve Solenoid Operator					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0044	0	FS-J420C	Flow Switch	Electrolyser ELC-J420A/B Pressure Relief Valve Operating					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1

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			INSTRUMENT TYPE	SERVICE													
0045	0	PS-J420B	Pressure Switch	Electrolyser EL-J420A/B Rupture Disc Burst					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0046	0	TS-J420B	Temperature Switch	Electrolytic Cell ELC-J420B High Temperature Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0047	0	TS-J420C	Temperature Switch	Electrolytic Cell ELC-J420A High Temperature Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0048	0	LS-J420A	Level Switch	Electrolytic Cell ELC-J420A High Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0049	0	LS-J420B	Level Switch	Electrolytic Cell ELC-J420B High Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0050	0	TS-J420A	Temperature Switch	Electrolyser Rectifier RT-J420A High Temperature					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0051	0	FT-J440A	Flow Indicator	Softened Water Flow to Electrolyser EL-J440A					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0052	0	FT-J440B	Flow Switch	Softened Water Low Flow to Electrolyser EL-J440B					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0053	0	PI-J440A	Pressure Indicator	Softened Water Pressure to Electrolyser EL-J440A					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0054	0	PS-J440A	Pressure Switch	Brine Solution to Electrolyser EL-J440A High Pressure Alarm					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0055	0	SOL-J440A	Solenoid Actuator	Softened Water to Electrolyser ELC-J440A Control Valve Solenoid Operator					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0056	0	FS-J440C	Flow Switch	Electrolyser ELC-J440A/B Pressure Relief Valve Operating					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0057	0	PS-J440B	Pressure Switch	Electrolyser EL-J440A/B Rupture Disc Burst					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0058	0	TS-J440B	Temperature Switch	Electrolytic Cell ELC-J440B High Temperature Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0059	0	TS-J440C	Temperature Switch	Electrolytic Cell ELC-J440A High Temperature Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0060	0	LS-J440A	Level Switch	Electrolytic Cell ELC-J440A High Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0061	0	LS-J440B	Level Switch	Electrolytic Cell ELC-J440B High Level					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0062	0	TS-J440A	Temperature Switch	Electrolyser Rectifier RT-J440A High Temperature					skid	Supply Contractor	Supply Contractor	Pre-wired to skid mounted non intrinsically safe junction box	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1

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			INSTRUMENT TYPE	SERVICE														
0063	0	GI-J450A	Gas Indicator	Sodium Hypochlorite Generation Room Gas Detection						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1	
0064	0	GE-J450A	Gas Element	Sodium Hypochlorite Generation Room Gas Detection						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1	
0065	0	GT-J450A	Gas Transmitter	Sodium Hypochlorite Generation Room Gas Detection						Supply Contractor	Contractor		Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1	
0066	1	GI-J450B	Gas Indicator	Sodium Hypochlorite Generation Room Gas Detection	Crowcon	Flamgard Plus	24V DC				Contractor	Contractor	These units are to be identical to those provided by Supply Contractor	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0067	1	GE-J450B	Gas Element	Sodium Hypochlorite Generation Room Gas Detection	Crowcon	Flamgard Plus	24V DC				Contractor	Contractor	These units are to be identical to those provided by Supply Contractor	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0068	1	GT-J450B	Gas Transmitter	Sodium Hypochlorite Generation Room Gas Detection	Crowcon	Flamgard Plus	24V DC				Contractor	Contractor	These units are to be identical to those provided by Supply Contractor	Refer to shop drawings	CPG0465-I-01 Sheet 5			CPG0465-ML-01 Sheet 1
0069	0																	CPG0465-ML-01 Sheet 1
0070	0	FS-J450A	Flow Switch	Stand PipeBlower BLW-J450A Low Air Flow						Supply Contractor	Contractor	Wired to intrinsically safe junction box JB-J405A		CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0071	0	PS-J450A	Pressure Switch	Stand Pipe Blower BLW-J450A High Differential Pressure						Supply Contractor	Contractor	Wired to intrinsically safe junction box JB-J405A		CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0072	0	FI-J002A	Flow Indicator	Softened Water to Sodium Hypochlorite Blending Station Flow										CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0073	0	FI-J481A	Flow Indicator	12% Bulk Hypochlorite to Sodium Hypochlorite Blending Station Flow										CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0074	0	FS-J500A	Flow Switch	Sodium Hypochlorite Storage Tank TK-J500A Ventilation Flow Low						Supply Contractor	Contractor	Wired to intrinsically safe junction box JB-J500A		CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0075	0	PS-J500A	Pressure Switch	Sodium Hypochlorite Storage Tank TK-J500A Ventilation Differential Pressure High						Supply Contractor	Contractor	Wired to intrinsically safe junction box JB-J500A		CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0076	0	LE-J500A	Level Element	Sodium Hypochlorite Storage Tank TK-J500A Level					Flange	Supply Contractor	Contractor			CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0077	0	LI-J500A	Level Indicator	Sodium Hypochlorite Storage Tank TK-J500A Level						Supply Contractor	Contractor			CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0078	0	LT-J500A	Level Transmitter	Sodium Hypochlorite Storage Tank TK-J500A Level			120V	TBC	Wall/ Stand	Supply Contractor	Contractor			CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0079	0	GI-J550A	Gas Indicator	Sodium Hypochlorite Gas Detection						Supply Contractor	Contractor			CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0080	0	GE-J550A	Gas Element	Sodium Hypochlorite Gas Detection						Supply Contractor	Contractor			CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0081	0	GT-J550A	Gas Transmitter	Sodium Hypochlorite Gas Detection						Supply Contractor	Contractor			CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1	
0082	0	FS-J520A	Flow Switch	Sodium Hypochlorite Storage Tank TK-J520A Ventilation Flow Low						Supply Contractor	Contractor	Wired to intrinsically safe junction box JB-J520A		CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1	
0083	0	PS-J520A	Pressure Switch	Sodium Hypochlorite Storage Tank TK-J520A Ventilation Differential Pressure High						Supply Contractor	Contractor	Wired to intrinsically safe junction box JB-J520A		CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1	
0084	0	LE-J520A	Level Element	Sodium Hypochlorite Storage Tank TK-J520A Level					Flange	Supply Contractor	Contractor			CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1	
0085	0	LI-J520A	Level Indicator	Sodium Hypochlorite Storage Tank TK-J520A Level						Supply Contractor	Contractor			CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1	
0086	0	LT-J520A	Level Transmitter	Sodium Hypochlorite Storage Tank TK-J520A Level			120V	TBC	Wall/ Stand	Supply Contractor	Contractor			CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1	

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			INSTRUMENT TYPE	SERVICE													
0087	0	FS-J540A	Flow Switch	Sodium Hypochlorite Storage Tank TK-J540A Ventilation Flow Low						Supply Contractor	Contractor	Wired to intrinsically safe junction box JB-J540A		CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1
0088	0	PS-J540A	Pressure Switch	Sodium Hypochlorite Storage Tank TK-J540A Ventilation Differential Pressure High						Supply Contractor	Contractor	Wired to intrinsically safe junction box JB-J540A		CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0089	0	LE-J540A	Level Element	Sodium Hypochlorite Storage Tank TK-J540A Level					Flange	Supply Contractor	Contractor			CPG0465-I-01 Sheet 6			CPG0465-ML-01 Sheet 1
0090	0	LI-J540A	Level Indicator	Sodium Hypochlorite Storage Tank TK-J540A Level						Supply Contractor	Contractor			CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0091	0	LT-J540A	Level Transmitter	Sodium Hypochlorite Storage Tank TK-J540A Level			120V	TBC	Wall/ Stand	Supply Contractor	Contractor			CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0092	0	FS-J560A	Flow Switch	Sodium Hypochlorite Storage Tank TK-J560A Ventilation Flow Low						Supply Contractor	Contractor	Wired to intrinsically safe junction box JB-J560A		CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0093	0	PS-J560A	Pressure Switch	Sodium Hypochlorite Storage Tank TK-J560A Ventilation Differential Pressure High						Supply Contractor	Contractor	Wired to intrinsically safe junction box JB-J560A		CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0094	0	LE-J560A	Level Element	Sodium Hypochlorite Storage Tank TK-J560A Level					Flange	Supply Contractor	Contractor			CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0095	0	LI-J560A	Level Indicator	Sodium Hypochlorite Storage Tank TK-J560A Level						Supply Contractor	Contractor			CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0096	0	LT-J560A	Level Transmitter	Sodium Hypochlorite Storage Tank TK-J560A Level			120V	TBC	Wall/ Stand	Supply Contractor	Contractor			CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0097	1	GI-J550B	Gas Indicator	Sodium Hypochlorite Gas Detection	Crowcon	Flamgard Plus	24V DC			Contractor	Contractor	These units are to be identical to those provided by Supply Contractor		CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0098	1	GE-J550B	Gas Element	Sodium Hypochlorite Gas Detection	Crowcon	Flamgard Plus	24V DC			Contractor	Contractor	These units are to be identical to those provided by Supply Contractor		CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0099	1	GT-J550B	Gas Transmitter	Sodium Hypochlorite Gas Detection	Crowcon	Flamgard Plus	24V DC			Contractor	Contractor	These units are to be identical to those provided by Supply Contractor		CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0100	0	LS-J550A	Conductivity Level Switch	Sodium Hypochlorite Containmentment Sump High			120V	6mm from floor of containment	Bracket	Supply Contractor	Contractor	To measure any liquid in containment		CPG0465-I-01 Sheet 7			CPG0465-ML-01 Sheet 1
0101	0	ZS-J610A	Position Switch	Pump Revolution on Pump P-J610A					Pump Skid	Supply Contractor	Supply Contractor	Wired to master control panel CP-J11		P-01			
0102	0	LS-J610A	Level Switch	Pump Case Level Switch (Leak Detection)					Pump Skid	Supply Contractor	Supply Contractor			P-01			
0103	0	PI-J610A	Pressure Indicator	Sodium Hypochlorite Pump P-J610A Outlet Pressure Indicator					Pump Skid	Supply Contractor	Supply Contractor			P-01			
0104	0	ZS-J620A	Position Switch	Pump Revolution on Pump P-J620A					Pump Skid	Supply Contractor	Supply Contractor	Wired to master control panel CP-J11		P-01			
0105	0	LS-J620A	Level Switch	Pump Case Level Switch (Leak Detection)					Pump Skid	Supply Contractor	Supply Contractor			P-01			
0106	0	PI-J620A	Pressure Indicator	Sodium Hypochlorite Pump P-J620A Outlet Pressure Indicator					Pump Skid	Supply Contractor	Supply Contractor			P-01			
0107	0	ZS-J640A	Position Switch	Pump Revolution on Pump P-J640A					Pump Skid	Supply Contractor	Supply Contractor	Wired to master control panel CP-J11		P-01			
0108	0	LS-J640A	Level Switch	Pump Case Level Switch (Leak Detection)					Pump Skid	Supply Contractor	Supply Contractor			P-01			
0109	0	PI-J640A	Pressure Indicator	Sodium Hypochlorite Pump P-J640A Outlet Pressure Indicator					Pump Skid	Supply Contractor	Supply Contractor			P-01			
0110	0	ZS-J660A	Position Switch	Pump Revolution on Pump P-J650A					Pump Skid	Supply Contractor	Supply Contractor	Wired to master control panel CP-J11		P-01			
0111	0	LS-J660A	Level Switch	Pump Case Level Switch (Leak Detection)					Pump Skid	Supply Contractor	Supply Contractor			P-01			
0112	0	PI-J660A	Pressure Indicator	Sodium Hypochlorite Pump P-J660A Outlet Pressure Indicator					Pump Skid	Supply Contractor	Supply Contractor			P-01			
0113	0	FE-J610A	Flow Element	Sodium Hypochlorite to Chlorine Contact Tank Influent Flow					Flange	Supply Contractor	Supply Contractor	50 mm		P-01			
0114	0	FI-J610A	Flow Indicator	Sodium Hypochlorite to Chlorine Contact Tank Influent Flow						Supply Contractor	Supply Contractor			P-01			
0115	0	FT-J610A	Flow Transmitter	Sodium Hypochlorite to Chlorine Contact Tank Influent Flow					Wall/ Stand	Supply Contractor	Supply Contractor			P-01			
0116	0	FE-J640A	Flow Element	Sodium Hypochlorite to Filtered Water Channel Flow					Flange	Supply Contractor	Supply Contractor	50 mm		P-01		WB-A0453	

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RECORD NO.	REV. No.	TAG NAME	DESCRIPTION		MANUFACTURER	MODEL	POWER SUPPLY	CALIBRATED RANGE	MOUNTING	SUPPLIED BY	INSTALLED BY	COMMENTS	SPEC. DATA SHEET	P&ID DRAWING	INSTRUMENT LOOP DIA.	INSTALL-ATION DETAIL	LOCATION DWG.
			INSTRUMENT TYPE	SERVICE													
0117	0	FI-J640A	Flow Indicator	Sodium Hypochlorite to Filtered Water Channel Flow						Supply Contractor	Supply Contractor			P-01			
0118	0	FT-J640A	Flow Transmitter	Sodium Hypochlorite to Filtered Water Channel Flow					Wall/ Stand	Supply Contractor	Supply Contractor			P-01			
0119	0																
0120	0																
0121	0																
0122	0	PI-S200A	Pressure Indicator	Rail Car Unloading Compressed Air Pressure				0-345 Kpa		Contractor	Contractor			WS-P0001			
0123	0	SOL-S200A	Solenoid Actuator	Rail Car Unloading Compressed Air Supply Control Valve			120VAC			Contractor	Contractor			WS-P0001			
0124	0	LCP-S200A	Local Control Panel	Bulk Sulphuric Acid Storage Tank TK-S210A & TK-S220A Rail Car Fill Control Panel						Contractor	Contractor			WS-P0001			
	1	LA-S200A	Audible Alarm	Bulk Sulphuric Acid Storage Tank High Level Alarm Rail Car Fill Side	Tork Alert or similar		120VAC			Contractor	Contractor			WS-P0001			
0125	0	PI-S204A	Pressure Indicator	Truck Unloading Compressed Air Pressure				0-345 Kpa		Contractor	Contractor			WS-P0001			
0126	0	SOL-S204A	Solenoid Actuator	Truck Unloading Compressed Air Supply Control Valve			120VAC			Contractor	Contractor			WS-P0001			
0127	0	SOL-S204B	Solenoid Actuator	Truck Unloading Compressed Air Purge Control Valve			120VAC			Contractor	Contractor			WS-P0001			
0128	0	FS-S750A	Flow Switch	Rail Car Unloading Emergency Shower Operating						Contractor	Contractor		I105	WS-P0001			
0129	0	FS-S758A	Flow Switch	Truck Unloading Emergency Shower Operating						Contractor	Contractor		I105	WS-P0001			
0130	0	LCP-S204A	Local Control Panel	Bulk Sulphuric Acid Storage Tank TK-S210A & TK-S220A Truck Fill Control Panel						Contractor	Contractor			WS-P0001			
	1	LA-S204A	Audible Alarm	Bulk Sulphuric Acid Storage Tank High Level Alarm Truck Fill Side	Tork Alert or similar		120VAC			Contractor	Contractor			WS-P0001			
0131	0	LI-S210B	Remote Indicator	Bulk Sulphuric Acid Storage Tank TK-S210A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0001			
0132	0	LI-S210C	Remote Indicator	Bulk Sulphuric Acid Storage Tank TK-S210A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0001			
0133	0	LI-S220B	Remote Indicator	Bulk Sulphuric Acid Storage Tank TK-S220A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0001			
0134	0	LI-S220C	Remote Indicator	Bulk Sulphuric Acid Storage Tank TK-S220A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0001			
0135	0	LS-S206A	Level Switch	Chemical Delivery Spill Catchment Manhole High Level			120VAC	6mm from floor of containment	Bracket	Contractor	Contractor	To measure any liquid in containment	I126	WS-P0001			
0136	0	LT-S210A	Level Transmitter	Bulk Sulphuric Acid Storage Tank TK-S210A Level			120VAC		Wall/ Stand	Contractor	Contractor		I120	WS-P0002	WB-A0455		
0137	0	LI-S210A	Level Indicator	Bulk Sulphuric Acid Storage Tank TK-S210A Level						Contractor	Contractor		I120	WS-P0002	WB-A0455		
0138	0	LE-S210A	Level Element	Bulk Sulphuric Acid Storage Tank TK-S210A Level					Flange	Contractor	Contractor		I120	WS-P0002	WB-A0455		
0139	0	PT-S210A	Pressure Transmitter	Bulk Sulphuric Acid Storage Tank TK-S210A Level			24vdc		Flange	Contractor	Contractor		I111	WS-P0002			
0140	0	LT-S220A	Level Transmitter	Bulk Sulphuric Acid Storage Tank TK-S220A Level			120VAC		Wall/ Stand	Contractor	Contractor		I120	WS-P0002	WB-A0455		
0141	0	LI-S220A	Level Indicator	Bulk Sulphuric Acid Storage Tank TK-S220A Level						Contractor	Contractor		I120	WS-P0002	WB-A0455		
0142	0	LE-S220A	Level Element	Bulk Sulphuric Acid Storage Tank TK-S220A Level						Contractor	Contractor		I120	WS-P0002	WB-A0455		
0143	0	PT-S220A	Pressure Transmitter	Bulk Sulphuric Acid Storage Tank TK-S220A Level			24vdc		Flange	Contractor	Contractor		I111	WS-P0002			
0144	0	FS-S755A	Flow Switch	Bulk Sulphuric Acid Storage Room Emergency Shower Operating						Contractor	Contractor		I105	WS-P0002			
0145	0	PI-S230A	Pressure Indicator	Sulphuric Acid Feed Pump P-S230A Outlet Pressure				0-300 Kpa		Contractor	Contractor			WS-P0003			
0146	0	FT-S235A	Flow Transmitter	Sulphuric Acid Feed Pump P-S230A Discharge Flow			120VAC		Wall/ Stand	Contractor	Contractor		I100A	WS-P0003	WB-A0453	WB-A0453	
0147	0	FI-S235A	Flow Indicator	Sulphuric Acid Feed Pump P-S230A Discharge Flow						Contractor	Contractor		I100A	WS-P0003	WB-A0453	WB-A0453	
0148	0	FE-S235A	Flow Element	Sulphuric Acid Feed Pump P-S230A Discharge Flow				0-5 ltr/min	Flange	Contractor	Contractor	Size to be determined by pump skid designer	I100A	WS-P0003	WB-A0453	WB-A0453	
0149	0	PI-S240A	Pressure Indicator	Sulphuric Acid Feed Pump P-S240A Outlet Pressure				0-300 Kpa		Contractor	Contractor			WS-P0003			
0150	0	PI-S250A	Pressure Indicator	Sulphuric Acid Feed Pump P-S250A Outlet Pressure				0-300 Kpa		Contractor	Contractor			WS-P0003			
0151	0	FT-S250A	Flow Transmitter	Sulphuric Acid Feed Pump P-S250A Discharge Flow			120VAC		Wall/ Stand	Contractor	Contractor		I100A	WS-P0003	WB-A0453	WB-A0453	
0152	0	FI-S250A	Flow Indicator	Sulphuric Acid Feed Pump P-S250A Discharge Flow						Contractor	Contractor		I100A	WS-P0003	WB-A0453	WB-A0453	
0153	0	FE-S250A	Flow Element	Sulphuric Acid Feed Pump P-S250A Discharge Flow				0-5 ltr/min	Flange	Contractor	Contractor	Size to be determined by pump skid designer	I100A	WS-P0003	WB-A0453	WB-A0453	
0154	0	LS-S260A	Level Switch	Bulk Sulphuric Acid Spill Containment High Level				6mm from floor of containment		Contractor	Contractor	To measure any liquid in containment	I126	WS-P0003	WB-A0458		
0155	0	LA-S260B	Level Alarm	Bulk Sulphuric Acid Containment High Level Visual Alarm Mounted Outside Door to Room			120VAC			Contractor	Contractor	Warning lamp mounted outside room above door		WS-P0002			
0156	0	LS-S260B	Level Switch	Bulk Sulphuric Acid Spill Containment (North Sump) High Level				6mm from floor of containment		Contractor	Contractor	To measure any liquid in containment	I126	WS-P0003	WB-A0458		
0157	0	PI-S100A	Pressure Indicator	Rail Car Unloading Compressed Air Pressure				0-370 Kpa		Contractor	Contractor			WS-P0004			

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RECORD NO.	REV. No.	TAG NAME	DESCRIPTION		MANUFACTURER	MODEL	POWER SUPPLY	CALIBRATED RANGE	MOUNTING	SUPPLIED BY	INSTALLED BY	COMMENTS	SPEC. DATA SHEET	P&ID DRAWING	INSTRUMENT LOOP DIA.	INSTALL-ATION DETAIL	LOCATION DWG.
			INSTRUMENT TYPE	SERVICE													
0158	0	SOL-S100A	Solenoid Actuator	Rail Car Unloading Compressed Air Supply Control Valve						Contractor	Contractor			WS-P0004			
0159	0	LCP-S100A	Local Control Panel	Bulk Ferric Chloride Storage Tanks TK-S110A, TK-S120A, TK-S130A, TK-S140A Rail Car Fill Control Panel						Contractor	Contractor			WS-P0004			
	1	LA-S100A	Audible Alarm	Bulk Ferric Chloride Storage Tank High Level Alarm Rail Car Side	Tork Alert or similar		120VAC			Contractor	Contractor			WS-P0004			
0160	0	PI-S105A	Pressure Indicator	Truck Unloading Compressed Air Pressure			0-370 Kpa			Contractor	Contractor			WS-P0004			
0161	0	SOL-S105A	Solenoid Actuator	Truck Unloading Compressed Air Supply Control Valve						Contractor	Contractor			WS-P0004			
0162	0	SOL-S105B	Solenoid Actuator	Truck Unloading Compressed Air Purge Control Valve						Contractor	Contractor			WS-P0004			
0163	0	LCP-S201C	Local Control Panel	Bulk Ferric Chloride Storage Tank TK-S110A, TK-S120A, TK-S130A, TK-S140A Truck Fill Control Panel						Contractor	Contractor			WS-P0004			
	1	LA-S105A	Audible Alarm	Bulk Ferric Chloride Storage Tank High Level Alarm Truck Fill Side	Tork Alert or similar		120VAC			Contractor	Contractor			WS-P0004			
0164	0	FS-S751A	Flow Switch	Rail Car Unloading Emergency Shower Operating						Contractor	Contractor		I105	WS-P0004			
0165	0	LI-S110B	Remote Indicator	Bulk Ferric Chloride Storage Tank TK-S110A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0004			
0166	0	LI-S110C	Remote Indicator	Bulk Ferric Chloride Storage Tank TK-S110A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0004			
0167	0	LI-S120B	Remote Indicator	Bulk Ferric Chloride Storage Tank TK-S120A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0004			
0168	0	LI-S120C	Remote Indicator	Bulk Ferric Chloride Storage Tank TK-S120A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0004			
0169	0	LI-S130B	Remote Indicator	Bulk Ferric Chloride Storage Tank TK-S130A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0004			
0170	0	LI-S130C	Remote Indicator	Bulk Ferric Chloride Storage Tank TK-S130A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0004			
0171	0	LI-S140B	Remote Indicator	Bulk Ferric Chloride Storage Tank TK-S140A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0004			
0172	0	LI-S140C	Remote Indicator	Bulk Ferric Chloride Storage Tank TK-S140A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0004			
0173	0	LT-S110A	Level Transmitter	Bulk Ferric Chloride Storage Tank TK-S110A Level			120VAC	0-8 mtrs	Wall/ Stand	Contractor	Contractor		I120	WS-P0005	WB-A0455		
0174	0	LI-S110A	Level Indicator	Bulk Ferric Chloride Storage Tank TK-S110A Level						Contractor	Contractor		I120	WS-P0005	WB-A0455		
0175	0	LE-S110A	Level Element	Bulk Ferric Chloride Storage Tank TK-S110A Level					Flange	Contractor	Contractor		I120	WS-P0005	WB-A0455		
0176	0	PT-S110A	Pressure Transmitter	Bulk Ferric Chloride Storage Tank TK-S110A Level			24vdc		Flange	Contractor	Contractor		I111	WS-P0005			
0177	0	LT-S120A	Level Transmitter	Bulk Ferric Chloride Storage Tank TK-S120A Level			120VAC	0-8 mtrs	Wall/ Stand	Contractor	Contractor		I120	WS-P0005	WB-A0455		
0178	0	LI-S120A	Level Indicator	Bulk Ferric Chloride Storage Tank TK-S120A Level						Contractor	Contractor		I120	WS-P0005	WB-A0455		
0179	0	LE-S120A	Level Element	Bulk Ferric Chloride Storage Tank TK-S120A Level					Flange	Contractor	Contractor		I120	WS-P0005	WB-A0455		
0180	0	PT-S120A	Pressure Transmitter	Bulk Ferric Chloride Storage Tank TK-S120A Level			24vdc		Flange	Contractor	Contractor		I111	WS-P0005			
0181	0	LT-S130A	Level Transmitter	Bulk Ferric Chloride Storage Tank TK-S130A Level			120VAC	0-8 mtrs	Wall/ Stand	Contractor	Contractor		I120	WS-P0006	WB-A0455		
0182	0	LI-S130A	Level Indicator	Bulk Ferric Chloride Storage Tank TK-S130A Level						Contractor	Contractor		I120	WS-P0006	WB-A0455		
0183	0	LE-S130A	Level Element	Bulk Ferric Chloride Storage Tank TK-S130A Level					Flange	Contractor	Contractor		I120	WS-P0006	WB-A0455		
0184	0	PT-S130A	Pressure Transmitter	Bulk Ferric Chloride Storage Tank TK-S130A Level			24vdc	0-8 mtrs	Flange	Contractor	Contractor		I111	WS-P0006			
0185	0	LT-S140A	Level Transmitter	Bulk Ferric Chloride Storage Tank TK-S140A Level			120VAC	0-8 mtrs	Wall/ Stand	Contractor	Contractor		I120	WS-P0006	WB-A0455		
0186	0	LI-S140A	Level Indicator	Bulk Ferric Chloride Storage Tank TK-S140A Level						Contractor	Contractor		I120	WS-P0006	WB-A0455		
0187	0	LE-S140A	Level Element	Bulk Ferric Chloride Storage Tank TK-S140A Level					Flange	Contractor	Contractor		I120	WS-P0006	WB-A0455		
0188	0	PT-S140A	Pressure Transmitter	Bulk Ferric Chloride Storage Tank TK-S140A Level			24vdc	0-8 mtrs	Flange	Contractor	Contractor		I111	WS-P0006			
0189	0	PI-S160A	Pressure Indicator	Ferric Chloride Feed Pump P-S160A Outlet Pressure				0-300 Kpa		Contractor	Contractor			WS-P0007			
0190	0	FT-S165A	Flow Transmitter	Ferric Chloride Feed Pump P-S160A Discharge Flow					Wall/ Stand	Contractor	Contractor		I100B	WS-P0007	WB-A0453	WB-A0453	
0191	0	FI-S165A	Flow Indicator	Ferric Chloride Feed Pump P-S160A Discharge Flow						Contractor	Contractor		I100B	WS-P0007	WB-A0453	WB-A0453	
0192	0	FE-S165A	Flow Element	Ferric Chloride Feed Pump P-S160A Discharge Flow				0-15 ltr/min	Flange	Contractor	Contractor	Size to be determined by pump skid designer	I100B	WS-P0007	WB-A0453	WB-A0453	
0193	0	PI-S170A	Pressure Indicator	Ferric Chloride Feed Pump P-S170A Outlet Pressure				0-300 Kpa		Contractor	Contractor			WS-P0007			
0194	0	PI-S180A	Pressure Indicator	Ferric Chloride Feed Pump P-S180A Outlet Pressure				0-300 Kpa		Contractor	Contractor			WS-P0007			
0195	0	FT-S185A	Flow Transmitter	Ferric Chloride Feed Pump P-S180A Discharge Flow					Wall/ Stand	Contractor	Contractor		I100B	WS-P0007	WB-A0453	WB-A0453	
0196	0	FI-S185A	Flow Indicator	Ferric Chloride Feed Pump P-S180A Discharge Flow						Contractor	Contractor		I100B	WS-P0007	WB-A0453	WB-A0453	
0197	0	FE-S185A	Flow Element	Ferric Chloride Feed Pump P-S180A Discharge Flow				0-15 ltr/min	Flange	Contractor	Contractor	Size to be determined by pump skid designer	I100B	WS-P0007	WB-A0453	WB-A0453	
0198	0	LS-S190A	Level Switch	Ferric Chloride Containment Level High				6mm from floor of containment		Contractor	Contractor	To measure any liquid in containment	I126	WS-P0007	WB-A0458		
0199	0	LA-S190B	Level Alarm	Bulk Ferric Chloride Containment High Level			120VAC			Contractor	Contractor	Warning lamp mounted outside room above door		WS-P0006			
0200	0	LS-S190B	Level Switch	Ferric Chloride Containment (North Sump) Level High				6mm from floor of containment		Contractor	Contractor	To measure any liquid in containment	I126	WS-P0007	WB-A0458		

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RECORD NO.	REV. No.	TAG NAME	DESCRIPTION		MANUFACTURER	MODEL	POWER SUPPLY	CALIBRATED RANGE	MOUNTING	SUPPLIED BY	INSTALLED BY	COMMENTS	SPEC. DATA SHEET	P&ID DRAWING	INSTRUMENT LOOP DIA.	INSTALL-ATION DETAIL	LOCATION DWG.
			INSTRUMENT TYPE	SERVICE													
0201	0	PI-S307A	Pressure Indicator	Truck Unloading Compressed Air Pressure				0-370 Kpa		Contractor	Contractor			WS-P0008			
0202	0	PI-S300A	Pressure Indicator	Rail Car Unloading Compressed Air Pressure				0-370 Kpa		Contractor	Contractor			WS-P0008			
0203	0	SOL-S300A	Solenoid Actuator	Rail Car Unloading Compressed Air Supply Control Valve			120VAC			Contractor	Contractor			WS-P0008			
0204	0	SOL-S300B	Solenoid Actuator	Rail Car Unloading Compressed Air Purge Control Valve			120VAC			Contractor	Contractor			WS-P0008			
0205	0	LCP-S301A	Local Control Panel	Sodium Hydroxide Storage Tanks TK-S310A, TK-S320A, TK-S330A, TK-S340A Rail Car Fill Control Panel			120VAC			Contractor	Contractor			WS-P0008			
	1	LA-S300A	Audible Alarm	Sodium Hydroxide Storage Tank High Level Alarm Rail Car Side	Tork Alert or similar		120VAC			Contractor	Contractor			WS-P0008			
0206	0	SOL-S307A	Solenoid Actuator	Truck Unloading Compressed Air Supply Control Valve			120VAC			Contractor	Contractor			WS-P0008			
0207	0	LCP-S307A	Local Control Panel	Sodium Hydroxide Storage Tanks TK-S310A, TK-S320A, TK-S330A, TK-S340A Truck Fill Control Panel						Contractor	Contractor			WS-P0008			
	1	LA-S07A	Audible Alarm	Sodium Hydroxide Storage Tank High Level Alarm Truck Fill Side						Contractor	Contractor			WS-P0008			
0208	0	LI-S310B	Remote Indicator	Bulk Sodium Hydroxide Storage Tank TK-S310A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0008			
0209	0	LI-S310C	Remote Indicator	Bulk Sodium Hydroxide Storage Tank TK-S310A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0008			
0210	0	LI-S320B	Remote Indicator	Bulk Sodium Hydroxide Storage Tank TK-S320A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0008			
0211	0	LI-S320C	Remote Indicator	Bulk Sodium Hydroxide Storage Tank TK-S320A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0008			
0212	0	LI-S330B	Remote Indicator	Bulk Sodium Hydroxide Storage Tank TK-S330A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0008			
0213	0	LI-S330C	Remote Indicator	Bulk Sodium Hydroxide Storage Tank TK-S330A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0008			
0214	0	LI-S340B	Remote Indicator	Bulk Sodium Hydroxide Storage Tank TK-S340A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0008			
0215	0	LI-S340C	Remote Indicator	Bulk Sodium Hydroxide Storage Tank TK-S340A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0008			
0216	0	FS-S759A	Flow Switch	Truck Unloading Emergency Shower Operating						Contractor	Contractor		I105	WS-P0008			
0217	0	LS-S309A	Level Switch	Chemical Delivery Spill Catchment Manhole High Level			120VAC	6mm from floor of containment	Bracket	Contractor	Contractor	To measure any liquid in containment	I126	WS-P0008			
0218	0	TI-S310A	Temperature Indicator	Bulk Sodium Hydroxide Storage Tank TK-S310A Temperature						Contractor	Contractor	Loop powered 3 digit		WS-P0009			
0219	0	TT-S310A	Temperature Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S310A Temperature			24vdc		Thermowell	Contractor	Contractor		I131	WS-P0009			
0220	0	LT-S310A	Level Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S310A Level			120VAC	0-8 mtrs		Contractor	Contractor		I120	WS-P0009	WB-A0455		
0221	0	LI-S310A	Level Indicator	Bulk Sodium Hydroxide Storage Tank TK-S310A Level						Contractor	Contractor		I120	WS-P0009	WB-A0455		
0222	0	LE-S310A	Level Element	Bulk Sodium Hydroxide Storage Tank TK-S310A Level					Flange	Contractor	Contractor		I120	WS-P0009	WB-A0455		
0223	0	PT-S310A	Pressure Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S310A Level			24vdc	0-8 mtrs		Contractor	Contractor		I111	WS-P0009			
0224	0	TI-S320A	Temperature Indicator	Bulk Sodium Hydroxide Storage Tank TK-S320A Temperature						Contractor	Contractor	Loop powered 3 digit		WS-P0009			
0225	0	TT-S320A	Temperature Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S320A Temperature			24vdc		Thermowell	Contractor	Contractor		I131	WS-P0009			
0226	0	LT-S320A	Level Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S320A Level			120VAC	0-8 mtrs	Wall/ Stand	Contractor	Contractor		I120	WS-P0009	WB-A0455		
0227	0	LI-S320A	Level Indicator	Bulk Sodium Hydroxide Storage Tank TK-S320A Level						Contractor	Contractor		I120	WS-P0009	WB-A0455		
0228	0	LE-S320A	Level Element	Bulk Sodium Hydroxide Storage Tank TK-S320A Level					Flange	Contractor	Contractor		I120	WS-P0009	WB-A0455		
0229	0	FS-S754A	Flow Switch	Bulk Sodium Hydroxide Storage Room Unloading Emergency Shower Operating						Contractor	Contractor		I105	WS-P0009			
0230	0	PT-S320A	Pressure Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S320A Level			24vdc	0-8 mtrs		Contractor	Contractor		I111	WS-P0009			
0231	0	TI-S330A	Temperature Indicator	Bulk Sodium Hydroxide Storage Tank TK-S330A Temperature						Contractor	Contractor	Loop powered 3 digit		WS-P0010			
0232	0	TT-S330A	Temperature Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S330A Temperature			24vdc		Thermowell	Contractor	Contractor		I131	WS-P0010			
0233	0	LT-S330A	Level Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S330A Level			120VAC	0-8 mtrs	Wall/ Stand	Contractor	Contractor		I120	WS-P0010	WB-A0455		
0234	0	LI-S330A	Level Indicator	Bulk Sodium Hydroxide Storage Tank TK-S330A Level						Contractor	Contractor		I120	WS-P0010	WB-A0455		
0235	0	LE-S330A	Level Element	Bulk Sodium Hydroxide Storage Tank TK-S330A Level					Flange	Contractor	Contractor		I120	WS-P0010	WB-A0455		
0236	0	PT-S330A	Pressure Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S330A Level			24vdc	0-8 mtrs		Contractor	Contractor		I111	WS-P0010			
0237	0	TI-S340A	Temperature Indicator	Bulk Sodium Hydroxide Storage Tank TK-S340A Temperature						Contractor	Contractor	Loop powered 3 digit		WS-P0010			
0238	0	TT-S340A	Temperature Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S340A Temperature			24vdc		Thermowell	Contractor	Contractor		I131	WS-P0010			
0239	0	LT-S340A	Level Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S340A Level			120VAC	0-8 mtrs		Contractor	Contractor		I120	WS-P0010	WB-A0455		
0240	0	LI-S340A	Level Indicator	Bulk Sodium Hydroxide Storage Tank TK-S340A Level						Contractor	Contractor		I120	WS-P0010	WB-A0455		
0241	0	LE-S340A	Level Element	Bulk Sodium Hydroxide Storage Tank TK-S340A Level					Flange	Contractor	Contractor		I120	WS-P0010	WB-A0455		
0242	0	PT-S340A	Pressure Transmitter	Bulk Sodium Hydroxide Storage Tank TK-S340A Level			24vdc	0-8 mtrs		Contractor	Contractor		I111	WS-P0010			
0243	0	PI-S350A	Pressure Indicator	Sodium Hydroxide Feed Pump P-S350A Outlet Pressure				0-300 Kpa		Contractor	Contractor			WS-P0011			
0244	0	FT-S350A	Flow Transmitter	Sodium Hydroxide Feed Pump P-S350A Discharge Flow			120VAC		Wall/ Stand	Contractor	Contractor		I100C	WS-P0011	WB-A0453	WB-A0453	
0245	0	FI-S350A	Flow Indicator	Sodium Hydroxide Feed Pump P-S250A Discharge Flow						Contractor	Contractor		I100C	WS-P0011	WB-A0453	WB-A0453	



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RECORD NO.	REV. No.	TAG NAME	DESCRIPTION		MANUFACTURER	MODEL	POWER SUPPLY	CALIBRATED RANGE	MOUNTING	SUPPLIED BY	INSTALLED BY	COMMENTS	SPEC. DATA SHEET	P&ID DRAWING	INSTRUMENT LOOP DIA.	INSTALL-ATION DETAIL	LOCATION DWG.
			INSTRUMENT TYPE	SERVICE													
0246	0	FE-S350A	Flow Element	Sodium Hydroxide Feed Pump P-S350A Discharge Flow				0-30 ltr/min	Flange	Contractor	Contractor	Size to be determined by pump skid designer	I100C	WS-P0011	WB-A0453	WB-A0453	
0247	0	PI-S360A	Pressure Indicator	Sodium Hydroxide Feed Pump P-S360A Outlet Pressure				0-300 Kpa		Contractor	Contractor			WS-P0011			
0248	0	PI-S370A	Pressure Indicator	Sodium Hydroxide Feed Pump P-S360A Outlet Pressure				0-300 Kpa		Contractor	Contractor			WS-P0011			
0249	0	FT-S370A	Flow Transmitter	Sodium Hydroxide Feed Pump P-S360A Discharge Flow			120VAC		Wall/ Stand	Contractor	Contractor		I100C	WS-P0011	WB-A0453	WB-A0453	
0250	0	FI-S370A	Flow Indicator	Sodium Hydroxide Feed Pump P-S360A Discharge Flow						Contractor	Contractor		I100C	WS-P0011	WB-A0453	WB-A0453	
0251	0	FE-S370A	Flow Element	Sodium Hydroxide Feed Pump P-S370A Discharge Flow				0-30 ltr/min	Flange	Contractor	Contractor	Size to be determined by pump skid designer	I100C	WS-P0011	WB-A0453	WB-A0453	
0252	0	LS-S371A	Level Switch	Sodium Hydroxide Containment High Level				6mm from floor of containment		Contractor	Contractor	To measure any liquid in containment	I126	WS-P0011	WB-A0458		
0253	0	LA-S371B	Level Alarm	Bulk Sodium Hydroxide Containment High Level Visual Alarm			120VAC			Contractor	Contractor	Warning lamp mounted outside room above door		WS-P0009			
0254	0	LS-S371B	Level Switch	Sodium Hydroxide Containment (North Sump) High Level				6mm from floor of containment		Contractor	Contractor	To measure any liquid in containment	I126	WS-P0011	WB-A0458		
0255	0	FS-S752A	Flow Switch	Bulk Ammonia Storage Room Emergency Shower Operating									I105	WS-P0012			
0256	0	PI-S401A	Pressure Indicator	Truck Unloading Compressed Air Pressure				0-370 Kpa		Contractor	Contractor			WS-P0012			
0257	0	SOL-S401A	Solenoid Actuator	Truck Unloading Compressed Air Supply Control Valve			120VAC			Contractor	Contractor			WS-P0012			
0258	0	LI-S410B	Remote Indicator	Bulk Ammonia Storage Tank TK-S410A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0012			
0259	0	LI-S410B	Remote Indicator	Bulk Ammonia Storage Tank TK-S420A Level					Panel	Contractor	Contractor	Loop powered 3 digit		WS-P0012			
0260	0	LCP-S401A	Local Control Panel	Ammonia Storage Tanks TK-S410A, TK-S420A Truck Fill Control Panel						Contractor	Contractor			WS-P0012			
	1	LA-S401A	Audible Alarm	Ammonia Storage Tanks High Level Alarm Truck Fill Side	Tork Alert or similar		120VAC			Contractor	Contractor			WS-P0012			
0261	0	PI-S410A	Pressure Indicator	Bulk Ammonia Storage Tank TK-S410A Pressure				0-220 Kpa		Contractor	Contractor			WS-P0013			
0262	0	PS-S410A	Pressure Switch	Bulk Ammonia Storage Tank TK-S410A Pressure Relief Valve Operating				140 Kpa		Contractor	Contractor	Connected into PRV tank connection		WS-P0013			
0263	0	LE-S410A	Level Element	Bulk Ammonia Storage Tank TK-S410A Level					Flange	Contractor	Contractor			WS-P0013			
0264	0	LI-S410A	Level Indicator	Bulk Ammonia Storage Tank TK-S410A Level						Contractor	Contractor			WS-P0013			
0265	0	LT-S410A	Level Transmitter	Bulk Ammonia Storage Tank TK-S410A Level			120VAC	0-8 mtrs	Wall/ Stand	Contractor	Contractor			WS-P0013			
0266	0	LE-S410B	Level Element	Bulk Ammonia Storage Tank TK-S410A Level					Flange	Contractor	Contractor			WS-P0013			
0267	0	LI-S410B	Level Indicator	Bulk Ammonia Storage Tank TK-S410A Level						Contractor	Contractor			WS-P0013			
0268	0	LT-S410B	Level Transmitter	Bulk Ammonia Storage Tank TK-S410A Level			120VAC	0-8 mtrs	Wall/ Stand	Contractor	Contractor			WS-P0013			
0269	0	PI-S420A	Pressure Indicator	Bulk Ammonia Storage Tank TK-S420A Pressure				0-220 Kpa		Contractor	Contractor			WS-P0013			
0270	0	PS-S420A	Pressure Switch	Bulk Ammonia Storage Tank TK-S420A Pressure Relief Valve Operating				140 Kpa		Contractor	Contractor	Connected into PRV tank connection		WS-P0013			
0271	0	LE-S420A	Level Element	Bulk Ammonia Storage Tank TK-S420A Level					Flange	Contractor	Contractor			WS-P0013			
0272	0	LI-S420A	Level Indicator	Bulk Ammonia Storage Tank TK-S420A Level						Contractor	Contractor			WS-P0013			
0273	0	LT-S420A	Level Transmitter	Bulk Ammonia Storage Tank TK-S420A Level			120VAC	0-5 mtrs	Wall/ Stand	Contractor	Contractor			WS-P0013			
0274	0	LE-S420B	Level Element	Bulk Ammonia Storage Tank TK-S420A Level					Flange	Contractor	Contractor			WS-P0013			
0275	0	LI-S420B	Level Indicator	Bulk Ammonia Storage Tank TK-S420A Level						Contractor	Contractor			WS-P0013			
0276	0	LT-S420B	Level Transmitter	Bulk Ammonia Storage Tank TK-S420A Level			120VAC	0-5 mtrs	Wall/ Stand	Contractor	Contractor			WS-P0013			
0277	0	GT-S450A	Gas Transmitter	Ammonia Gas Detector						Contractor	Contractor	Indicator mounted at low level		WS-P0013			
0278	0	GE-S450A	Gas Element	Ammonia Gas Detector						Contractor	Contractor			WS-P0013			
0279	0	LS-S405A	Level Switch	Ammonia Storage Tank PRV Vent Water Column Level Low						Contractor	Contractor	Mounted into top of water column container	I126	WS-P0013	WB-A0458		
0280	0	SOL-S405A	Solenoid Actuator	Ammonia Storage Tank PRV Vent Water Column Water Supply Valve			120VAC			Contractor	Contractor			WS-P0013			
0281	0	LS-S405B	Level Switch	Ammonia Storage Tank PRV Vent Water Column Level Low						Contractor	Contractor	Mounted into top of water column container	I126	WS-P0013	WB-A0458		
0282	0	SOL-S405B	Solenoid Actuator	Ammonia Storage Tank PRV Vent Water Column Water Supply Valve			120VAC			Contractor	Contractor			WS-P0013			
0283	0	PI-S430A	Pressure Indicator	Ammonia Feed Pump P-S430A Outlet Pressure				0-300 Kpa		Contractor	Contractor			WS-P0014			
0284	0	FT-S430A	Flow Transmitter	Ammonia Feed Pump P-S430A Discharge Flow			120VAC		Wall/ Stand	Contractor	Contractor		I100D	WS-P0014	WB-A0453	WB-A0453	
0285	0	FI-S430A	Flow Indicator	Ammonia Feed Pump P-S430A Discharge Flow						Contractor	Contractor		I100D	WS-P0014	WB-A0453	WB-A0453	

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RECORD NO.	REV. No.	TAG NAME	DESCRIPTION		MANUFACTURER	MODEL	POWER SUPPLY	CALIBRATED RANGE	MOUNTING	SUPPLIED BY	INSTALLED BY	COMMENTS	SPEC. DATA SHEET	P&ID DRAWING	INSTRUMENT LOOP DIA.	INSTALL-ATION DETAIL	LOCATION DWG.
			INSTRUMENT TYPE	SERVICE													
0286	0	FE-S430A	Flow Element	Ammonia Feed Pump P-S430A Discharge Flow				0-2 ltr/min		Contractor	Contractor	Size to be determined by pump skid designer	I100D	WS-P0014	WB-A0453	WB-A0453	
0287	0	PI-S440A	Pressure Indicator	Ammonia Feed Pump P-S440A Outlet Pressure				0-300 Kpa		Contractor	Contractor			WS-P0014			
0288	0	FT-S440A	Flow Transmitter	Ammonia Feed Pump P-S440A Discharge Flow			120VAC		Wall/ Stand	Contractor	Contractor		I100D	WS-P0014	WB-A0453	WB-A0453	
0289	0	FI-S440A	Flow Indicator	Ammonia Feed Pump P-S440A Discharge Flow						Contractor	Contractor		I100D	WS-P0014	WB-A0453	WB-A0453	
0290	0	FE-S440A	Flow Element	Ammonia Feed Pump P-S440A Discharge Flow				0-2 ltr/min		Contractor	Contractor	Size to be determined by pump skid designer	I100D	WS-P0014	WB-A0453	WB-A0453	
0291	0	LS-S450A	Level Switch	Ammonia Containment Level				6mm from floor of containment		Contractor	Contractor	To measure any liquid in containment	I126	WS-P0014	WB-A0458		
0292	0	LA-S371B	Level Alarm	Bulk Ammonia Containment High Level Visual Alarm			120VAC			Contractor	Contractor	Warning lamp mounted outside room above door		WS-P0013			
0293	0	AT-S701A	Hardness Analyser	Softened Water to Steam Boiler Analyser			120VAC			Contractor	Contractor	Hach APA 6000 Low Range Hardness Analyser or approved equal		WS-H0502			
0294	0	AE-S701A	Hardness Analyser Element	Softened Water to Steam Boiler Analyser			120VAC			Contractor	Contractor			WS-H0502			
0295	0	WIT-S702	Drum Weigh Scale	Steam Boiler Water Amine Feed Drum Weight			120VAC			Contractor	Contractor	Eagle Microsystems DS750 or approved equal complete with suitable Digital Indicator Transmitter		WS-H0502			
0296	0	LS-S703A	Level Switch	Steam Boiler Condensate Tank Low Low Level			120VAC			Contractor	Contractor		I126	WS-H0502	WB-A0458		