DRAWING NO. 1724000448-PR-PID-00013

REV. 04

MANUAL VALVES

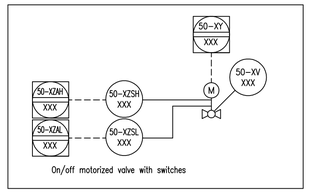
- GATE VALVE
- BALL VALVE
- CHECK VALVE
- NEEDLE VALVE
- "Y" TYPE FILTER
- DIAPHRAGM VALVE
- AUTOMATIC AIR VENT VALVE

OPERATED VALVES

- MOTORIZED ACTUATOR ON-OFF BALL VALVE
- PRESSURE SAFETY VALVE

OTHER SYMBOLS

- Local instrument
- Instrument in DCS
- Interlock in DCS
- Software signal
- Electric signal



On/off motorized valve with switches

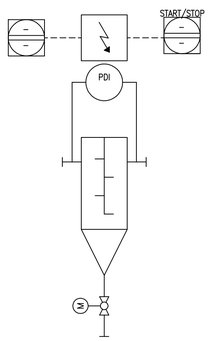


HH = High High
H = High
L = Low
LL = Low Low

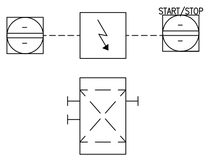
Intrument in DCS with alarm

INSTRUMENTS IDENTIFICATION – REFER TO ISA S5.1 FOR DETAILS				
Letter	FIRST LETTER	LETTERS FOLLOW		
	Measure or process variable	Modification	Letter or passive function	Output function
A	Analysis		Alarm	
B	Flame detection		Optional user	Optional user
C	Conductivity	Control		Regulation
D	Density	Differential		
E	Electrical voltage	Element	Primary el.	
F	Flow	Relationship		
G	Choice user			
H	Manual override			
I	Electricity		Indication	
J	Power	Scansion		
K	Time schedule or time	Rate of change		
L	Level		Light	
M	Choice user	Momentary or instant.		
N	Choice user		Optional user	Optional user
O	Choice user		Orifice or restriction	
P	Pressure		Handhold	
Q	Quantity	Full or score.		
R	Radioactivity		Registration	
S	Speed or frequency	Security		Interruption
T	Temperature	Transmitter		Transmission
U	General alarm			Multifunction
V	Vibration or mechanical analysis	Valve	Valve	
W	Weight or force		Well or sheath	
X	Variable unclassified	X axis	Not rated	Not rated
Y	State or event	Y axis		Computing module
Z	Position or size	Z axis		

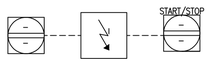
CORSE FILTER EQUIPPED WITH PDI, AUTOMATIC DRAIN VALVE AND LOCAL CONTROL PANEL



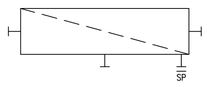
SAND FILTER EQUIPPED WITH LOCAL CONTROL PANEL



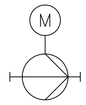
UV LAMP EQUIPPED WITH LOCAL CONTROL PANEL



RO VESSEL & MEMBRANES (RO UNIT)



CENTRIFUGAL PUMP



AIR FAN



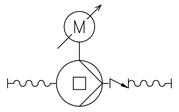
ELECTRIC HEATER



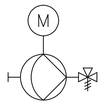
CARTRIDGE FILTER



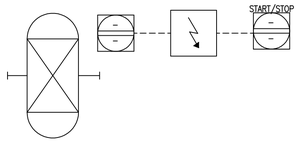
HIGH PRESSURE PUMP



DOSING PUMP EQUIPPED WITH MULTIFUNCTION VALVE



SOFTENING FILTER EQUIPPED WITH LOCAL CONTROL PANEL



PSC DOC. REF: PK2885-B-001

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	11-NOV-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
03	30-SEP-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
02	22-AUG-24	UR	WR	RM	ISSUED FOR REVIEW
01	29-MAY-24	GG	WR	RM	ISSUED FOR REVIEW
00	24-APR-24	UR	RC	RM	ISSUED FOR REVIEW

CROSSWIND

ROSETTI MARINO

TITLE :

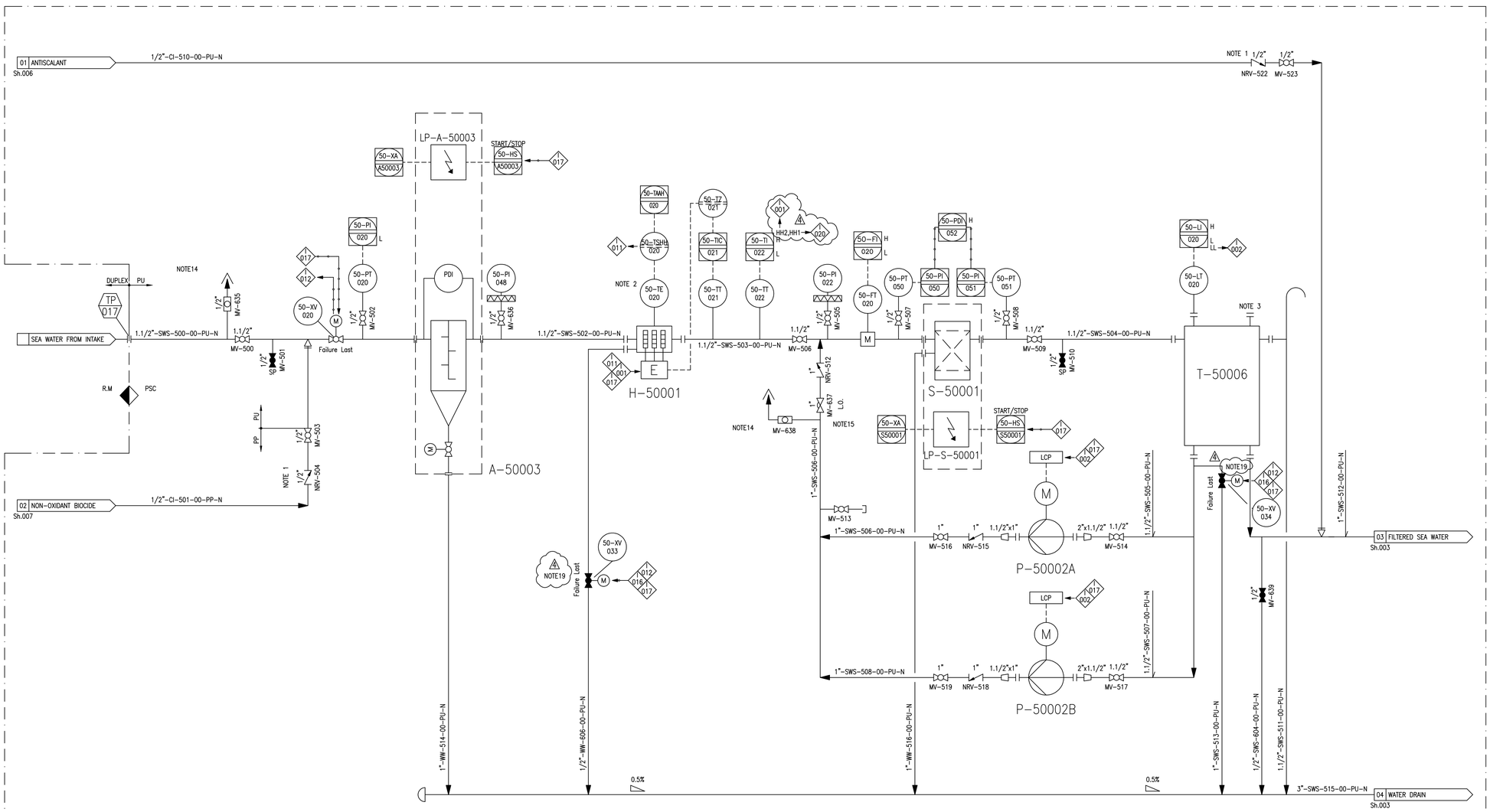
WATER TREATMENT PACKAGE
SEA WATER FINE FILTRATION
P&I DIAGRAM

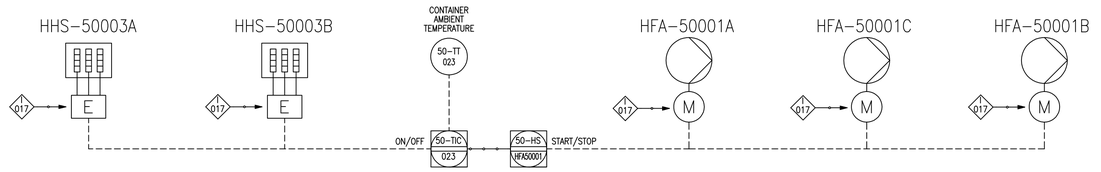
CONTRACT NO./TITLE			SCALE –
DRAWN UR	CHECKED WR	APPROVED RM	DATE 11/11/24

A1	DRAWING NO. 1724000448-PR-PID-00013	SHEET 001	REV. 04

File Name : 1724000448-PR-PID-00013 Rev04

DRAWING NO. 1724000448-PR-PID-00013 REV. 04

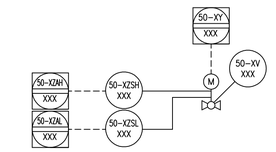




TERMINAL POINT

TP No.	NPS	FINISH	RATING	FACE	MATERIAL	DESCRIPTION
TP-017	1.1/2"	FLG.	150#	RF	PVC	SEA WATER FROM INTAKE PUMPS
TP-002	1"	FLG.	150#	RF	PVC	PRODUCT WATER
TP-003	3"	FLG.	150#	RF	PVC	SEA WATER DRAIN
TP-005	1"	FLG.	150#	RF	PP	BIOCIDE TO SEA WATER INTAKE
TP-006	1"	FLG.	150#	RF	PP	BIOCIDE TO WASTE WATER TANK
TP-007	1.1/2"	FLG.	150#	RF	PVC	CHEMICAL DRAIN
TP-008	1/2"	FLG.	150#	RF	PVC	CONTAINER OPEN DRAIN

TYPICAL FOR ON/OFF BALL VALVES



⚠ REFERENCE DOCUMENTS

DOCUMENT NUMBER	TITLE
1724000448-MAC-SP-00003	SYSTEM/PACKAGE FUNCTIONAL DESCRIPTION
1724000448-MAC-CE-00004	PACKAGE CAUSE EFFECT MATRIX

NOTES

No.	DESCRIPTION
1	SPRING LOADED CHECK VALVE.
2	SUPPLIED WITH EQUIPMENT.
3	INSPECTION COVER.
4	FILTER WITH PANEL AND AUTOMATIC MULTIPORT VALVE.
5	PUMP EQUIPPED WITH FLUSHING VALVE.
6	CHECK VALVE SUPPLIED WITH THE PUMP.
7	ALL MANUAL VALVES TAGS ARE PRECEDED BY: BLPH-
8	LOGIC FOR CONTROL OF P50009A/B THAT PREVENTS SIMULTANEOUS RUNNING OF A PUMP A AND B IS PROVIDED.
9	BIOCIDE DOSAGE TO CONTAINER INLET: CONTINUOUS BIOCIDE DOSAGE TO INTAKE PUMP: CONTINUOUS BIOCIDE DOSAGE TO WASTE WATER TANK: DISCONTINUOUS
10	OFF SPEC ON/OFF VALVE
11	SHUT OFF PRESSURE OF P-50009A/B = 6 barg
12	MULTIFUNCTIONAL VALVE BY PUMP SUPPLIER: BACKPRESSURE, PRESSURE RELIEF, ANTI-OVERFLOW AND SAFETY VALVE FUNCTION.
13	OUTLET VALVE
14	AUTOMATIC AIR VENT VALVE
15	POSITION TO BE DEFINED DURING COMMISSIONING
16	POLYAMIDE TUBING (RILSAN TYPE)
17	CHECK VALVE (NO SPRING TYPE)
18	DRAIN PAN FOR ANALYZER. DRAIN PAN VOLUME= 5 L
19	VALVE FOR AUTOMATIC SYSTEM DRAINING IN CASE OF SHUT DOWN OR LONG STOP PERIOD OF THE SYSTEM

A-50003	
SEA WATER COARSE FILTER	
FILTRATION RATE	125 µm
CAPACITY	2.5 m3/h
DES. PRESS.	5 barg
DES. TEMP.	50° C
MATERIAL	PLASTIC MAT.

H-50001	
ELECTRIC HEATER	
POWER	30 kW
CAPACITY	2.5 m3/h
DES. PRESS.	6 barg
DES. TEMP.	60° C
MATERIAL	PVC-TITANIUM

S-50001	
SAND FILTER	
TYPE	PRESSURE,VERTICAL
CAPACITY	2.5 m3/h
DES. PRESS.	7 barg
DES. TEMP.	50° C
MATERIAL	FRP

T-50006	
FILTERED WATER TANK	
VOLUME	3 m3
DES. PRESS.	ATM
DES. TEMP.	50° C
MATERIAL	FRP

P-50002A/B	
BACKWASH PUMP	
TYPE	CENTRIFUGAL
DES. PRESSURE	6 barg
CAPACITY	5 m3/h
HEAD	1.50 bar(a)
DES. TEMP.	60 °C
MATERIAL	PP

HHS-50003A/B	
CONTAINER ELECTRICAL HEATER	
POWER	8.4 kW
DES. PRESS.	ATM
DES. TEMP.	65°C

HFA-50001A/B	
CONTAINER AIR FAN	
POWER	110 W
DES. PRESS.	ATM
DES. TEMP.	60°C

PSC DOC. REF: PK2885-B-001

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	11-NOV-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
03	30-SEP-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
02	22-AUG-24	UR	WR	RM	ISSUED FOR REVIEW
01	29-MAY-24	GG	WR	RM	ISSUED FOR REVIEW
00	24-APR-24	UR	RC	RM	ISSUED FOR REVIEW

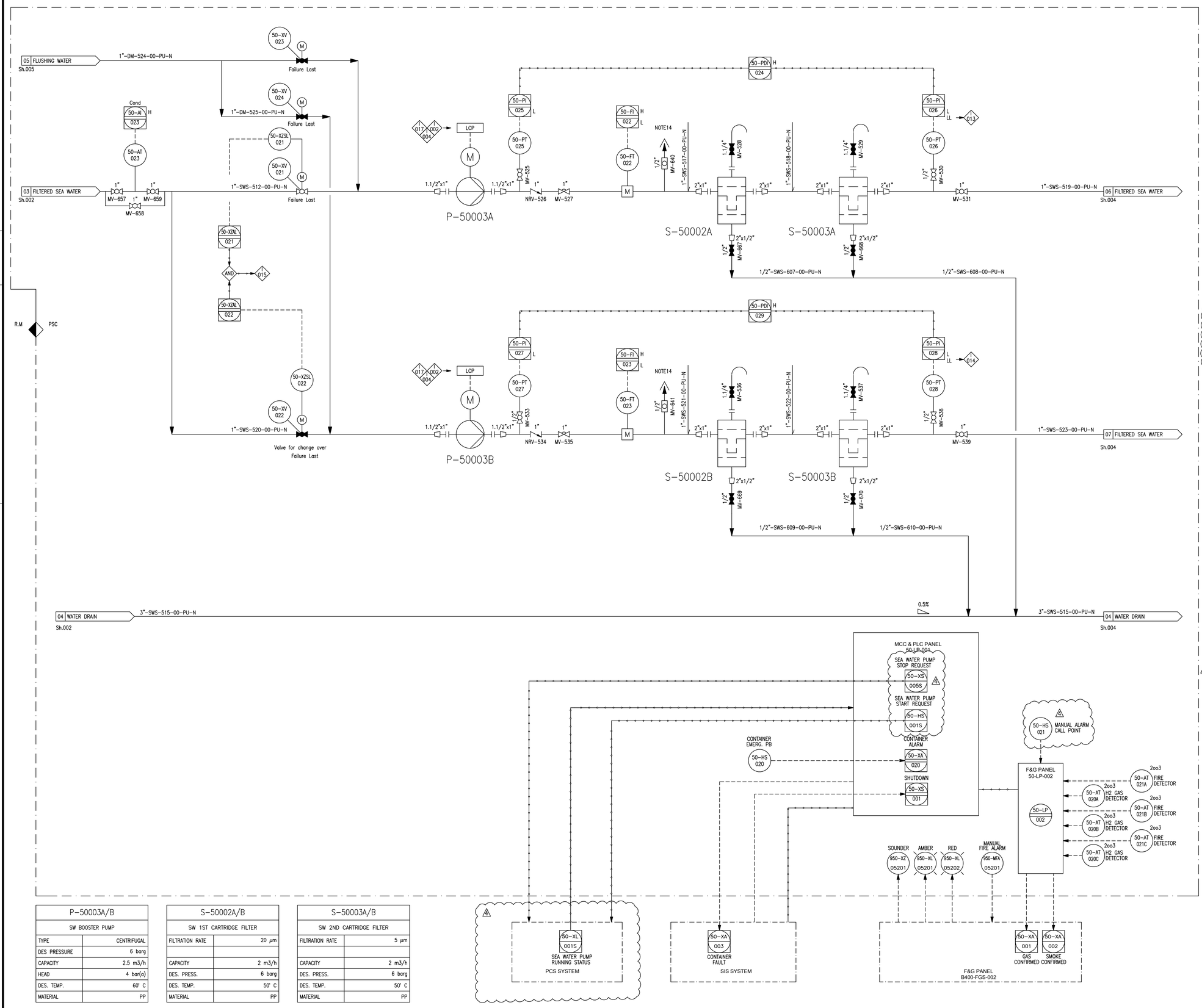
CROSSWIND | ROSETTI MARINO

TITLE :
WATER TREATMENT PACKAGE
SEA WATER FINE FILTRATION
P&I DIAGRAM

CONTRACT NO./TITLE			SCALE –
DRAWN UR	CHECKED WR	APPROVED RM	DATE 11/11/24
A1	DRAWING NO. 1724000448-PR-PID-00013	SHEET 002	REV. 04

File Name : 1724000448-PR-PID-00013 Rev04

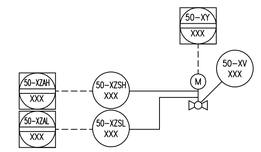
DRAWING NO. 1724000448-PR-PID-00013 REV. 04



TERMINAL POINT

TP No.	NPS	FINISH	RATING	FACE	MATERIAL	DESCRIPTION
TP-017	1.1/2"	FLG.	150#	RF	PVC	SEA WATER FROM INTAKE PUMPS
TP-002	1"	FLG.	150#	RF	PVC	PRODUCT WATER
TP-003	3"	FLG.	150#	RF	PVC	SEA WATER DRAIN
TP-005	1"	FLG.	150#	RF	PP	BIOCIDE TO SEA WATER INTAKE
TP-006	1"	FLG.	150#	RF	PP	BIOCIDE TO WASTE WATER TANK
TP-007	1.1/2"	FLG.	150#	RF	PVC	CHEMICAL DRAIN
TP-008	1/2"	FLG.	150#	RF	PVC	CONTAINER OPEN DRAIN

TYPICAL FOR ON/OFF BALL VALVES



REFERENCE DOCUMENTS

DOCUMENT NUMBER	TITLE
1724000448-MAC-SP-00003	SYSTEM/PACKAGE FUNCTIONAL DESCRIPTION
1724000448-MAC-CE-00004	PACKAGE CAUSE EFFECT MATRIX

NOTES

No.	DESCRIPTION
1	SPRING LOADED CHECK VALVE.
2	SUPPLIED WITH EQUIPMENT.
3	INSPECTION COVER.
4	FILTER WITH PANEL AND AUTOMATIC MULTIPORT VALVE.
5	PUMP EQUIPPED WITH FLUSHING VALVE.
6	CHECK VALVE SUPPLIED WITH THE PUMP.
7	ALL MANUAL VALVES TAGS ARE PRECEDED BY: BLPH-
8	LOGIC FOR CONTROL OF P50009A/B THAT PREVENTS SIMULTANEOUS RUNNING OF A PUMP A AND B IS PROVIDED.
9	BIOCIDE DOSAGE TO CONTAINER INLET: CONTINUOUS BIOCIDE DOSAGE TO INTAKE PUMP: CONTINUOUS BIOCIDE DOSAGE TO WASTE WATER TANK: DISCONTINUOUS
10	OFF SPEC ON/OFF VALVE
11	SHUT OFF PRESSURE OF P-50009A/B = 6 barg
12	MULTIFUNCTIONAL VALVE BY PUMP SUPPLIER: BACKPRESSURE, PRESSURE RELIEF, ANTI-OVERFLOW AND SAFETY VALVE FUNCTION.
13	OUTLET VALVE
14	AUTOMATIC AIR VENT VALVE
15	POSITION TO BE DEFINED DURING COMMISSIONING
16	POLYAMIDE TUBING (RILSAN TYPE)
17	CHECK VALVE (NO SPRING TYPE)
18	DRAIN PAN FOR ANALYZER. DRAIN PAN VOLUME= 5 L
19	VALVE FOR AUTOMATIC SYSTEM DRAINING IN CASE OF SHUT DOWN OR LONG STOP PERIOD OF THE SYSTEM

P-50003A/B	
SW BOOSTER PUMP	
TYPE	CENTRIFUGAL
DES PRESSURE	6 barg
CAPACITY	2.5 m3/h
HEAD	4 bar(a)
DES. TEMP.	60° C
MATERIAL	PP

S-50002A/B	
SW 1ST CARTRIDGE FILTER	
FILTRATION RATE	20 µm
CAPACITY	2 m3/h
DES. PRESS.	6 barg
DES. TEMP.	50° C
MATERIAL	PP

S-50003A/B	
SW 2ND CARTRIDGE FILTER	
FILTRATION RATE	5 µm
CAPACITY	2 m3/h
DES. PRESS.	6 barg
DES. TEMP.	50° C
MATERIAL	PP

PSC DOC. REF: PK2885-B-001

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	11-NOV-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
03	30-SEP-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
02	22-AUG-24	UR	WR	RM	ISSUED FOR REVIEW
01	29-MAY-24	GG	WR	RM	ISSUED FOR REVIEW
00	24-APR-24	UR	RC	RM	ISSUED FOR REVIEW

CROSSWIND

ROSETTI MARINO

TITLE :
WATER TREATMENT PACKAGE
SEA WATER FINE FILTRATION
P&I DIAGRAM

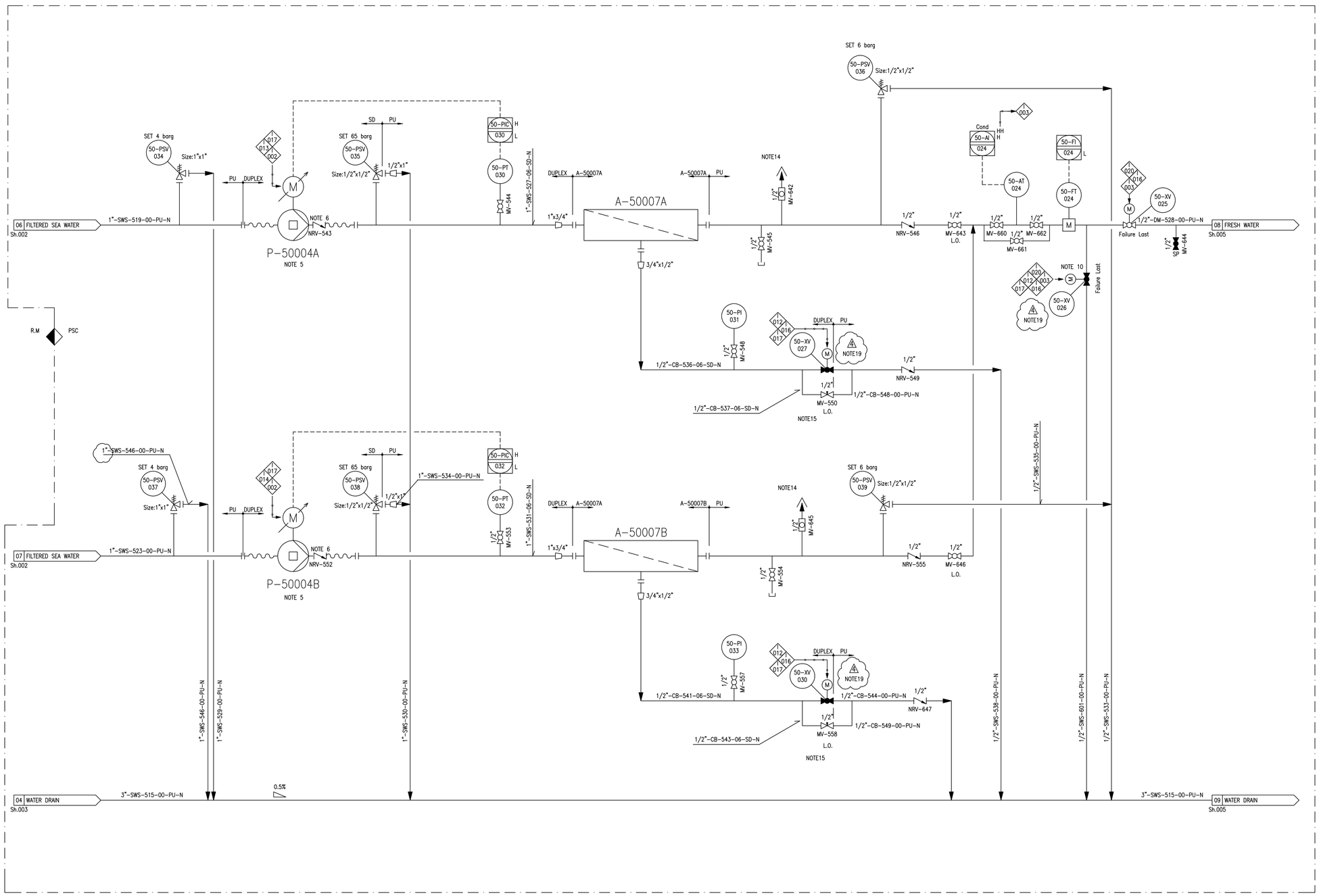
CONTRACT NO./TITLE			SCALE –
DRAWN UR	CHECKED WR	APPROVED RM	DATE 11/11/24

A1	DRAWING NO. 1724000448-PR-PID-00013	SHEET 003	REV. 04

File Name : 1724000448-PR-PID-00013 Rev04

DRAWING NO. 1724000448-PR-PID-00013

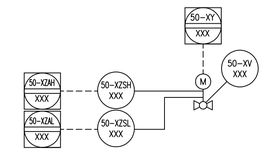
REV. 04



TERMINAL POINT

TP No.	NPS	FINISH	RATING	FACE	MATERIAL	DESCRIPTION
TP-017	1.1/2"	FLG.	150#	RF	PVC	SEA WATER FROM INTAKE PUMPS
TP-002	1"	FLG.	150#	RF	PVC	PRODUCT WATER
TP-003	3"	FLG.	150#	RF	PVC	SEA WATER DRAIN
TP-005	1"	FLG.	150#	RF	PP	BIOCIDE TO SEA WATER INTAKE
TP-006	1"	FLG.	150#	RF	PP	BIOCIDE TO WASTE WATER TANK
TP-007	1.1/2"	FLG.	150#	RF	PVC	CHEMICAL DRAIN
TP-008	1/2"	FLG.	150#	RF	PVC	CONTAINER OPEN DRAIN

TYPICAL FOR ON/OFF BALL VALVES



⚠ REFERENCE DOCUMENTS

DOCUMENT NUMBER	TITLE
1724000448-MAC-SP-00003	SYSTEM/PACKAGE FUNCTIONAL DESCRIPTION
1724000448-MAC-CE-00004	PACKAGE CAUSE EFFECT MATRIX

NOTES

No.	DESCRIPTION
1	SPRING LOADED CHECK VALVE.
2	SUPPLIED WITH EQUIPMENT.
3	INSPECTION COVER.
4	FILTER WITH PANEL AND AUTOMATIC MULTIPORT VALVE.
5	PUMP EQUIPPED WITH FLUSHING VALVE.
6	CHECK VALVE SUPPLIED WITH THE PUMP.
7	ALL MANUAL VALVES TAGS ARE PRECEDED BY: BLPH-
8	LOGIC FOR CONTROL OF P50009A/B THAT PREVENTS SIMULTANEOUS RUNNING OF A PUMP A AND B IS PROVIDED.
9	BIOCIDE DOSAGE TO CONTAINER INLET: CONTINUOUS BIOCIDE DOSAGE TO INTAKE PUMP: CONTINUOUS BIOCIDE DOSAGE TO WASTE WATER TANK: DISCONTINUOUS
10	OFF SPEC ON/OFF VALVE
11	SHUT OFF PRESSURE OF P-50009A/B = 6 barg
12	MULTIFUNCTIONAL VALVE BY PUMP SUPPLIER: BACKPRESSURE, PRESSURE RELIEF, ANTI-OVERFLOW AND SAFETY VALVE FUNCTION.
13	OUTLET VALVE
14	AUTOMATIC AIR VENT VALVE
15	POSITION TO BE DEFINED DURING COMMISSIONING
16	POLYAMIDE TUBING (RILSAN TYPE)
17	CHECK VALVE (NO SPRING TYPE)
18	DRAIN PAN FOR ANALYZER. DRAIN PAN VOLUME= 5 L
19	VALVE FOR AUTOMATIC SYSTEM DRAINING IN CASE OF SHUT DOWN OR LONG STOP PERIOD OF THE SYSTEM

P-50004A/B	
HP PUMP	
TYPE	AXIAL ROTATING PISTONS
DES PRESSURE	83 barg
CAPACITY	2 m3/h
HEAD	64.5 bar(a)
DES. TEMP.	50° C
MATERIAL	SS DUPLEX

A-50007A/B	
SEA WATER REVERSE OSMOSIS UNITS	
CAPACITY	0.8 m3/h
DES. PRESS.	69 barg
DES. TEMP.	45° C
MATERIAL	FRP

PSC DOC. REF: PK2885-B-001

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
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CROSSWIND

ROSETTI MARINO

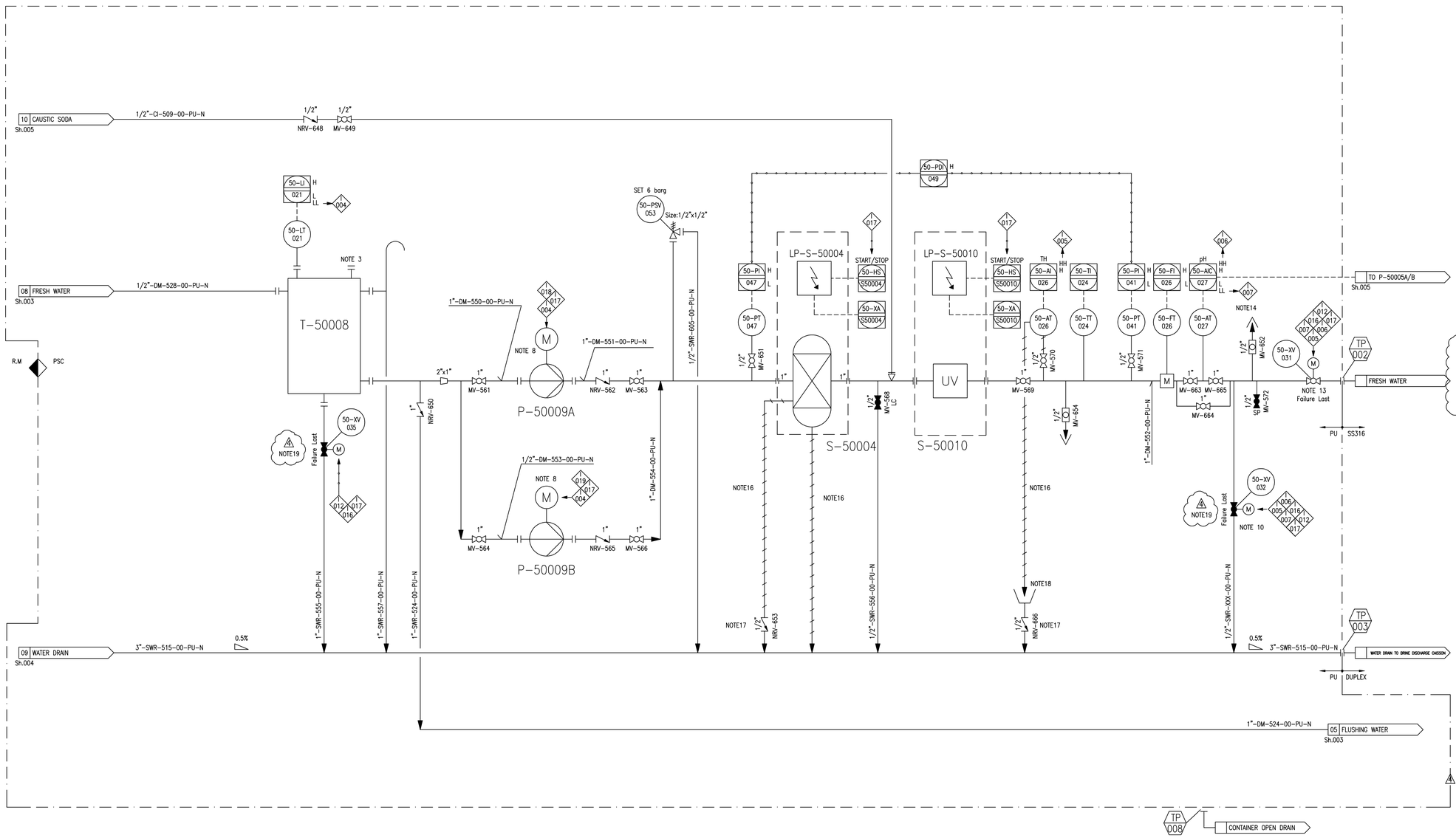
TITLE :
WATER TREATMENT PACKAGE
SEA WATER REVERSE OSMOSIS
P&I DIAGRAM

CONTRACT NO./TITLE			SCALE –
DRAWN UR	CHECKED WR	APPROVED RM	DATE 11/11/24

A1	DRAWING NO. 1724000448-PR-PID-00013	SHEET 004	REV. 04

File Name : 1724000448-PR-PID-00013 Rev04

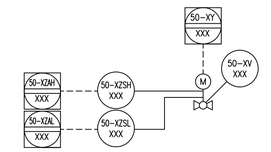
DRAWING NO. 1724000448-PR-PID-00013 REV. 04



TERMINAL POINT

TP No.	NPS	FINISH	RATING	FACE	MATERIAL	DESCRIPTION
TP-017	1.1/2"	FLG.	150#	RF	PVC	SEA WATER FROM INTAKE PUMPS
TP-002	1"	FLG.	150#	RF	PVC	PRODUCT WATER
TP-003	3"	FLG.	150#	RF	PVC	SEA WATER DRAIN
TP-005	1"	FLG.	150#	RF	PP	BIOCIDE TO SEA WATER INTAKE
TP-006	1"	FLG.	150#	RF	PP	BIOCIDE TO WASTE WATER TANK
TP-007	1.1/2"	FLG.	150#	RF	PVC	CHEMICAL DRAIN
TP-008	1/2"	FLG.	150#	RF	PVC	CONTAINER OPEN DRAIN

TYPICAL FOR ON/OFF BALL VALVES



REFERENCE DOCUMENTS

DOCUMENT NUMBER	TITLE
1724000448-MAC-SP-00003	SYSTEM/PACKAGE FUNCTIONAL DESCRIPTION
1724000448-MAC-CE-00004	PACKAGE CAUSE EFFECT MATRIX

NOTES

No.	DESCRIPTION
1	SPRING LOADED CHECK VALVE.
2	SUPPLIED WITH EQUIPMENT.
3	INSPECTION COVER.
4	FILTER WITH PANEL AND AUTOMATIC MULTIPORT VALVE.
5	PUMP EQUIPPED WITH FLUSHING VALVE.
6	CHECK VALVE SUPPLIED WITH THE PUMP.
7	ALL MANUAL VALVES TAGS ARE PRECEDED BY: BLPH-
8	LOGIC FOR CONTROL OF P50009A/B THAT PREVENTS SIMULTANEOUS RUNNING OF A PUMP A AND B IS PROVIDED.
9	BIOCIDE DOSAGE TO CONTAINER INLET: CONTINUOUS BIOCIDE DOSAGE TO INTAKE PUMP: CONTINUOUS BIOCIDE DOSAGE TO WASTE WATER TANK: DISCONTINUOUS
10	OFF SPEC ON/OFF VALVE
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13	OUTLET VALVE
14	AUTOMATIC AIR VENT VALVE
15	POSITION TO BE DEFINED DURING COMMISSIONING
16	POLYAMIDE TUBING (RILSAN TYPE)
17	CHECK VALVE (NO SPRING TYPE)
18	DRAIN PAN FOR ANALYZER. DRAIN PAN VOLUME= 5 L
19	VALVE FOR AUTOMATIC SYSTEM DRAINING IN CASE OF SHUT DOWN OR LONG STOP PERIOD OF THE SYSTEM

T-50008	
FRESH WATER TANK	
VOLUME	2.2 m3
DES. PRESS.	ATM
DES. TEMP.	50° C
MATERIAL	FRP

P-50009A/B	
FRESH WATER PUMP	
TYPE	CENTRIFUGAL
DES PRESSURE	25 barg
CAPACITY	0.8 m3/h
HEAD NOTE 11	5.2 bar(a)
DES. TEMP.	120° C
MATERIAL	SS 316L

S-50010	
UV STERILIZER	
CAPACITY	0.8 m3/h
DES. PRESS.	8 barg
DES. TEMP.	50° C
MATERIAL	SS 316

S-50004	
SOFTENING FILTER	
CAPACITY	0.8 m3/h
DES. PRESS.	6 barg
DES. TEMP.	40° C
MATERIAL	FRP-PLASTIC

PSC DOC. REF: PK2885-B-001

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	11-NOV-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
03	30-SEP-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
02	22-AUG-24	UR	WR	RM	ISSUED FOR REVIEW
01	29-MAY-24	GG	WR	RM	ISSUED FOR REVIEW
00	24-APR-24	UR	RC	RM	ISSUED FOR REVIEW

CROSSWIND ROSETTI MARINO

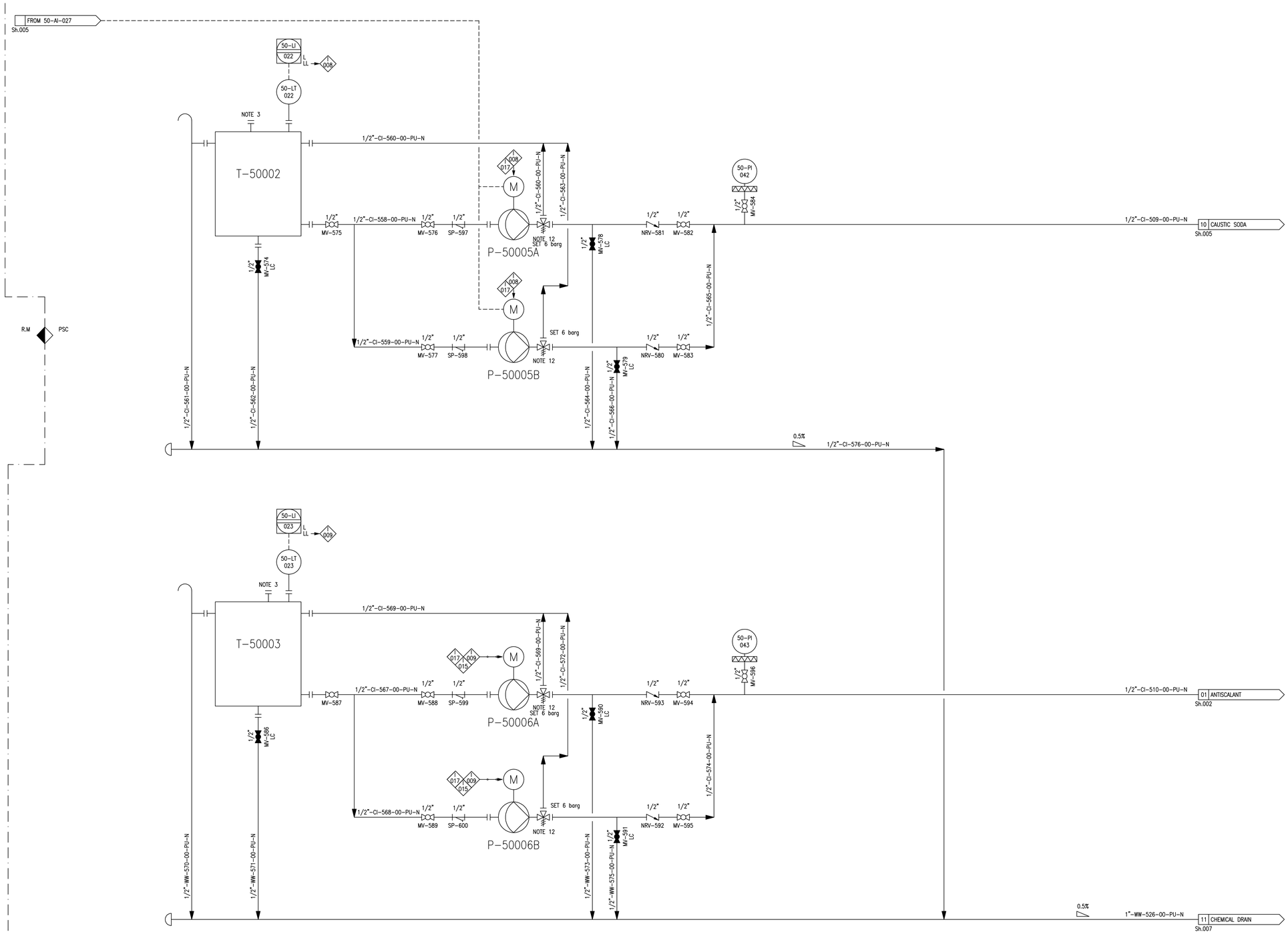
TITLE : WATER TREATMENT PACKAGE
FRESH WATER STORAGE
P&I DIAGRAM

CONTRACT NO./TITLE			SCALE –
DRAWN UR	CHECKED WR	APPROVED RM	DATE 11/11/24
A1	DRAWING NO. 1724000448-PR-PID-00013	SHEET 005	REV. 04

File Name : 1724000448-PR-PID-00013 Rev04

DRAWING NO. 1724000448-PR-PID-00013

REV. 04



TERMINAL POINT

TP No.	NPS	FINISH	RATING	FACE	MATERIAL	DESCRIPTION
TP-017	1.1/2"	FLG.	150#	RF	PVC	SEA WATER FROM INTAKE PUMPS
TP-002	1"	FLG.	150#	RF	PVC	PRODUCT WATER
TP-003	3"	FLG.	150#	RF	PVC	SEA WATER DRAIN
TP-005	1"	FLG.	150#	RF	PP	BIOCIDE TO SEA WATER INTAKE
TP-006	1"	FLG.	150#	RF	PP	BIOCIDE TO WASTE WATER TANK
TP-007	1.1/2"	FLG.	150#	RF	PVC	CHEMICAL DRAIN
TP-008	1/2"	FLG.	150#	RF	PVC	CONTAINER OPEN DRAIN

REFERENCE DOCUMENTS

DOCUMENT NUMBER	TITLE
1724000448-MAC-SP-00003	SYSTEM/PACKAGE FUNCTIONAL DESCRIPTION
1724000448-MAC-CE-00004	PACKAGE CAUSE EFFECT MATRIX

NOTES

No.	DESCRIPTION
1	SPRING LOADED CHECK VALVE.
2	SUPPLIED WITH EQUIPMENT.
3	INSPECTION COVER.
4	FILTER WITH PANEL AND AUTOMATIC MULTIPORT VALVE.
5	PUMP EQUIPPED WITH FLUSHING VALVE.
6	CHECK VALVE SUPPLIED WITH THE PUMP.
7	ALL MANUAL VALVES TAGS ARE PRECEDED BY: BLPH-
8	LOGIC FOR CONTROL OF P50009A/B THAT PREVENTS SIMULTANEOUS RUNNING OF A PUMP A AND B IS PROVIDED.
9	BIOCIDE DOSAGE TO CONTAINER INLET: CONTINUOUS BIOCIDE DOSAGE TO INTAKE PUMP: CONTINUOUS BIOCIDE DOSAGE TO WASTE WATER TANK: DISCONTINUOUS
10	OFF SPEC ON/OFF VALVE
11	SHUT OFF PRESSURE OF P-50009A/B = 6 barg
12	MULTIFUNCTIONAL VALVE BY PUMP SUPPLIER: BACKPRESSURE, PRESSURE RELIEF, ANTI-OVERFLOW AND SAFETY VALVE FUNCTION.
13	OUTLET VALVE
14	AUTOMATIC AIR VENT VALVE
15	POSITION TO BE DEFINED DURING COMMISSIONING
16	POLYAMIDE TUBING (RILSAN TYPE)
17	CHECK VALVE (NO SPRING TYPE)
18	DRAIN PAN FOR ANALYZER. DRAIN PAN VOLUME= 5 L
19	VALVE FOR AUTOMATIC SYSTEM DRAINING IN CASE OF SHUT DOWN OR LONG STOP PERIOD OF THE SYSTEM

T-50002	
CAUSTIC SODA DOSING TANK	
VOLUME	0.05 m3
DES. PRESS.	ATM
DES. TEMP.	45° C
MATERIAL	PE

P-50005A/B	
CAUSTIC SODA DOSING PUMP	
TYPE	METERING DIAPHRAGM
DES PRESSURE	10 barg
CAPACITY	0.05 l/h
HEAD	4 bar(a)
DES. TEMP.	45° C
MATERIAL	PVC

T-50003	
ANTISCALANT DOSING TANK	
VOLUME	0.05 m3
DES. PRESS.	ATM
DES. TEMP.	45° C
MATERIAL	PE

P-50006A/B	
ANTISCALANT DOSING PUMP	
TYPE	METERING DIAPHRAGM
DES PRESSURE	10 barg
CAPACITY	0.01 l/h
HEAD	4 bar(a)
DES. TEMP.	45° C
MATERIAL	PVC

PSC DOC. REF: PK2885-B-001

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	11-NOV-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
03	30-SEP-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
02	22-AUG-24	UR	WR	RM	ISSUED FOR REVIEW
01	29-MAY-24	GG	WR	RM	ISSUED FOR REVIEW
00	24-APR-24	UR	RC	RM	ISSUED FOR REVIEW

CROSSWIND

ROSETTI MARINO

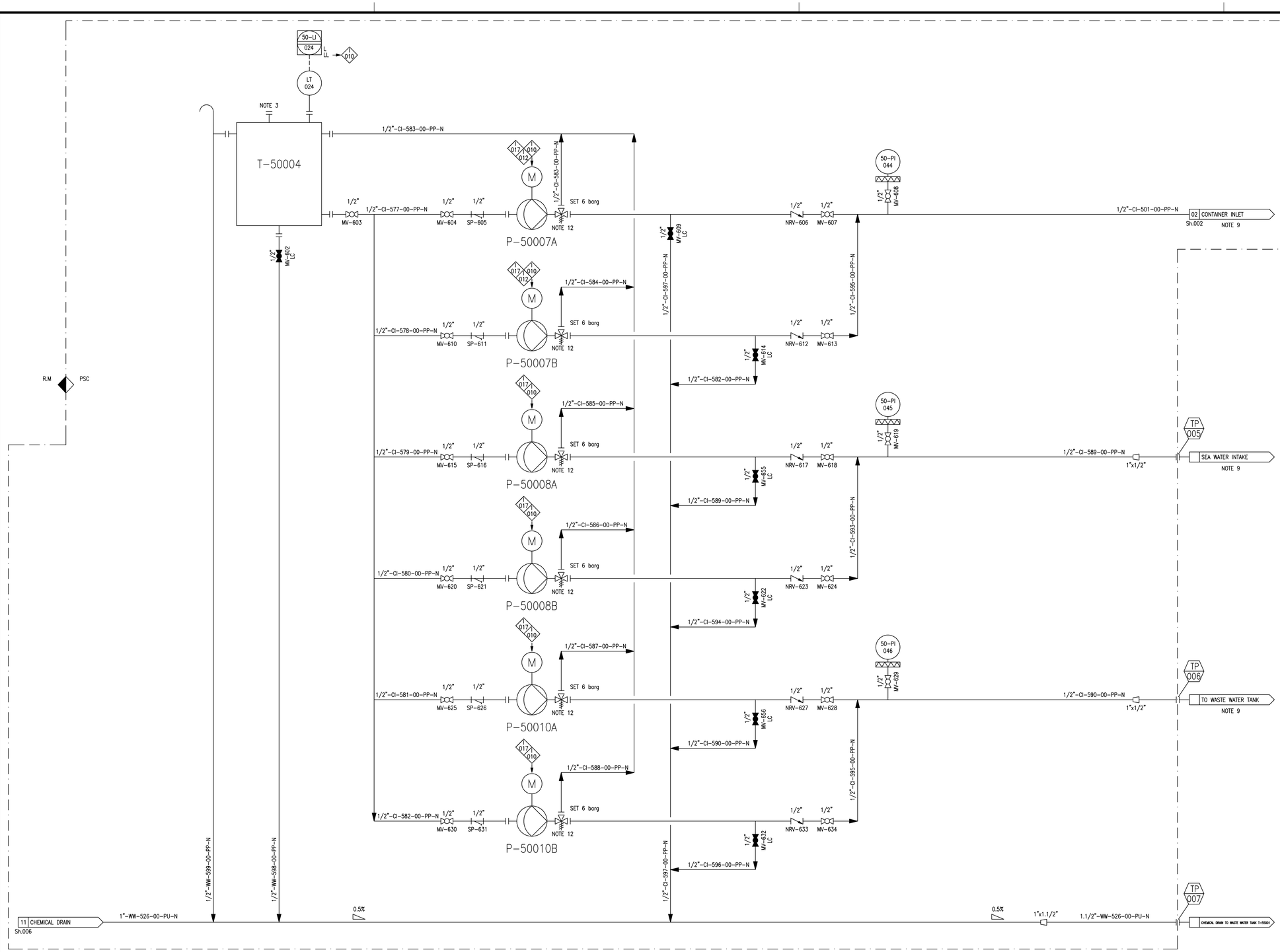
TITLE :
WATER TREATMENT PACKAGE
CHEMICALS DOSAGE
P&I DIAGRAM

CONTRACT NO./TITLE			SCALE –
DRAWN UR	CHECKED WR	APPROVED RM	DATE 11/11/24

A1	DRAWING NO. 1724000448-PR-PID-00013	SHEET 006	REV. 04

File Name : 1724000448-PR-PID-00013 Rev04

DRAWING NO. 1724000448-PR-PID-00013 REV. 04



TERMINAL POINT

TP No.	NPS	FINISH	RATING	FACE	MATERIAL	DESCRIPTION
TP-017	1.1/2"	FLG.	150#	RF	PVC	SEA WATER FROM INTAKE PUMPS
TP-002	1"	FLG.	150#	RF	PVC	PRODUCT WATER
TP-003	3"	FLG.	150#	RF	PVC	SEA WATER DRAIN
TP-005	1"	FLG.	150#	RF	PP	BIOCIDE TO SEA WATER INTAKE
TP-006	1"	FLG.	150#	RF	PP	BIOCIDE TO WASTE WATER TANK
TP-007	1.1/2"	FLG.	150#	RF	PVC	CHEMICAL DRAIN
TP-008	1/2"	FLG.	150#	RF	PVC	CONTAINER OPEN DRAIN

REFERENCE DOCUMENTS

DOCUMENT NUMBER	TITLE
1724000448-MAC-SP-00003	SYSTEM/PACKAGE FUNCTIONAL DESCRIPTION
1724000448-MAC-CE-00004	PACKAGE CAUSE EFFECT MATRIX

NOTES

No.	DESCRIPTION
1	SPRING LOADED CHECK VALVE.
2	SUPPLIED WITH EQUIPMENT.
3	INSPECTION COVER.
4	FILTER WITH PANEL AND AUTOMATIC MULTIPORT VALVE.
5	PUMP EQUIPPED WITH FLUSHING VALVE.
6	CHECK VALVE SUPPLIED WITH THE PUMP.
7	ALL MANUAL VALVES TAGS ARE PRECEDED BY: BLPH-
8	LOGIC FOR CONTROL OF P50009A/B THAT PREVENTS SIMULTANEOUS RUNNING OF A PUMP A AND B IS PROVIDED.
9	BIOCIDE DOSAGE TO CONTAINER INLET: CONTINUOUS BIOCIDE DOSAGE TO INTAKE PUMP: CONTINUOUS BIOCIDE DOSAGE TO WASTE WATER TANK: DISCONTINUOUS
10	OFF SPEC ON/OFF VALVE
11	SHUT OFF PRESSURE OF P-50009A/B = 6 barg
12	MULTIFUNCTIONAL VALVE BY PUMP SUPPLIER: BACKPRESSURE, PRESSURE RELIEF, ANTI-OVERFLOW AND SAFETY VALVE FUNCTION.
13	OUTLET VALVE
14	AUTOMATIC AIR VENT VALVE
15	POSITION TO BE DEFINED DURING COMMISSIONING
16	POLYAMIDE TUBING (RILSAN TYPE)
17	CHECK VALVE (NO SPRING TYPE)
18	DRAIN PAN FOR ANALYZER. DRAIN PAN VOLUME= 5 L
A 19	VALVE FOR AUTOMATIC SYSTEM DRAINING IN CASE OF SHUT DOWN OR LONG STOP PERIOD OF THE SYSTEM

T-50004	
NON-OXIDANT BIOCIDE DOSING TANK	
VOLUME	0.1 m3
DES. PRESS.	ATM
DES. TEMP.	45° C
MATERIAL	PE

P-50007A/B	
NON-OXIDANT BIOCIDE DOSING PUMP – CONTAINER INLET	
TYPE	METERING DIAPHRAGM
DES PRESSURE	10 barg
CAPACITY	0.03 l/h
HEAD	4.5 bar(a)
DES. TEMP.	45° C
MATERIAL	PVC

P-50008A/B	
NON-OXIDANT BIOCIDE DOSING PUMP – SEA WATER INTAKE	
TYPE	METERING DIAPHRAGM
DES PRESSURE	10 barg
CAPACITY	0.85 l/h
HEAD	4.5 bar(a)
DES. TEMP.	45° C
MATERIAL	PVC

P-50010A/B	
NON-OXIDANT BIOCIDE DOSING PUMP – WASTE WATER TANK	
TYPE	METERING DIAPHRAGM
DES PRESSURE	10 barg
CAPACITY	0.33 l/h
HEAD	4.5 bar(a)
DES. TEMP.	45° C
MATERIAL	PVC

PSC DOC. REF: PK2885-B-001

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	11-NOV-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
03	30-SEP-24	UR	WR	RM	ACCEPTED FOR CONSTRUCTION
02	22-AUG-24	UR	WR	RM	ISSUED FOR REVIEW
01	29-MAY-24	GG	WR	RM	ISSUED FOR REVIEW
00	24-APR-24	UR	RC	RM	ISSUED FOR REVIEW

CROSSWIND ROSETTI MARINO

TITLE : WATER TREATMENT PACKAGE
BIOCIDE DOSAGE
P&I DIAGRAM

CONTRACT NO./TITLE			SCALE –
DRAWN UR	CHECKED WR	APPROVED RM	DATE 11/11/24
A1	DRAWING NO. 1724000448-PR-PID-00013	SHEET 007	REV. 04

File Name : 1724000448-PR-PID-00013 Rev04