Base Load Power Hub (BLPH)

HMI screens print out

Document Number: 1724000594-IN-DD-00028

Job Doc Number: E366772C00-SPO

Document Class: 2

01	13/09/2024	Issue for Review (IFR)	KS	AB	SC
00	16/07/2024	Issue for Review (IFR)	AP	AB	SC
Rev.	Date	Description	Prepared	Reviewed	Approved

YOKOGAWA Co-innovating tomorrow™

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Revision / Change Log

Rev.	Description
00	Issue for Review (IFR)
01	Issue for Review (IFR)

HOLDS LIST

No.	Description
1	Hold-1 Alarms (System, Shelved, Audit etc), Overview, System Status (PCS/SIS/ FGS), pop-up screens ,Fire & Gas Layout shall be submitted during detail engineering.

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Table of contents

1 INTRODUCTION 6

1.1 PROJECT OVERVIEW 6

1.1.1 Project Location 6

1.1.2 Project Concept 7

2 DOCUMENT SCOPE 9

2.1 REFERENCES 9

2.2 DEFINITIONS AND ABBREVIATIONS 9

3 HMI SCreens 11

3.1 GENERAL GUIDELINES 12

3.2 List of HMI Screens 14

3.3 HMI Screens images 17

1 INTRODUCTION 6

1.1 PROJECT OVERVIEW 6

1.1.1 Project Location 6

1.1.2 Project Concept 7

2 DOCUMENT SCOPE 9

2.1 REFERENCES 9

2.2 DEFINITIONS AND ABBREVIATIONS 9

3 HMI SCreens 11

3.1 GENERAL GUIDELINES 12

3.2 List of HMI Screens 14

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

List of Figures

Figure 1 HOLLANDSE KUST NOORD WIND PARK Location Map 65
Figure 2 - Wind Park Details 76
Figure 3 – BLPH Concept 76

List of tables

Table 1 - Reference Documents 9
Table 2 - Definitions and Abbreviations 10
Table 3 – List of Graphics 16
Table 1 - Reference Documents 8
Table 2 - Definitions and Abbreviations 9

List of Attachments

NAAnnexture- 1 HMI Screen Images

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

1 INTRODUCTION

1.1 PROJECT OVERVIEW

Crosswind, a Shell and Eneco joint venture, was awarded the tender to develop the offshore Hollandse Kust Noord (HKN) wind farm, located 18.5km off the coast of Netherlands near the town of Egmond aan Zee. The consortium plans to have HKN operational in 2023 with an installed capacity of 759MW generating at least 3.3TWh per year. This is sufficient renewable power to supply more than 1 million Dutch households with green electricity.

Offshore wind farms produce intermittent electricity and balancing these dips and peaks and integrating this electricity into the national energy system requires new technologies. For this reason, the offshore wind farm will include several new technologies that could be implemented at full-scale in the future. The new technologies being explored include a floating solar park, a short-duration battery storage as well as long-term storage via green hydrogen produced by water electrolysis and subsequently consumed in a fuel cell. The combination of these individual measures, herein referred to as the Base Load Power Hub (BLPH) will ensure a continuous power supply regardless of the wind situation.

1.1.1 Project Location

The Hollandse Kust Noord (HKN) wind farm is located 18.5km off the coast of the Netherlands near the town of Egmond aan Zee.

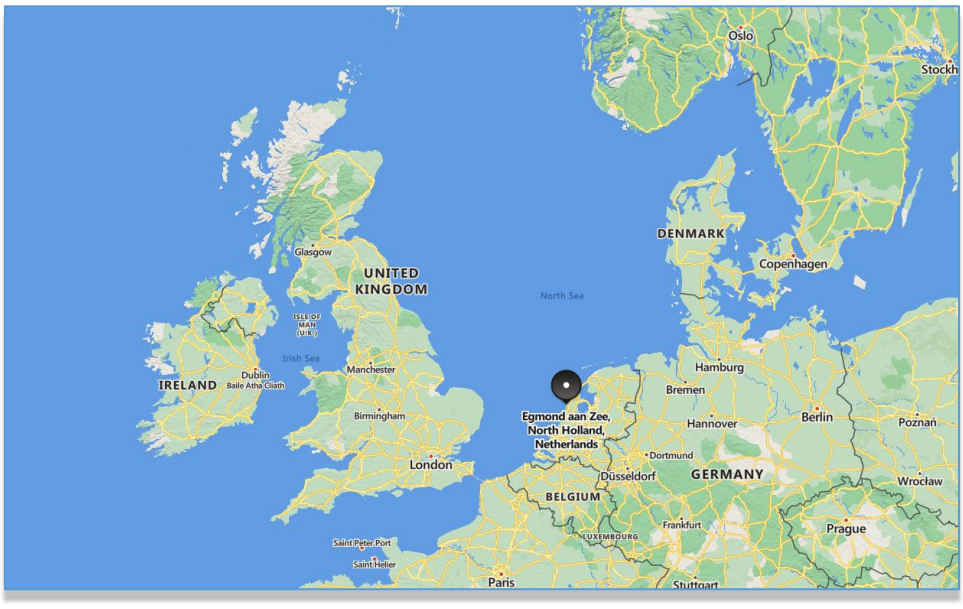


Figure 1 HOLLANDSE KUST NOORD WIND PARK Location Map

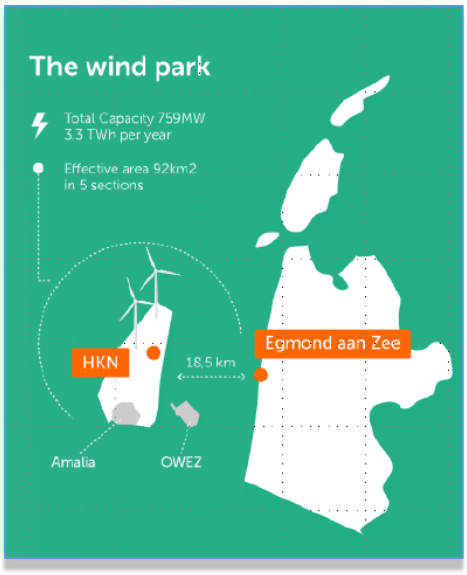


Figure 2 - Wind Park Details

The wind farm will consist of No. 69 x 11.5MW wind turbine generators each to be installed on a dedicated monopile structure. A 70th monopile located on coordinates E 590719.1, N 5841602.3 is reserved for installing the platform accommodating the BLPH. The monopile structure was designed and installed by Van Oord Offshore Wind (VooW) and therefore not part of the BLPH scope.

1.1.2 Project Concept

All components included in the BLPH will be integrated onshore on a topsides and installed in an offshore location within the boundaries of the HKN wind farm. At its simplest, the BLPH will store energy during periods of high electricity generation from renewable sources (a wind turbine generator and the floating solar PV farm) and release it during periods of low generation. In practice. It is expected that the energy stored will supplement generation from renewable sources to ensure that at least 1.0MW of power is exported to the electrical grid regardless of wind/solar availability.

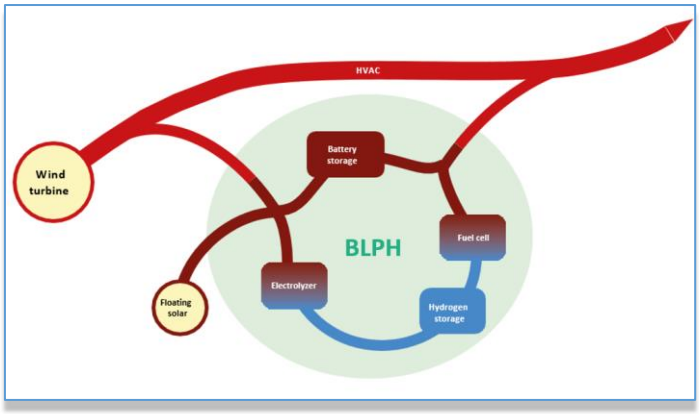


Figure 3 – BLPH Concept

Electricity in the BLPH will be stored in the form of electrons in a battery energy storage system (BESS) as well as converted into green hydrogen via water electrolysis. When the power output from the connecting wind turbine drops to below 1 MWe, the BLPH will return its stored energy to supplement the remaining power output. This will be by discharging the BESS, while stored hydrogen will be converted back into electricity using a fuel cell to extend the discharge duration.

The purpose of the BLPH s to function as a testbed for the integration of energy storage technologies with renewable generation. It is expected that equipment installed on the BLPH will operate as Normally Unmanned Installation for at least two (2) years with no or minimal maintenance and it will have its own independent control room with the ability to communicate with Crosswind's control room.

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

2 DOCUMENT SCOPE

This document describes the List of Human Machine Interface (HMI) Screens for the Yokogawa PCS, SIS and FGS.

The aim of this document is to ensure that the Human Machine Interface (HMI) is equipped with the facilities and functionalities needed by the operators to perform supervisory and control tasks in an efficient and effective way. The functionality of HMI is limited to graphics.

2.1 REFERENCES

Doc. No.	Description
1724000594-IN-SP-00018	PCS and SAFETY SISTEMS Software Functional Design Specification (FDS-SW)
1724000594-IN-DD-00015	System Architecture
1724000594-IN-SP-00019	EMCS Software Functional Design Specification (FDS-SW)
1724000594-IN-LIS-00004	PCS and Safety System IO List (HW and SW)
1724000594-IN-LIS-00005	EMCS IO List (HW and SW)
K559-2254-IC-SPE-001	System specification for Main Automation Contractor
K559-2254-EL-LST-001	BLPH CONTROL ALARM AND MONITORING TABLE
CWHKN-INN-INP-SPC-00005	SCADA Functional Design Specification

Table 1 - Reference Documents

2.2 DEFINITIONS AND ABBREVIATIONS

Abbreviations	Definition
BLPH	Base Load Power Hub
COMPANY or Client (CPY)	Crosswind
CONTRACTOR (CTR)	ROSETTI MARINO S.p.A.
C&E	Cause and Effect
EMCS	Electrical Measurement and Control System
FGS	Fire and Gas System
HMI	Human Machine Interface

OWS	Operator workstation
PROJECT	HOLLANDSE KUST NOORD WIND PARK Project
PCS	Process Control System
P&ID	Piping and Instrument Diagram
SCADA	Supervisory Control and Data Access
SIS	Safety Instrumented System

Table 2 - Definitions and Abbreviations

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

3 HMI SCREENS

Process operators monitor and control their respective units through the Yokogawa Human Machine Interface (HMI). SCADA shall is configured so that the operator can work simultaneously in the following two modes:

Proactive mode

This mode requires the proactive role of the operator in controlling the plant. Operator monitors the status of the plant by paging through displays, watching trends and deviations, and acting when required or appropriate. Awareness is improved by a well-designed hierarchical arrangement and a logical and understandable grouping of the HMI displays.

Reactive mode

This reactive mode is triggered by events such as alarms. The operator's attention is demanded and directed by the system to displays where he can see what has happened and can take appropriate corrective action. Visualization of alarms and access to corrective controls depend on the urgency of action required.

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

3.1 GENERAL GUIDELINES

HMI Screens provides a wide range of user-defined views, for operation and monitoring, as well as for system maintenance. Operation and monitoring functions are functions such as receiving and acknowledging of alarms, set point control, output manipulation, process data monitoring, trending, reporting, controller mode changing, etc.

The layout of the graphics conforms the following guidelines:

Layout Standard:

- All Graphic displays contain, as a minimum, Graphic Title, Navigation arrows and Navigation bar.
- Graphic title is located in the top middle of the graphic. It includes operating unit name, as well as specific graphic function description.
- The bar has max. 21 configurable navigation targets that facilitates operator to navigate to Unit menu, FGS display, SIS display and process displays.

Process and Instrument Lines:

- Are laid out in a way to minimize distracting clutter and to provide a simplified process flow view.
- Process flow is from left to right in a process graphic page.
- Layout minimizes piping (line) crossovers. The vertical line is broken in case of cross over.
- Lines are separated (both vertically and horizontally) by enough gap based on the line thickness.
- Layout minimizes the number of turns in a line.
- Directional arrows are placed only where process line enters equipment, at pipe corners or where lines leave the page.
- Process lines are of a thickness such that they are easily distinguishable from signal lines.
- Do not join lines in an X-pattern (four lines meeting at a point). Exception is where a single line splits into an odd number of branches.
- All control signal lines connected to another graphic shall have a dynamic “connector” target.
- Single color and pattern are used for all process lines.
- When process lines are continued in a separate graphic, both source and destination graphics will have dynamic connector arrows. Pipeline / process lines leaving a graphic will enter at the same height on the destination graphic.

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as “NOT CONTROLLED” copy

Graphic Parts & Symbols:

- All shapes are two-dimensional.
- Balance equipment on screen distribution to prevent density clusters.
- Dynamic shapes are not re-sized.
- As much as possible place control and on/off valves on horizontal lines only.
- Place valves symmetrically (aligned with each other).
- Do not show details to match operational requirement (e.g., do not show trays in a distillation tower).

Process Values & Tag Names:

- All analog values associated with field instrumentation are displayed next to the measuring point. The number of process digits to be displayed is based on the engineering range. The Instrument line connection to the process line is situated between the engineering unit and measuring point.
- Measurements from externally mounted instruments, inferred differentials, calculations, etc., are located adjacent to the process line or vessel and connected to the process line or vessel.
- Equipment names are placed inside the equipment symbol.
- Where there is logic associated with the starting and stopping of pumps by level or pressure measurement, the motor symbol is joined to the display value via an instrument line.
- Only acronyms and tag names are displayed in all capital letters. Engineering units are displayed as per the standard. Other texts are displayed using leading capitals (title case). When there is more than one word, the leading letter of each word is capitalized. This applies to tag comments, menu option, Graphic title and equipment labels.

General:

- In general, only process lines (or areas) that show PCS, SIS, and FGS instrumentation are shown on displays, although other lines may be shown to specify the position of field instruments.
- Process flow direction on graphics is generally from left to right.
- Graphic representation of dynamic shapes is consistent with that of static shapes.
- Local pneumatic loops, relief valves, steam traps, hand valves without position indication, etc., do not appear on displays.
- Graphics are to be distinguishable and readable from a distance of 1 meter from the screen.

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

3.2 LIST OF HMI SCREENS

Sl. No	P&ID	HMI Screen Name	Type of Display	Windows Hierarchy Level
1	123A-90-DD- PR-PID-80013	H2_STG_VESSELE_HEADER_IL	PROCESS	Level-2
2	123A-90-DD- PR-PID-80014	H2_STG_VESSELE_HEADER_OUTLET	PROCESS	Level-2
3	123A-90-DDL-PR-PID-80015	HYDROGEN_STORAGE_VESSEL_A	PROCESS	Level-2
4	123A-90-DD- PR-PID-80016	HYDROGEN_STORAGE_VESSEL_B	PROCESS	Level-2
5	123A-90-DD- PR-PID-80017	HYDROGEN_STORAGE_VESSEL_C	PROCESS	Level-2
6	123A-90-DD- PR-PID-80018	HYDROGEN_STORAGE_VESSEL_D	PROCESS	Level-2
7	123A-90-DD- PR-PID-80019	HYDROGEN_STORAGE_VESSEL_E	PROCESS	Level-2
8	123A-90-DD- PR-PID-80020	HYDROGEN_STORAGE_VESSEL_F	PROCESS	Level-2
9	123A-90-DD- PR-PID-80029	HYDROGEN_VENT_DRUM	PROCESS	Level-2
10	123A-90-DD- PR-PID-80028	HYDROGEN_VENT_HEADER	PROCESS	Level-2
11	1724000428-PR-PID-00019	IAP_COMPRESSOR_CABINET	PROCESS	Level-2
12	1724000428-PR-PID-00019	INSTRUMENT_AIR_PACKAGE	PROCESS	Level-2
13	123A90-DDL-PR-PID-80027	INSTRUMENT_AIR_PACKAGE_DISTRIBUTION	PROCESS	Level-2
14	1724000428-PR-PID-00018	NITROGEN	PROCESS	Level-2
15	123A-90-DD- PR-PID-80021	SEA_WATER_INTAKE_SYSTEM1	PROCESS	Level-2
16	123A-90-DD- PR-PID-80025	WATER_DOSPOSAL_SHEET_1	PROCESS	Level-2
17	123A-90-DD- PR-PID-80026	WATER_DISPOSAL_SHEET_2	PROCESS	Level-2
18	1724000428-PR-PID-00014	WTP BIOCIDE_DOSAGE	PROCESS	Level-2

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Sl. No	P&ID	HMI Screen Name	Type of Display	Windows Hierarchy Level
19	1724000428-PR-PID-00013	WTP_SEA_WATER_FILTRATION_1	PROCESS	Level-2
20	1724000428-PR-PID-00013	WTP_SEA_WATER_FILTRATION_2	PROCESS	Level-2
21	1724000428-PR-PID-00013	WTP_SEA_WATER_REVERSE_OSMOSIS	PROCESS	Level-2
22	123A-90-DDL-PR-PID-80011	ELECTROLYSER_PACKAGE_A20000	PROCESS	Level-2
23	123A-90-DD- PR-PID-80012	FUEL_CELL_PACKAGE_A80000	PROCESS	Level-2
24	123A90-DDL-IN-CE-40000	ASD	Process C&E	Level-2
25	123A90-DDL-IN-CE-40000	ESD	Process C&E	Level-2
26	123A90-DDL-IN-CE-40000	ESD-1D	Process C&E	Level-2
27	123A90-DDL-IN-CE-40000	PSD	Process C&E	Level-2
28	123A90-DDL-EL-DG-20014	ELECTROLYSER_FEEDER	ELECTRICAL	Level-2
29	123A90-DDL-EL-DG-20014	FUEL_CELL_FEEDER	ELECTRICAL	Level-2
30	123A-90-DD- PR-PID-80043	OPEN_DRAIN_SYSTEM	PROCESS	Level-2
31	1724000428-PR-PID-00013	WTP_ACID_ANTISCALANT_DOSAGES	PROCESS	Level-2
32	1724000428-PR-PID-00013	WTP_FRESH_WATER_STORAGE	PROCESS	Level-2
33	123A90-DDL-EL-DG-20158	B200_SWITCHROOM	ELECTRICAL	Level-2
34	123A90-DDL-EL-DG-20014	BESS_FEEDER	ELECTRICAL	Level-2
35	123A90-DDL-EL-DG-20014	DISTRIBUTION_TRANSFORMER_FEEDER	ELECTRICAL	Level-2
36	123A90-DDL-EL-DG-20158	OVERALL_SINGLE_LINE_DIAGRAM	ELECTRICAL	Level-2
37	123A90-DDL-EL-DG-20014	SOLAR_PACKAGE_FEEDER	ELECTRICAL	Level-2
38	123A90-DDL-EL-DG-20014	TRANSFORMER_INCOMER	ELECTRICAL	Level-2

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Sl. No	P&ID	HMI Screen Name	Type of Display	Windows Hierarchy Level
39	123A90-DDL-IN-CE-40000	MOS PUCH PUSH BUTTON	Process C&E	Level-2
40	-	CURRENT ALARM OVERVIEW	-	
41	-	HISTORICAL ALARM OVERVIEW	-	
42	-	NAVIGATION	-	
43		TREND		

Table 3 – List of Graphics

- Note: Hold-1 Alarms (System, Shelved, Audit etc), Overview, System Status (PCS/SIS/FGS), pop-up screens, Fire & Gas Layout shall be submitted during detail engineering.

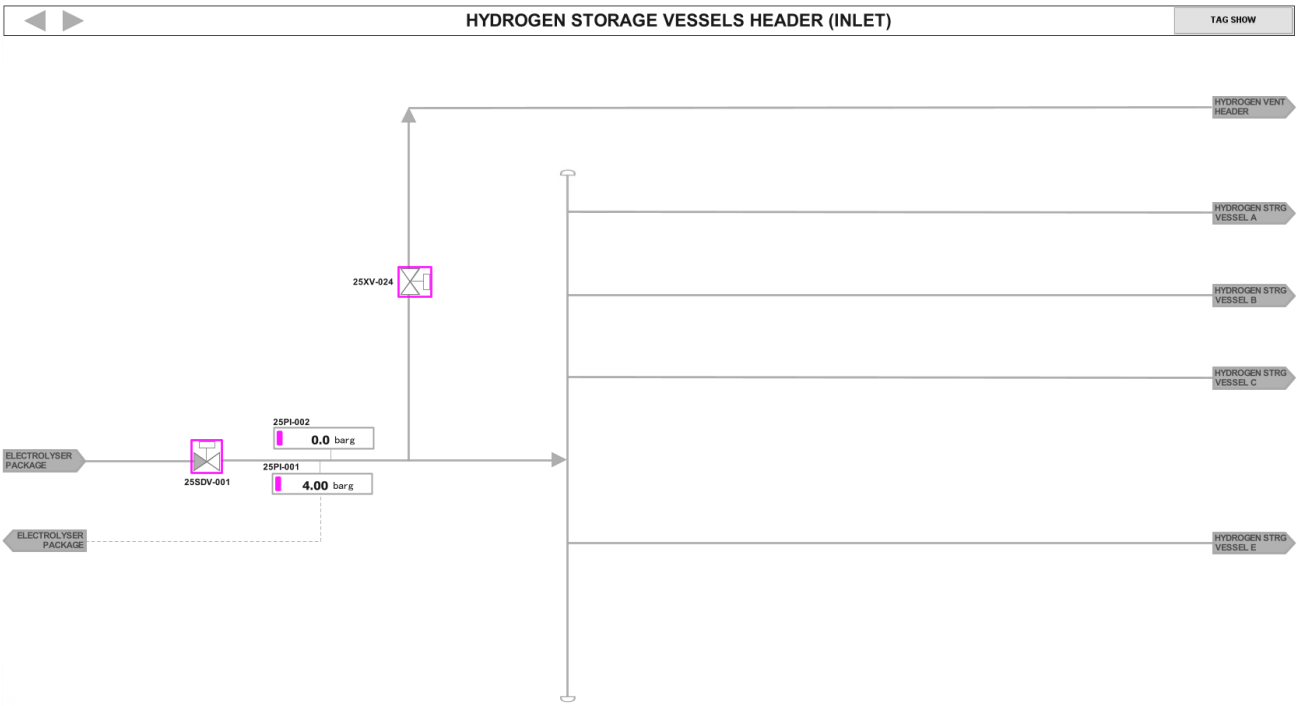
This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

3.3 HMI SCREENS IMAGES

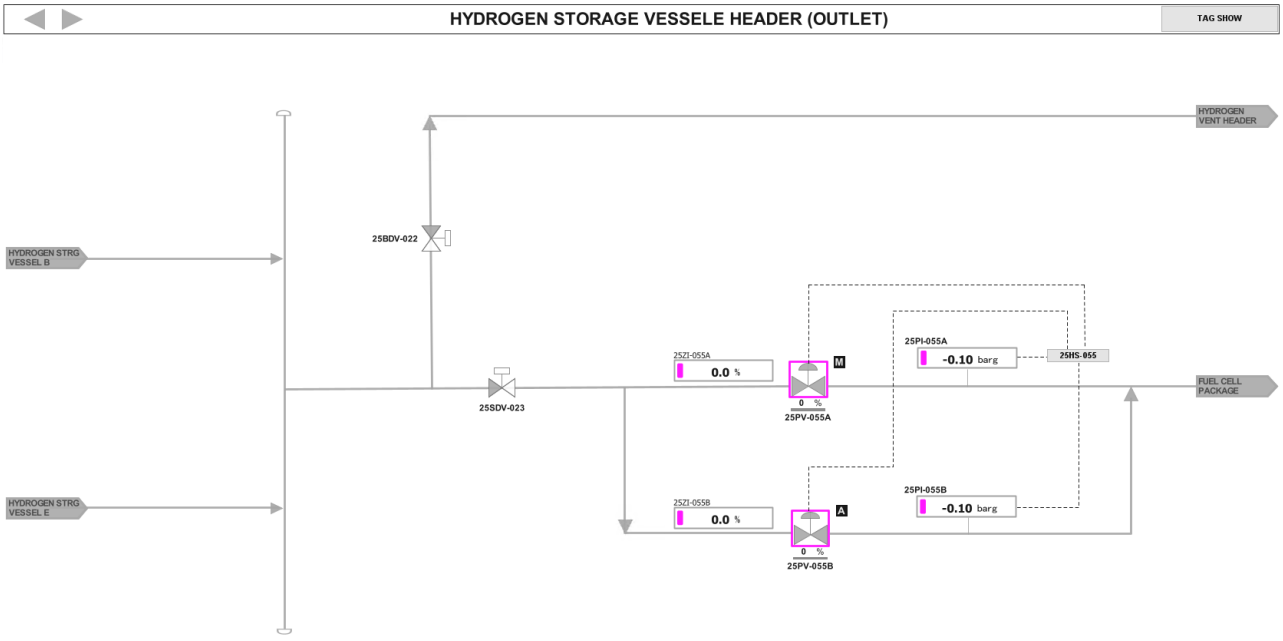
Annexture – 1

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

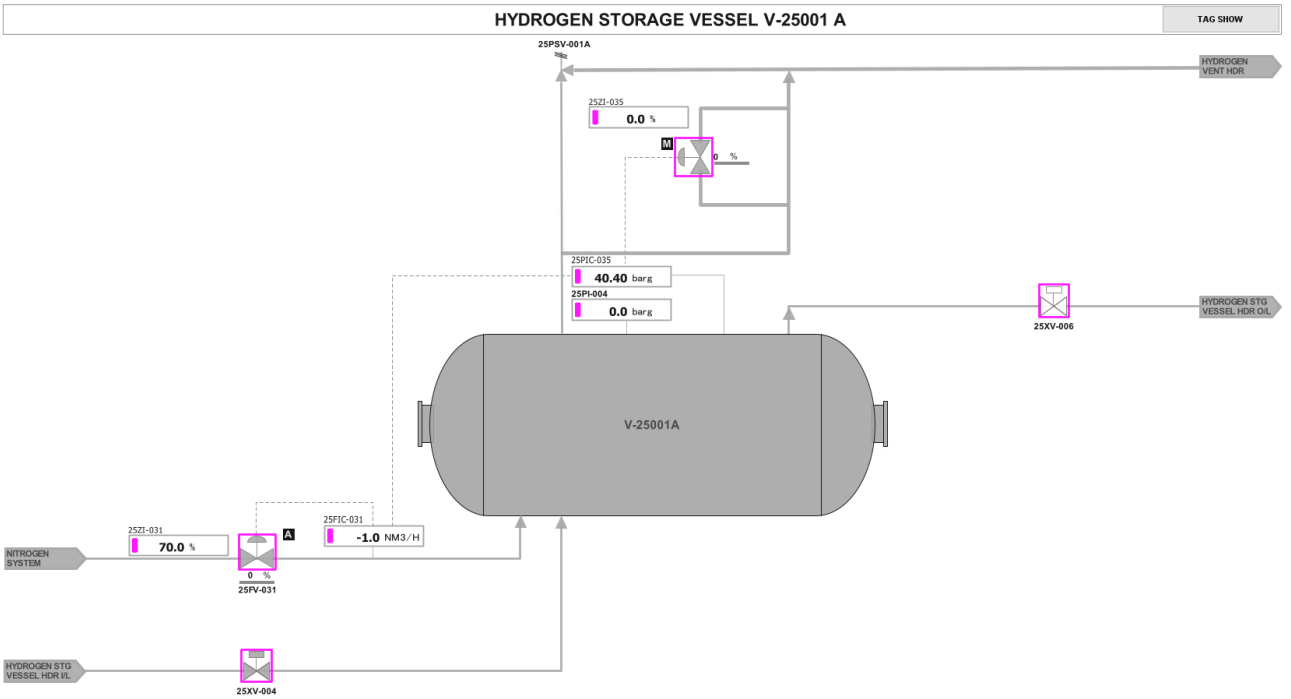
- H2_STG_VESSELE_HEADER_IL



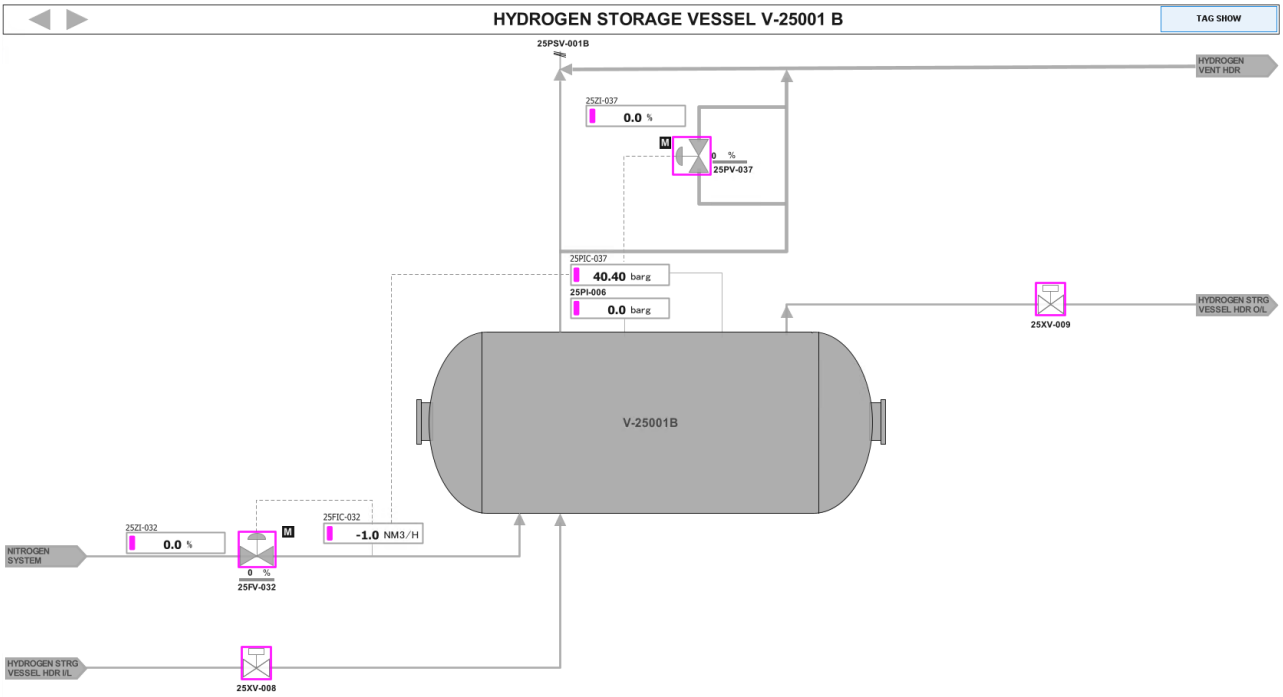
- H2_STG_VESSELE_HEADER_OUTLET



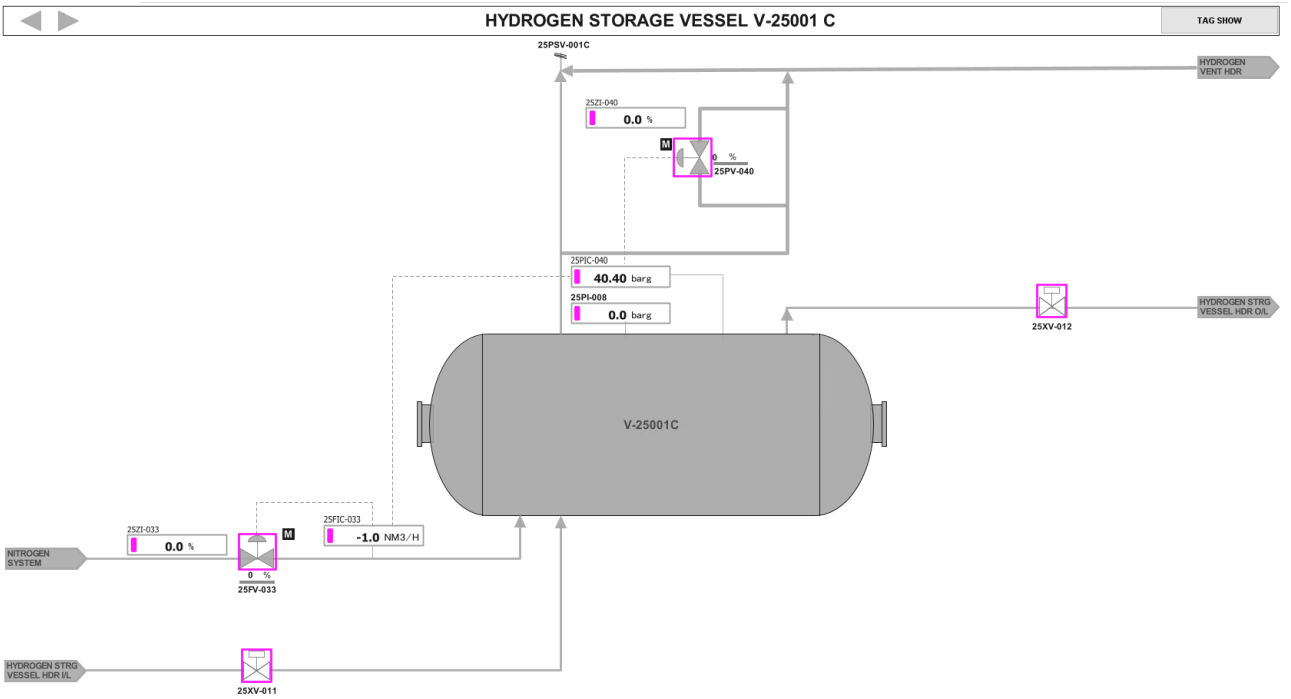
- HYDROGEN_STORAGE_VESSEL_A



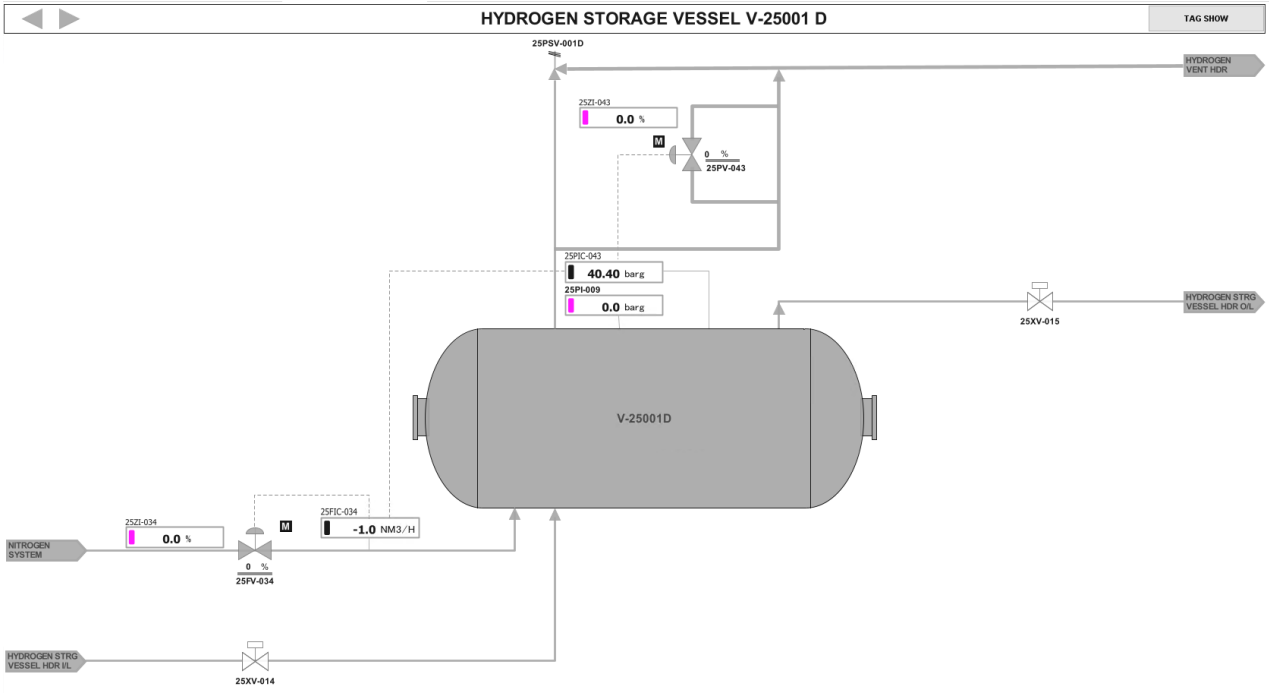
- HYDROGEN_STORAGE_VESSEL_B



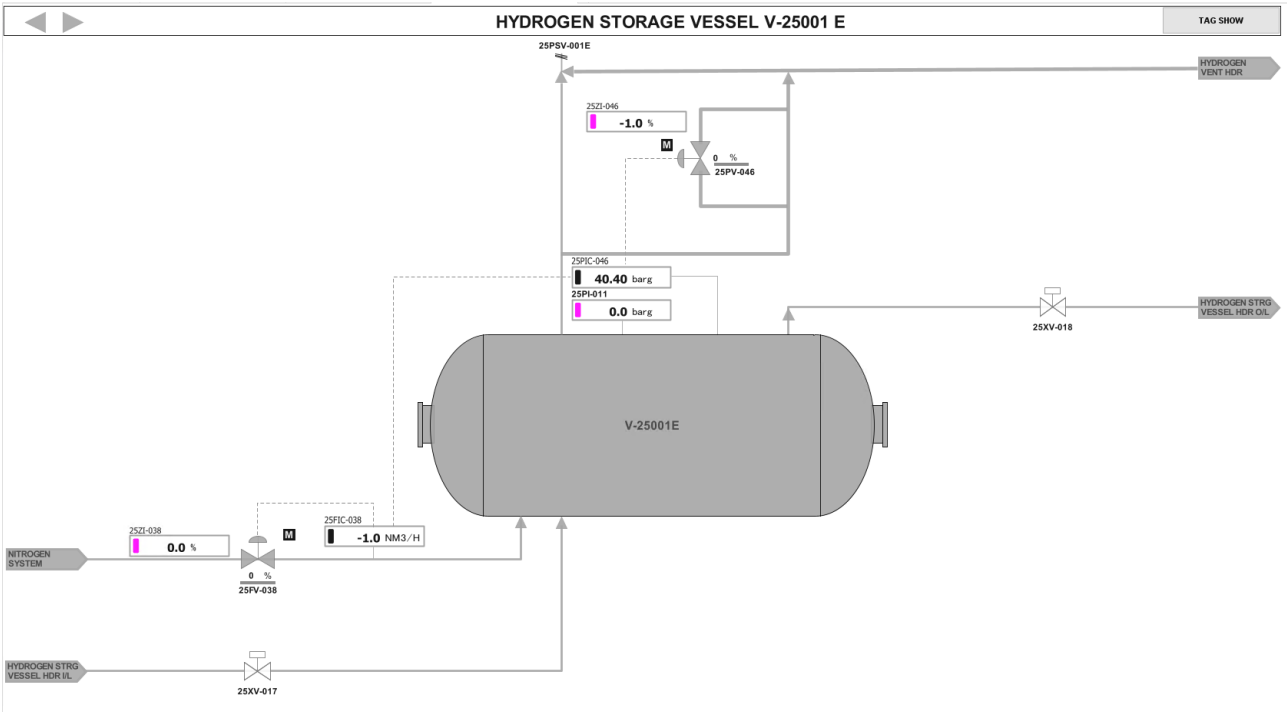
- HYDROGEN_STORAGE_VESSEL_C



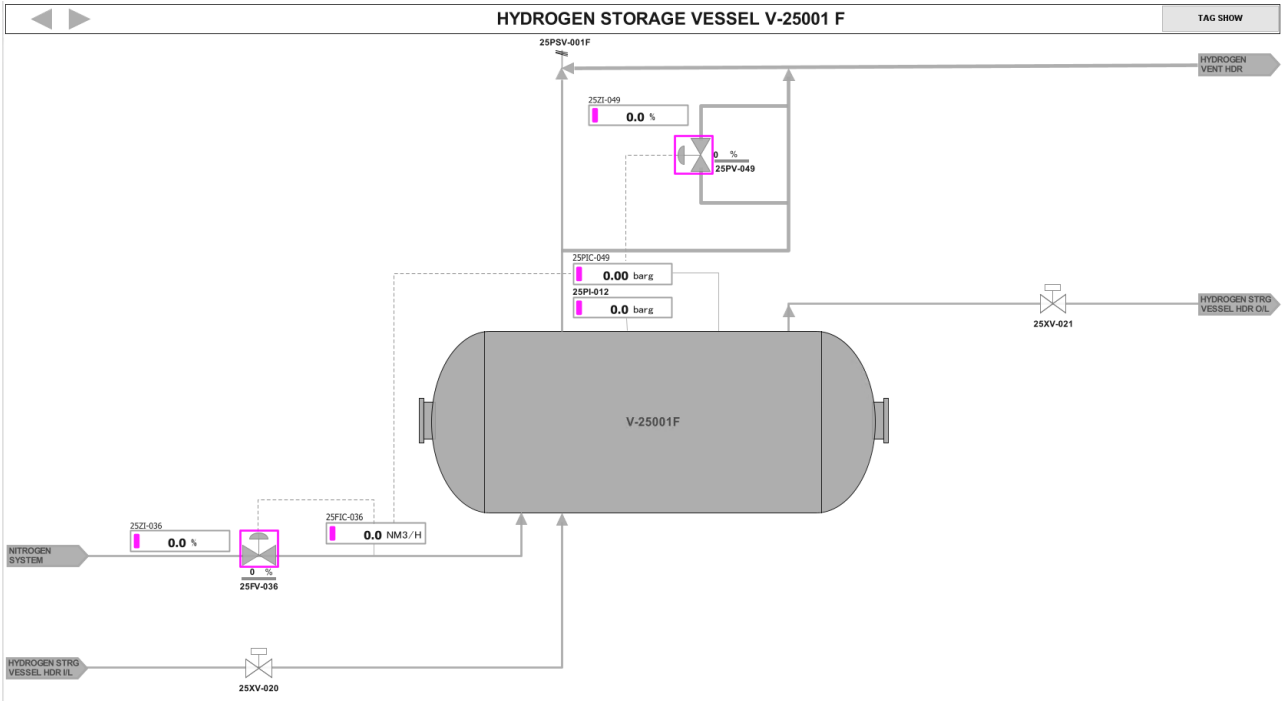
- HYDROGEN_STORAGE_VESSEL_D



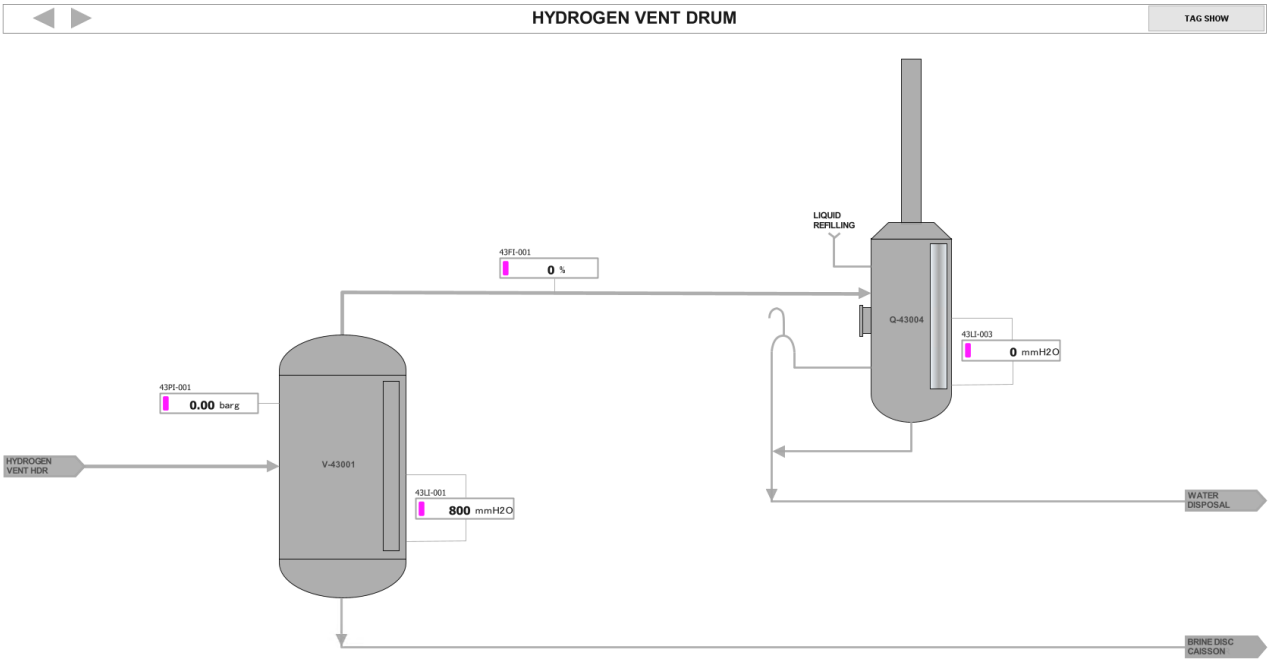
- HYDROGEN_STORAGE_VESSEL_E



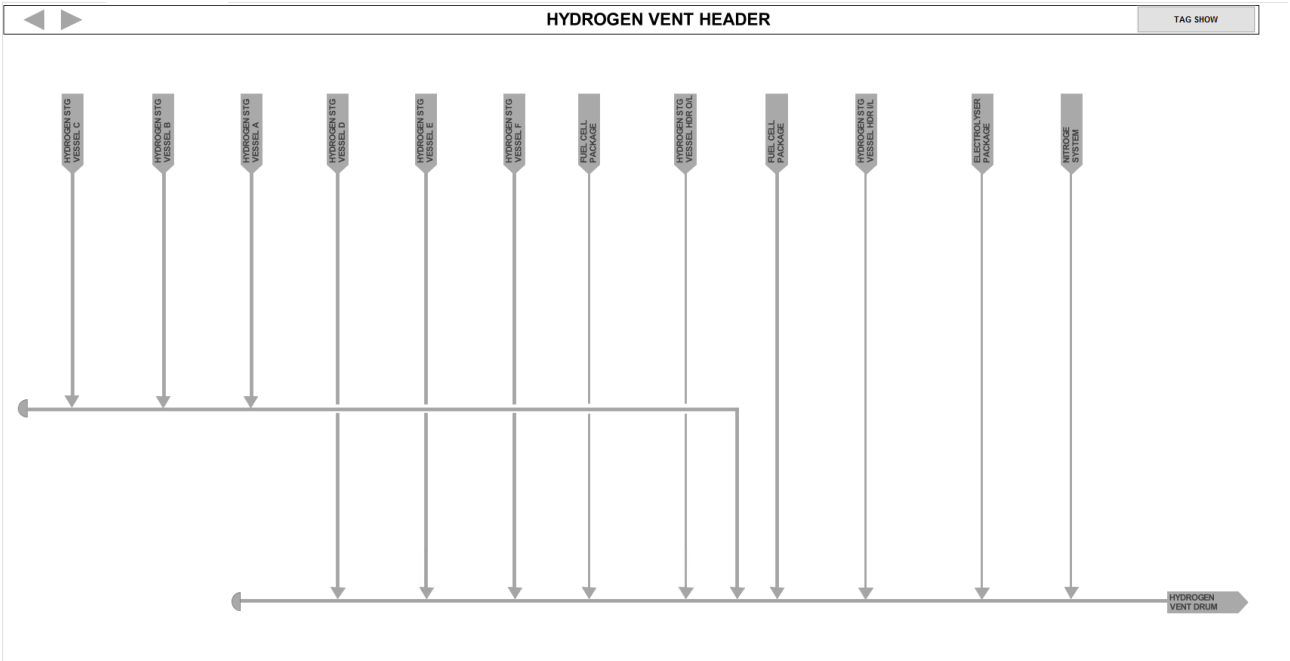
- HYDROGEN_STORAGE_VESSEL_F



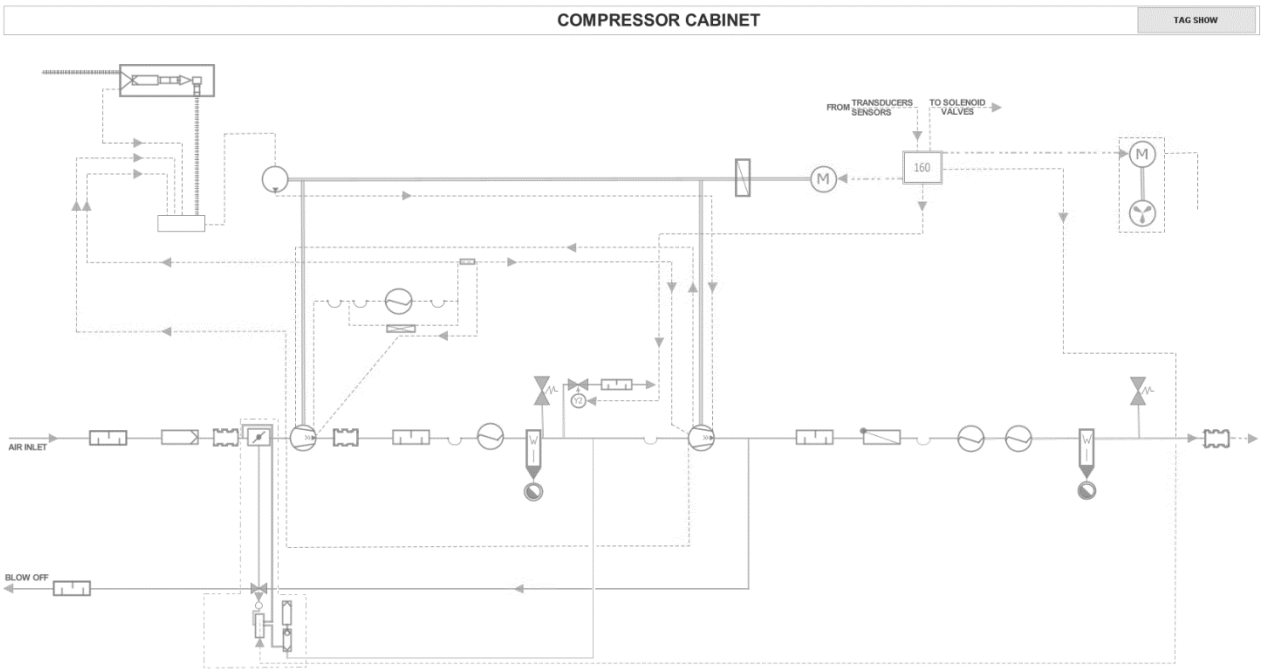
- HYDROGEN_VENT_DRUM



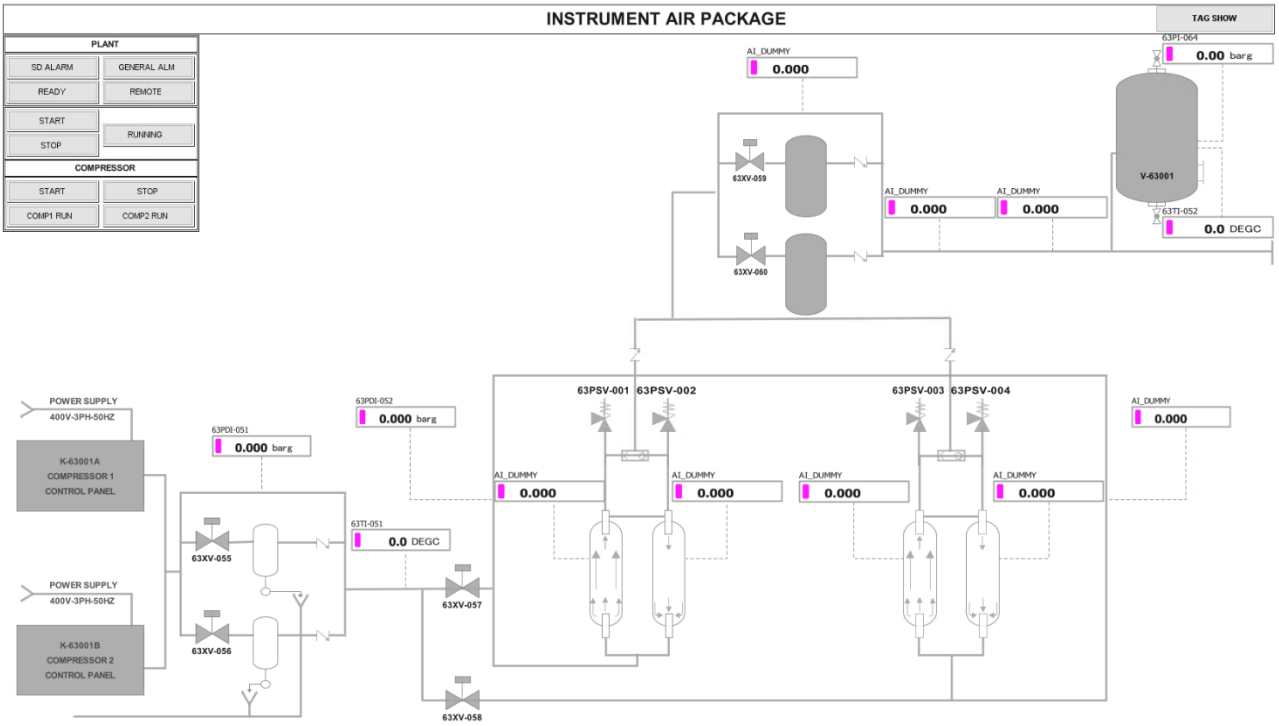
- HYDROGEN_VENT_HEADER



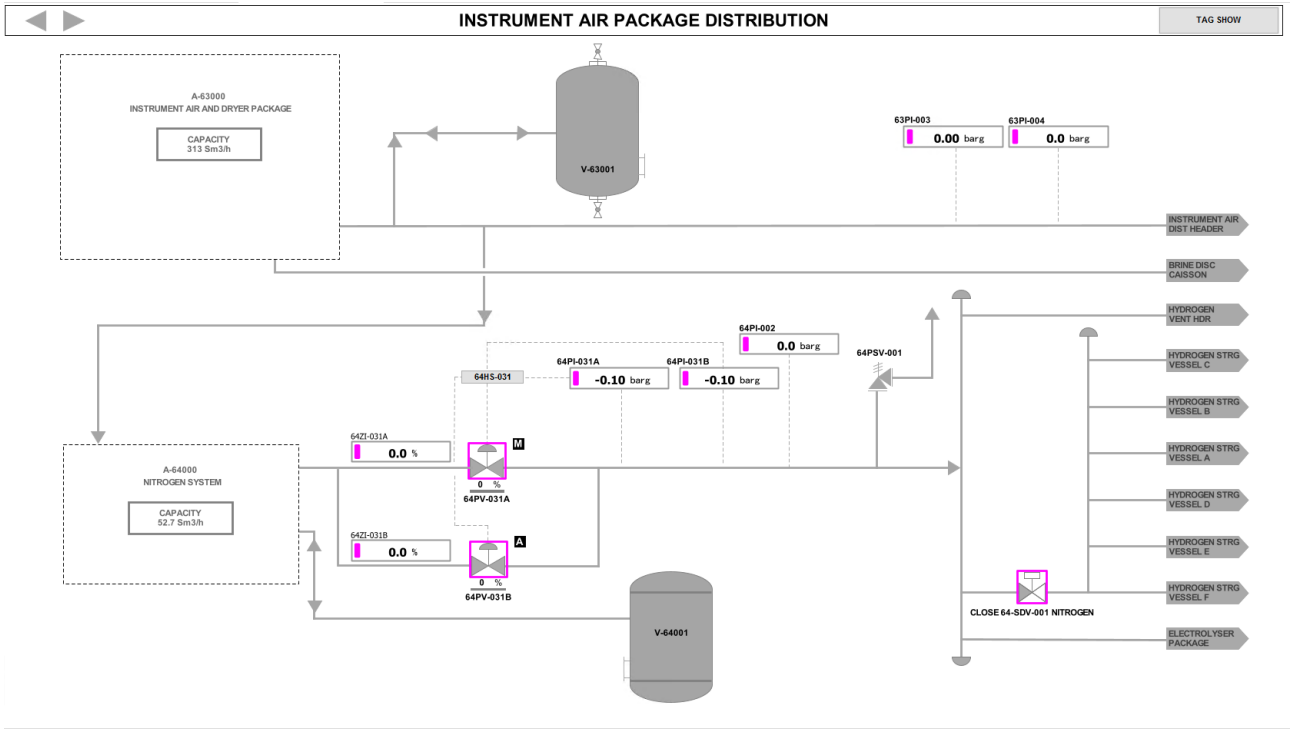
- IAP_COMPRESSOR_CABINET



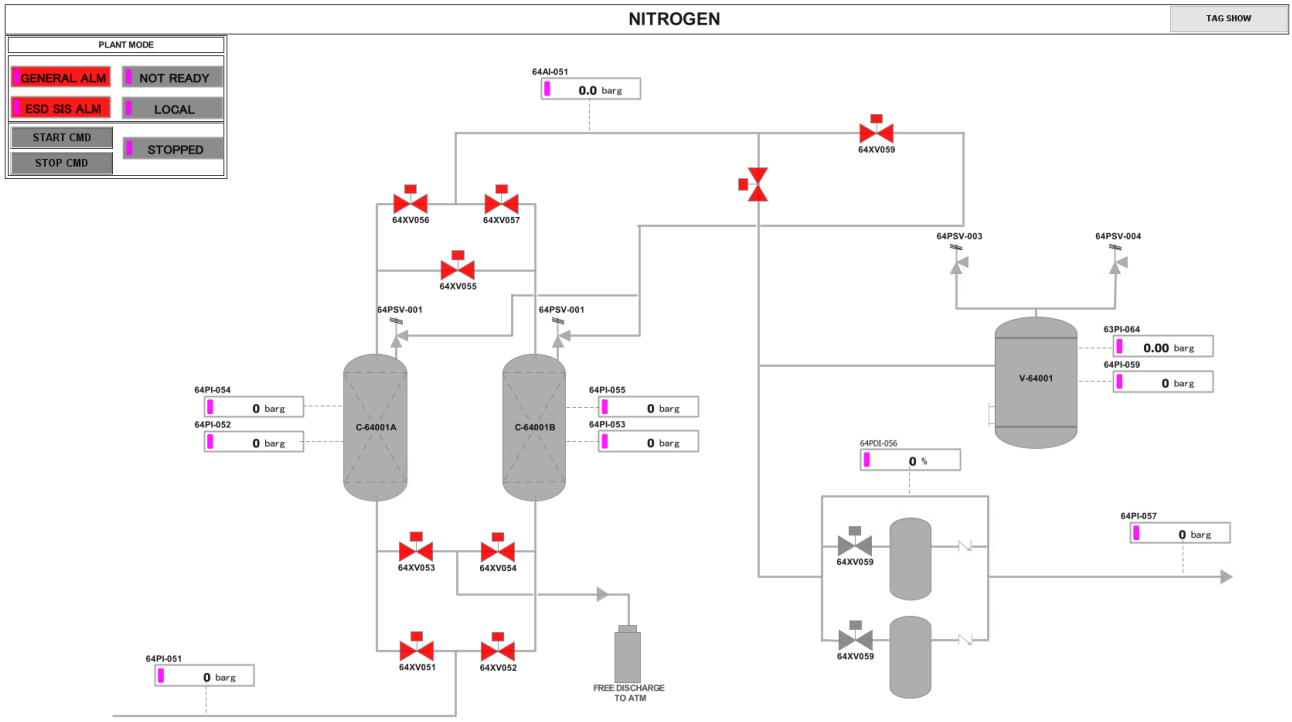
- INSTRUMENT_AIR_PACKAGE



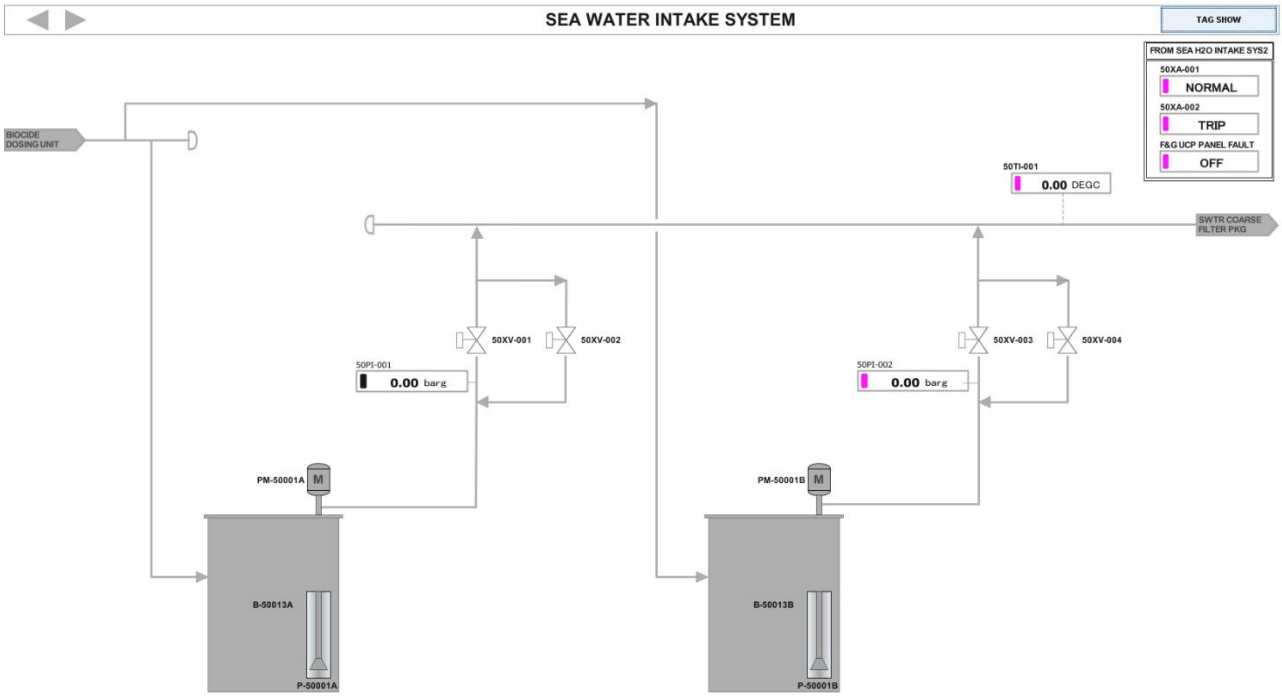
- INSTRUMENT_AIR_PACKAGE_AN



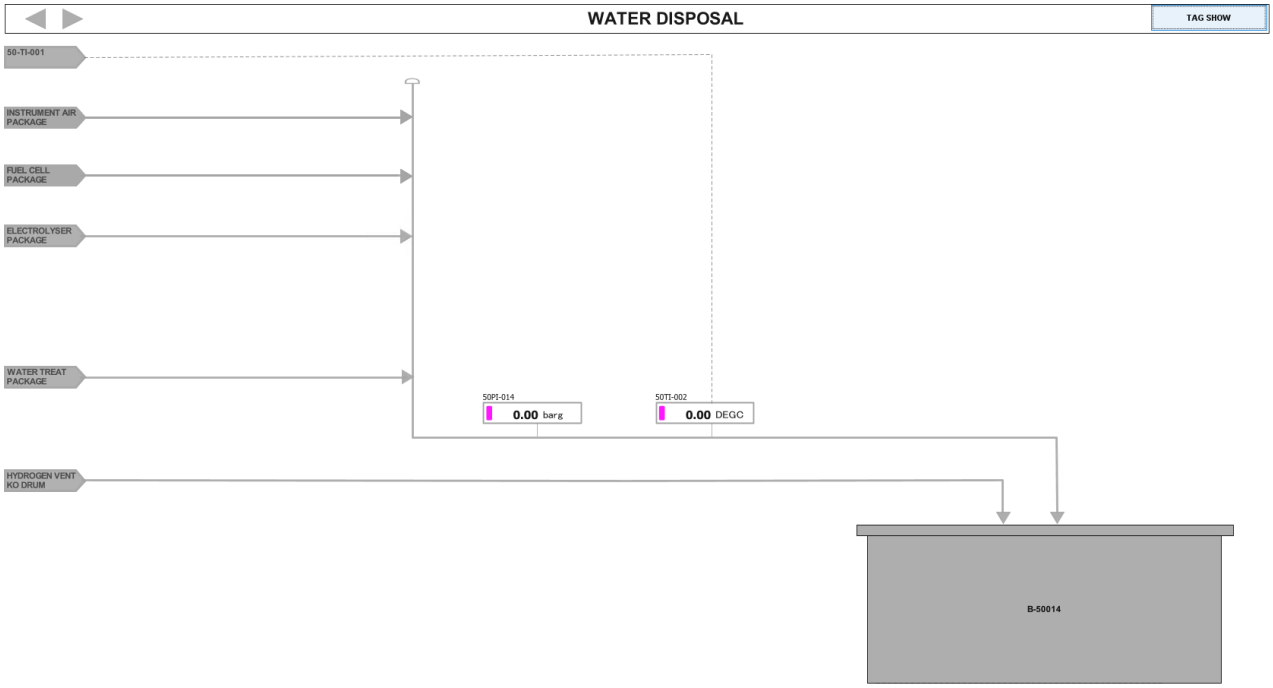
- NITROGEN


NITROGEN
TAG SHOW
PLANT MODE
GENERAL ALM
NOT READY
ESD SIS ALM
LOCAL
START CMD
STOP CMD
STOPPED
64AI-051
0.0 barg
64XV059
64XV056
64XV057
64XV055
64PSV-001
64PSV-001
64PSV-003
64PSV-004
63PI-064
0.00 barg
64PI-059
0 barg
V-64001
64PI-054
0 barg
64PI-052
0 barg
C-64001A
C-64001B
64PI-055
0 barg
64PI-053
0 barg
64PDI-056
0 %
64PI-057
0 barg
64XV053
64XV054
64XV059
64XV059
64XV051
64XV052
64PI-051
0 barg
FREE DISCHARGE TO ATM

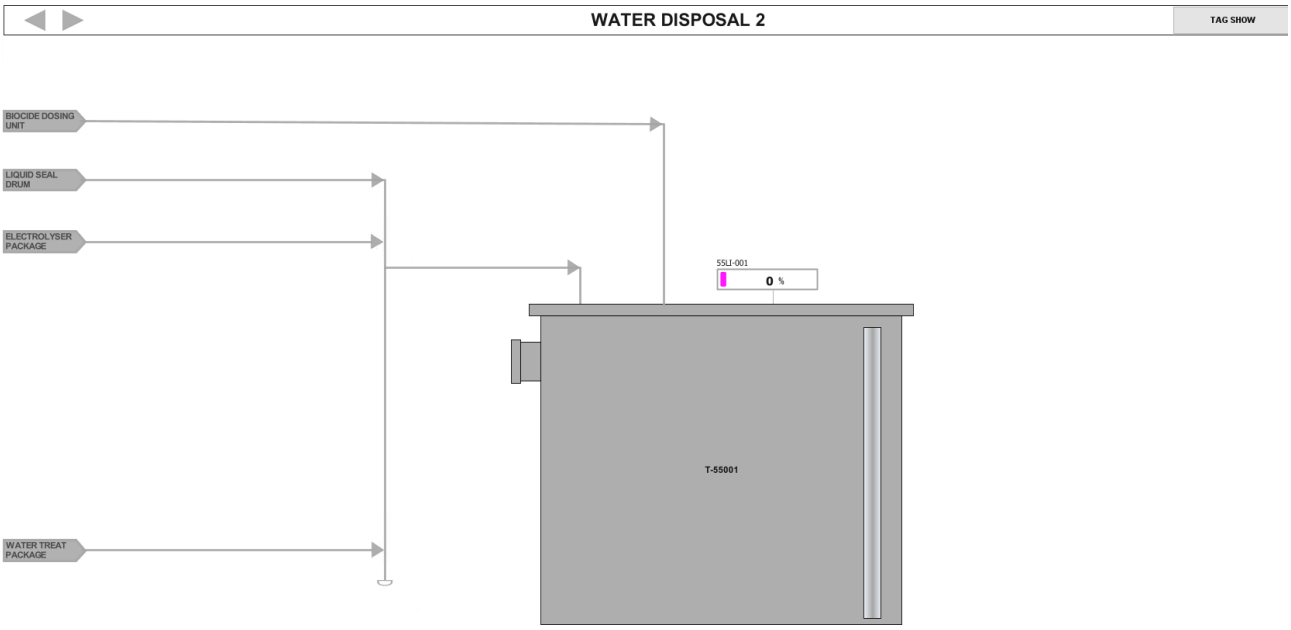
- SEA_WATER_INTAKE_SYSTEM1



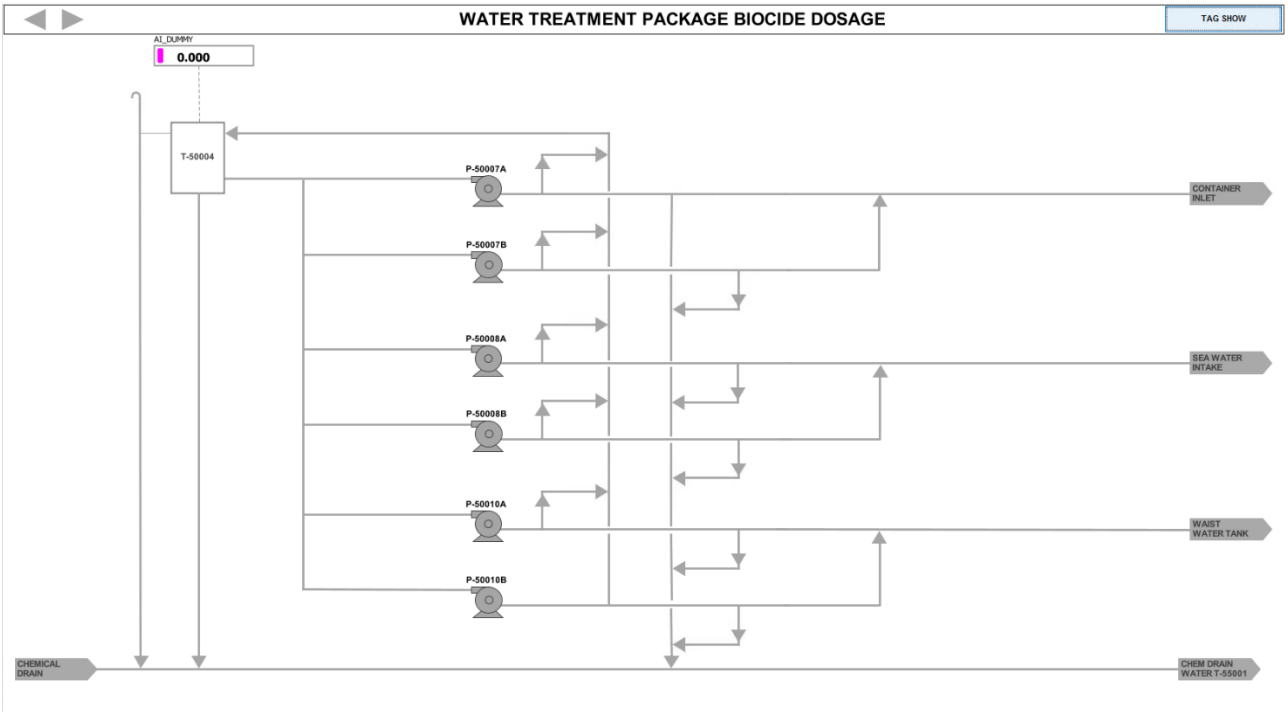
- WATER_DOSPOSAL_SHEET_1



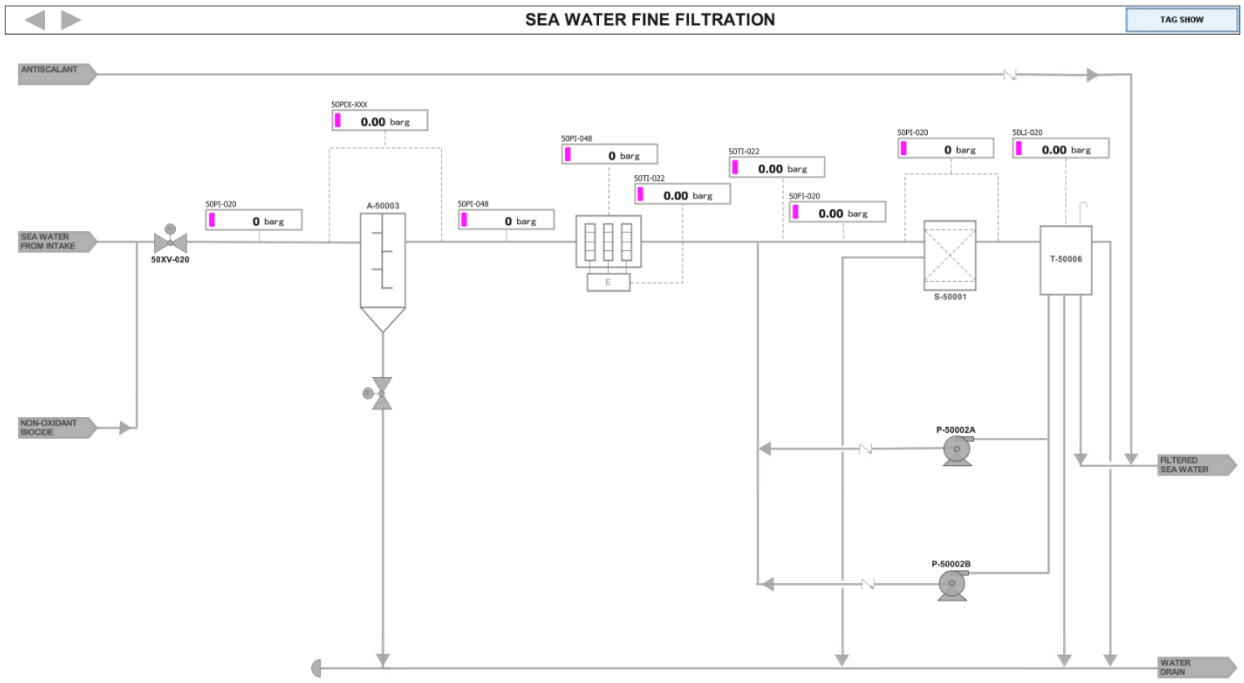
- WATER_DOSPOSAL_SHEET_2



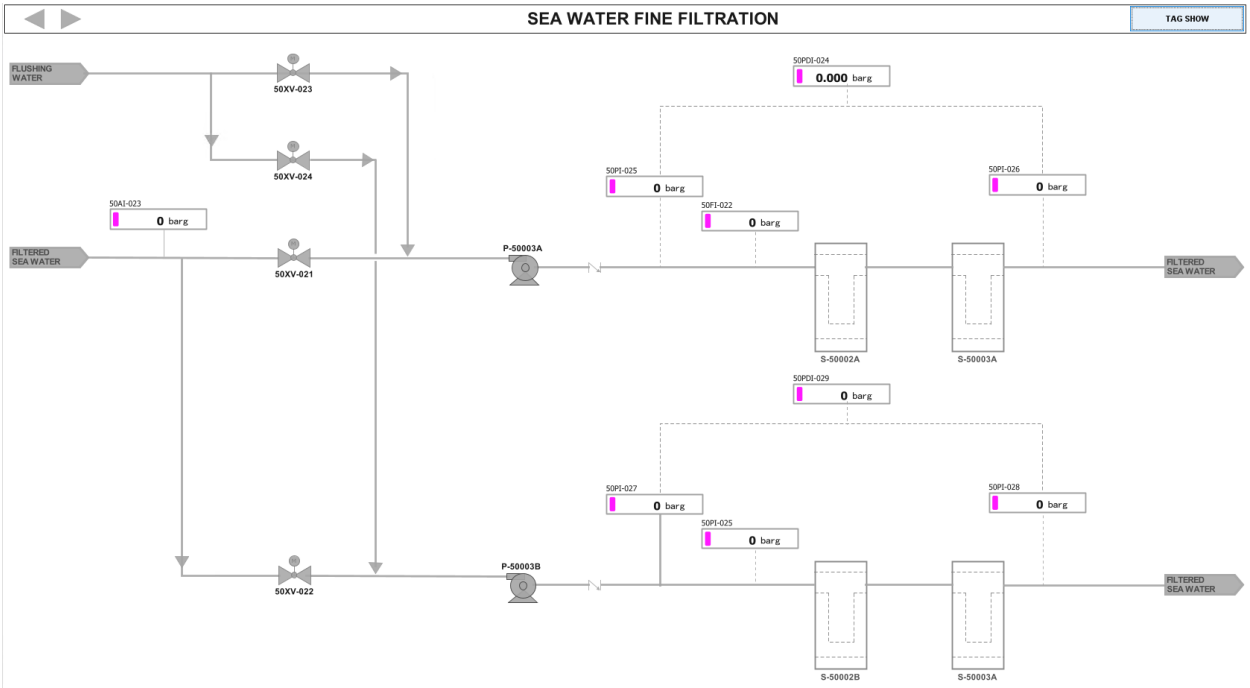
- WTP BIOCIDE_DOSAGE



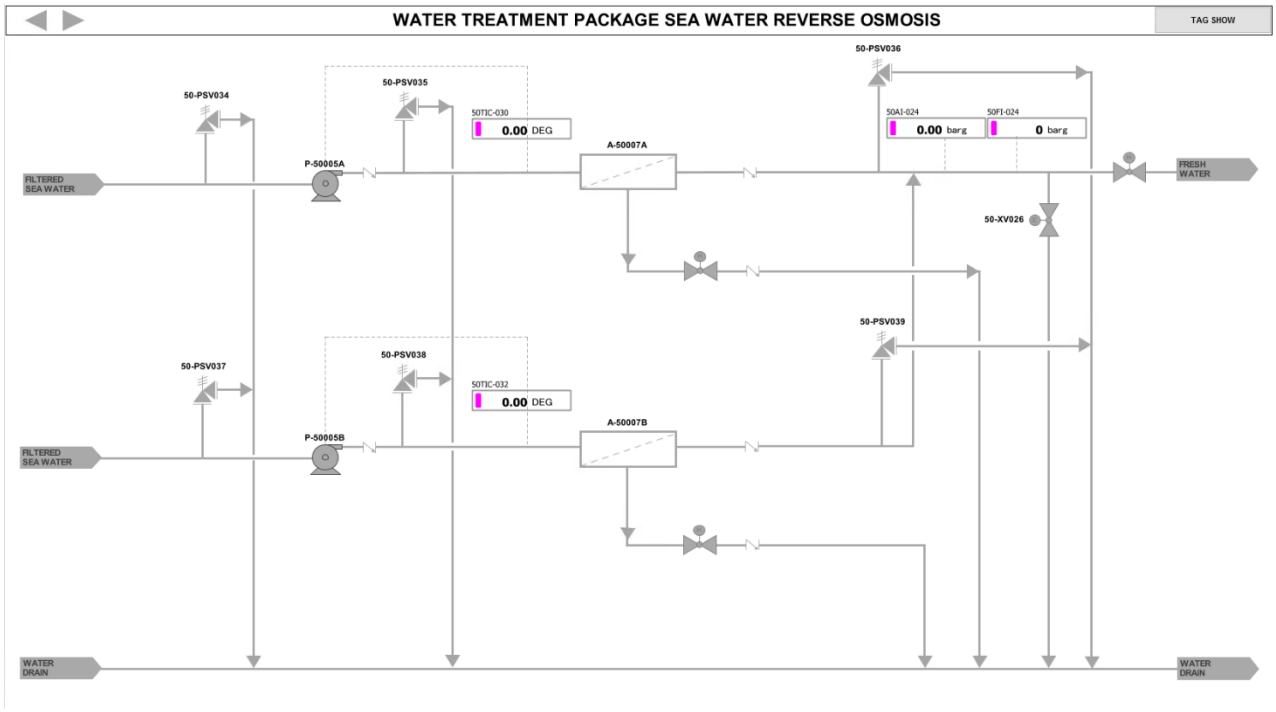
- WTP_SEA_WATER_FILTRATION_1



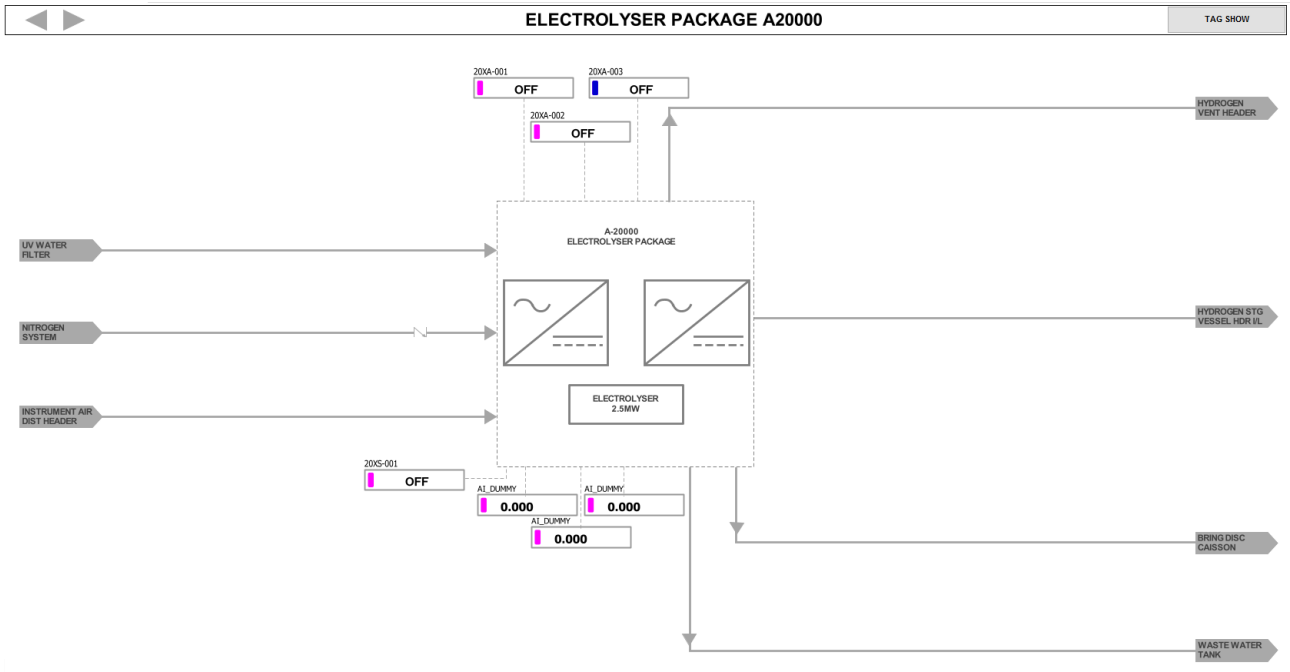
- WTP_SEA_WATER_FILTRATION_2



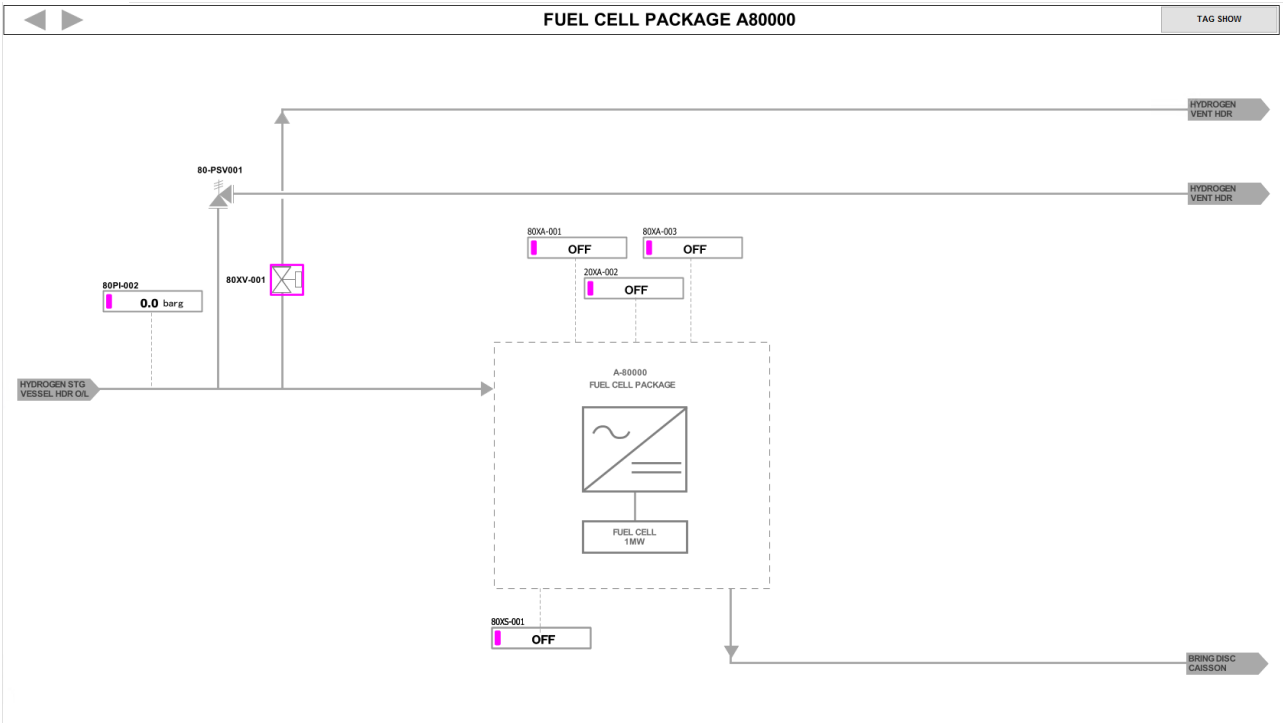
- WTP_SEA_WATER_REVERSE_OSMOSIS



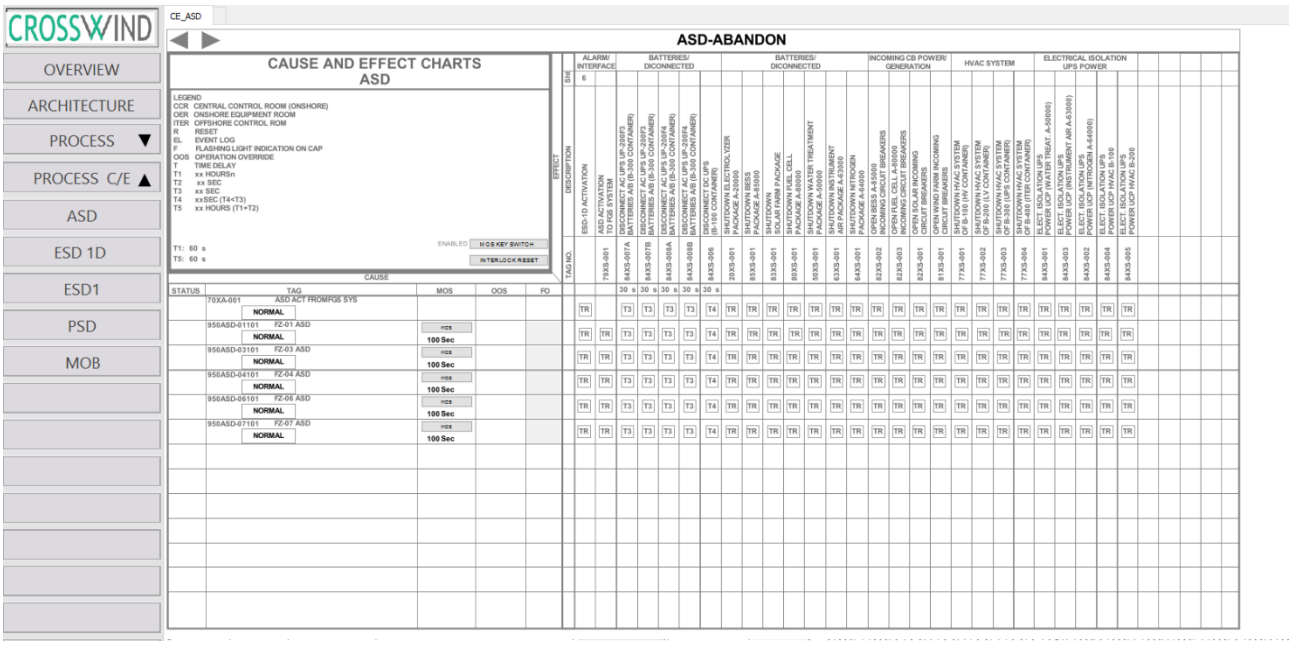
- ELECTROLYSER_PACKAGE_A20000



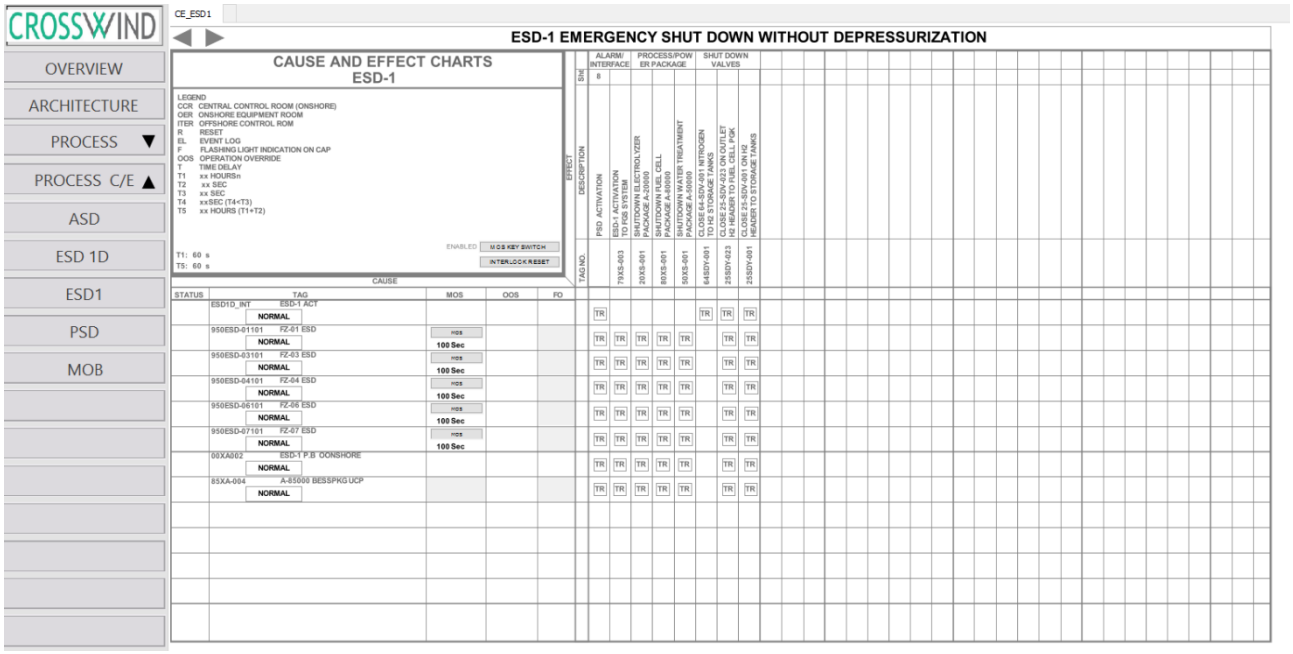
- FUEL_CELL_PACKAGE_A80000



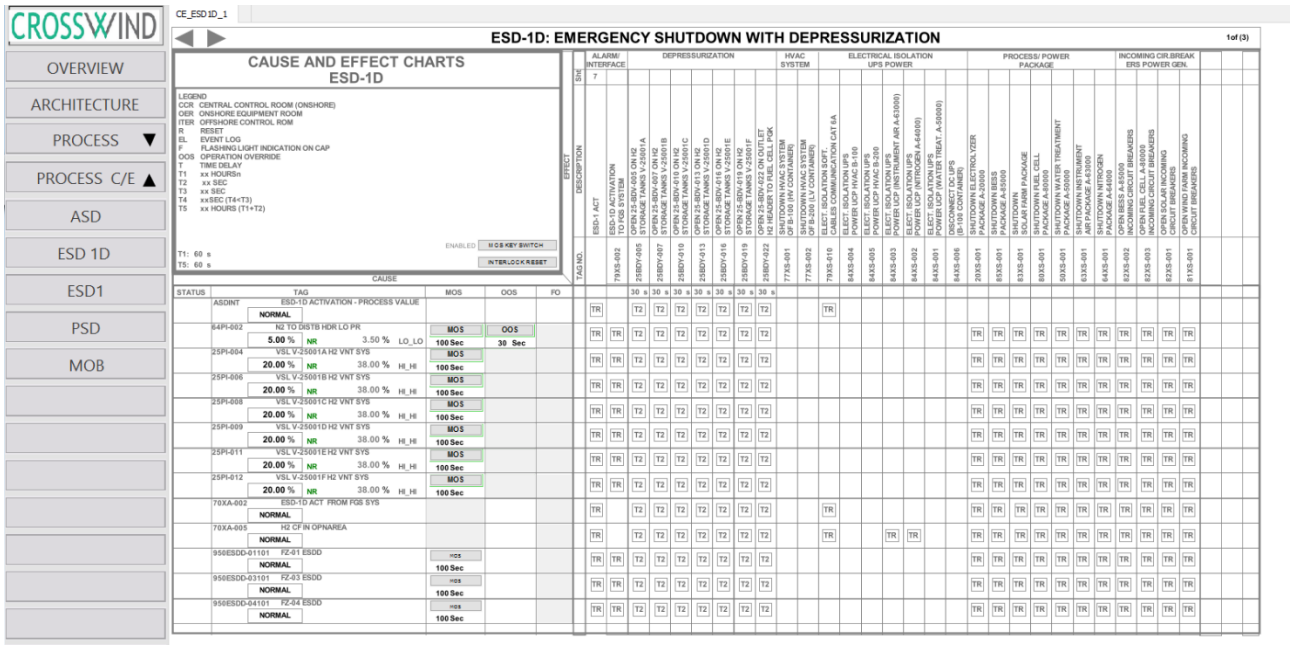
- ASD



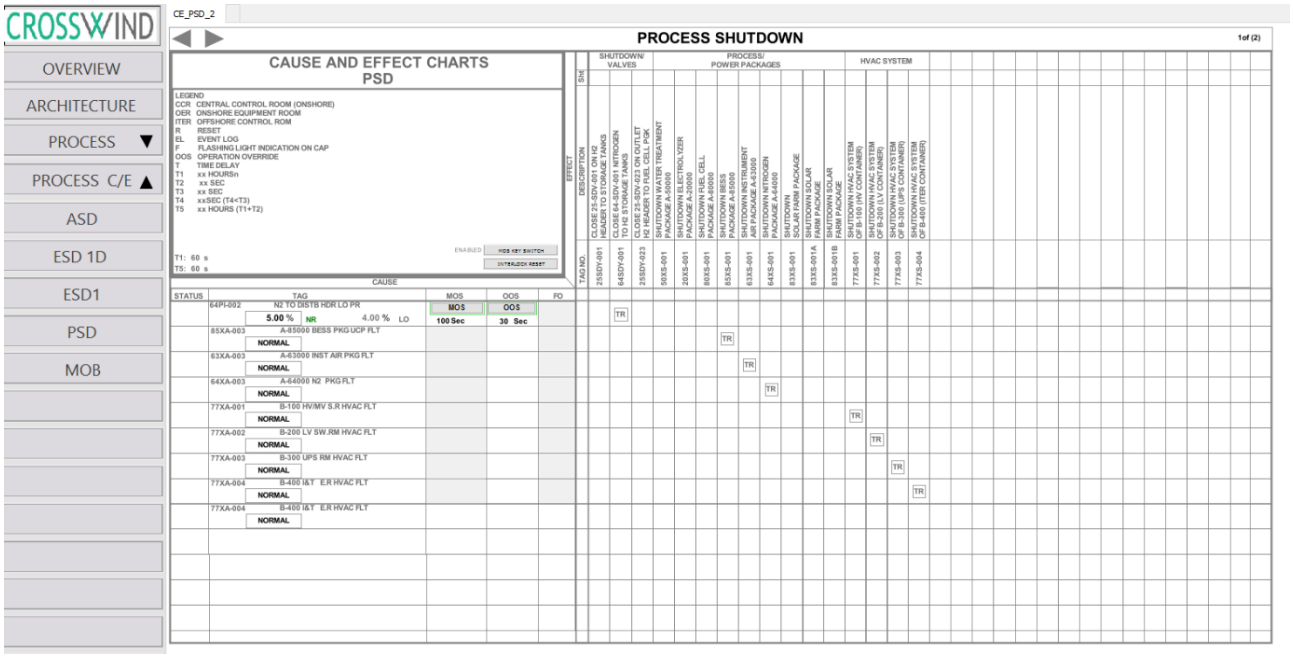
- ESD


CROSSWIND
OVERVIEW
ARCHITECTURE
PROCESS
PROCESS C/E
ASD
ESD 1D
ESD1
PSD
MOB
CE_ESD1
ESD-1 EMERGENCY SHUT DOWN WITHOUT DEPRESSURIZATION
CAUSE AND EFFECT CHARTS
ESD-1

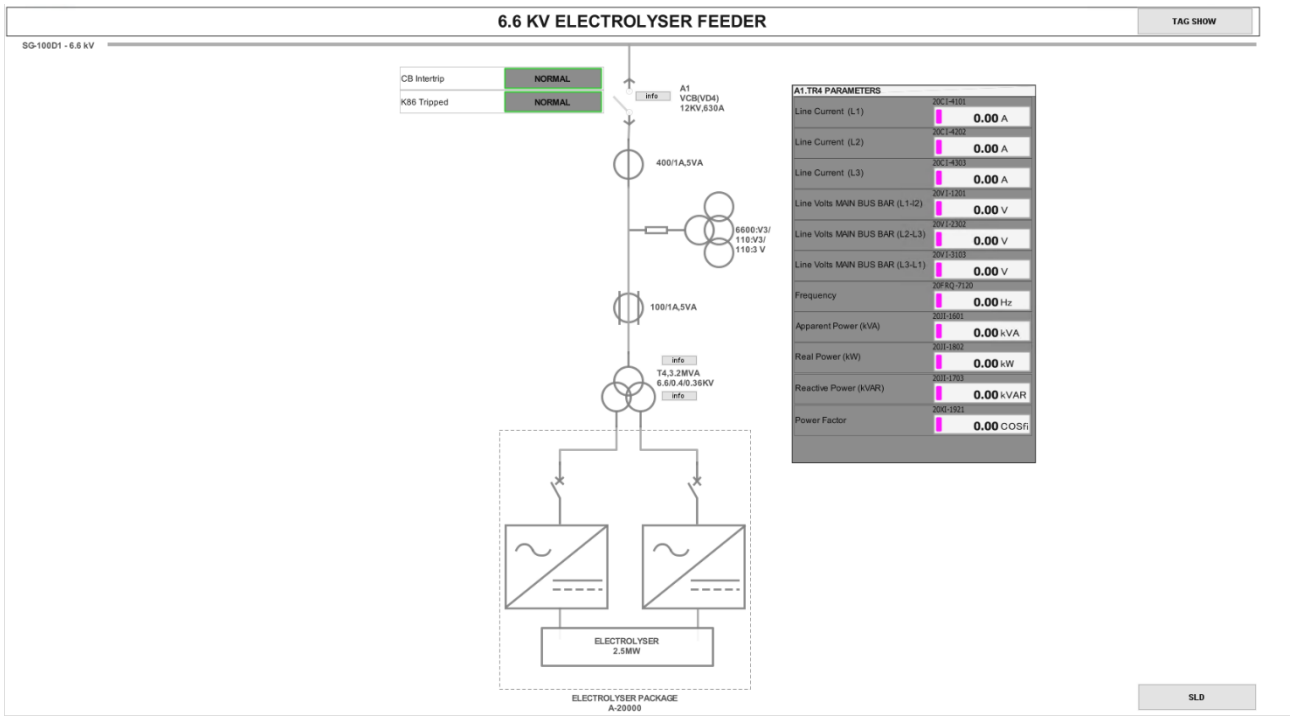
- ESD1D


CROSSWIND
OVERVIEW
ARCHITECTURE
PROCESS
PROCESS C/E
ASD
ESD 1D
ESD1
PSD
MOB
CE_ESD 1D_1
ESD-1D: EMERGENCY SHUTDOWN WITH DEPRESSURIZATION
CAUSE AND EFFECT CHARTS
ESD-1D

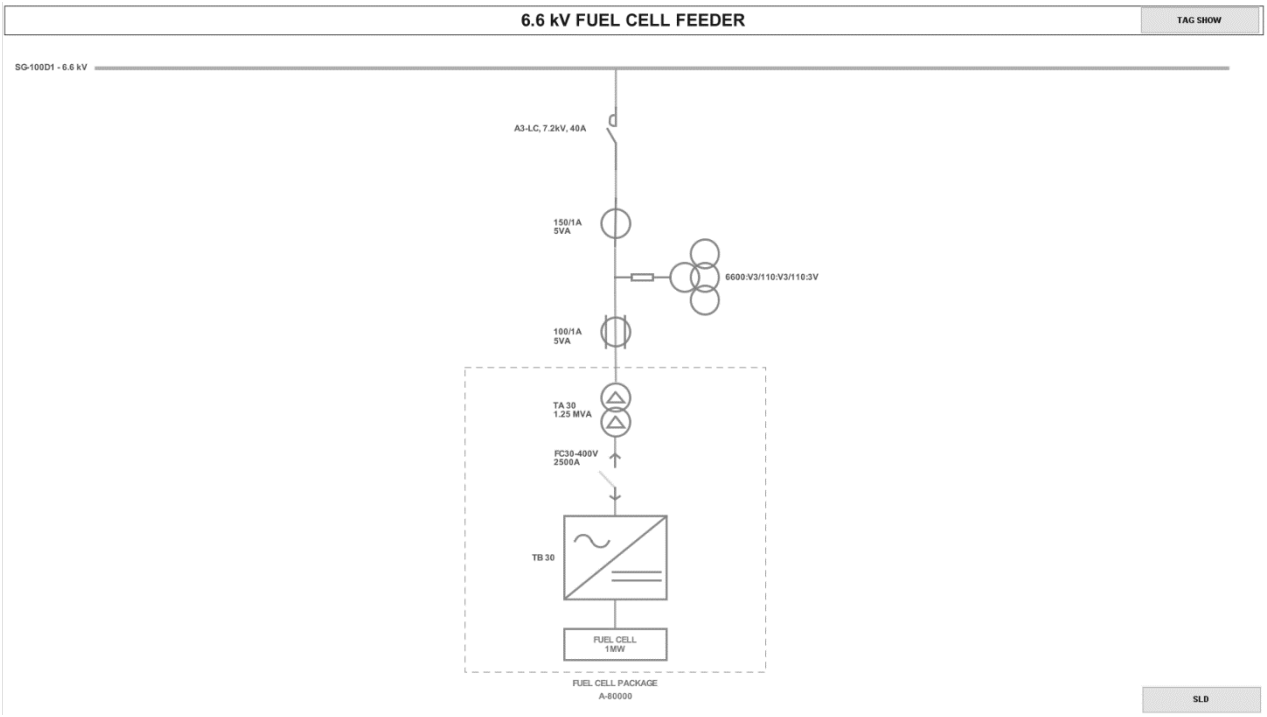
- PSD



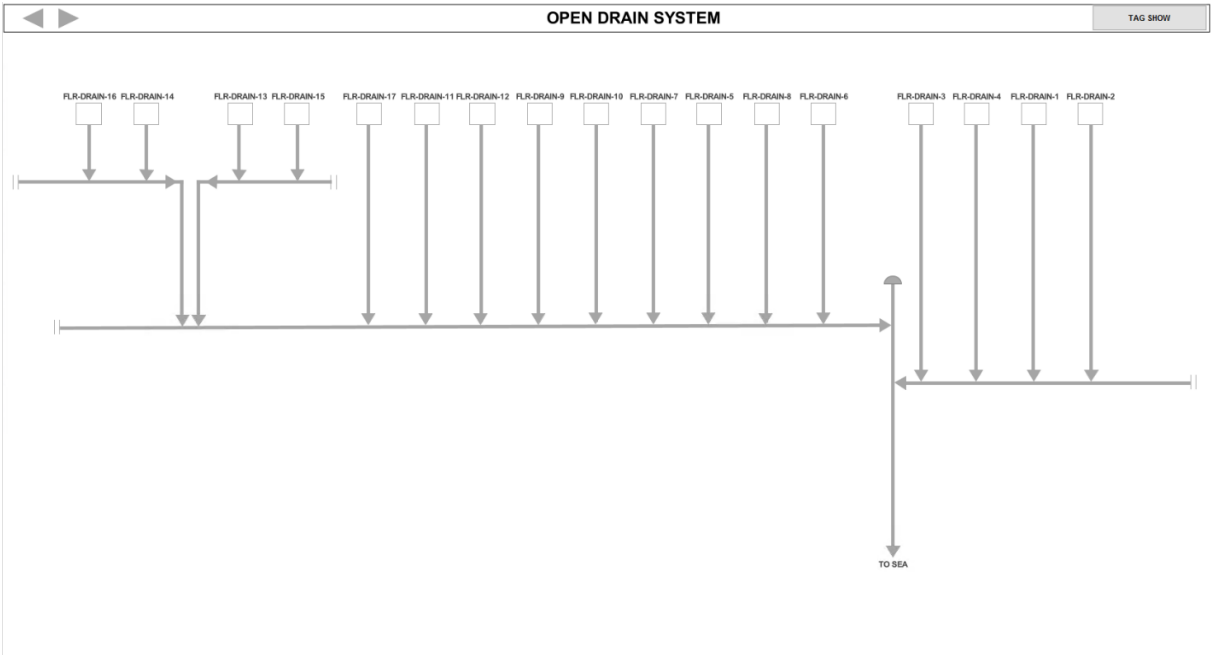
- ELECTROLYSER_FEEDER



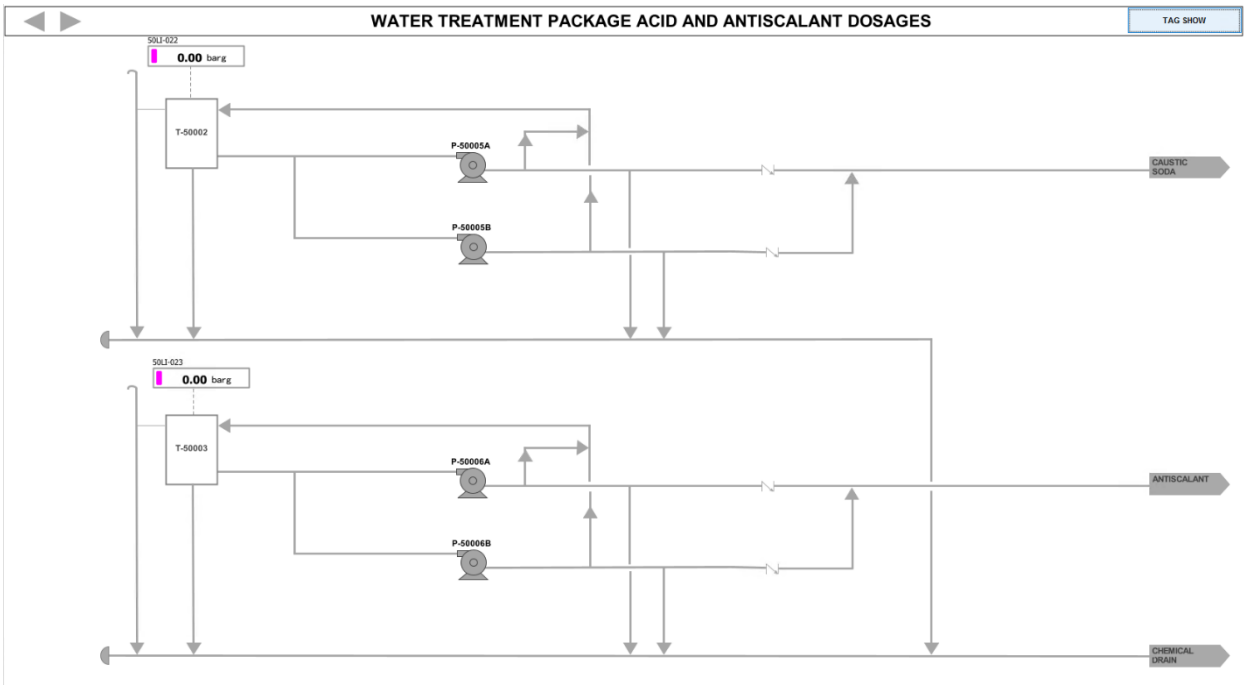
- FUEL_CELL_FEEDER



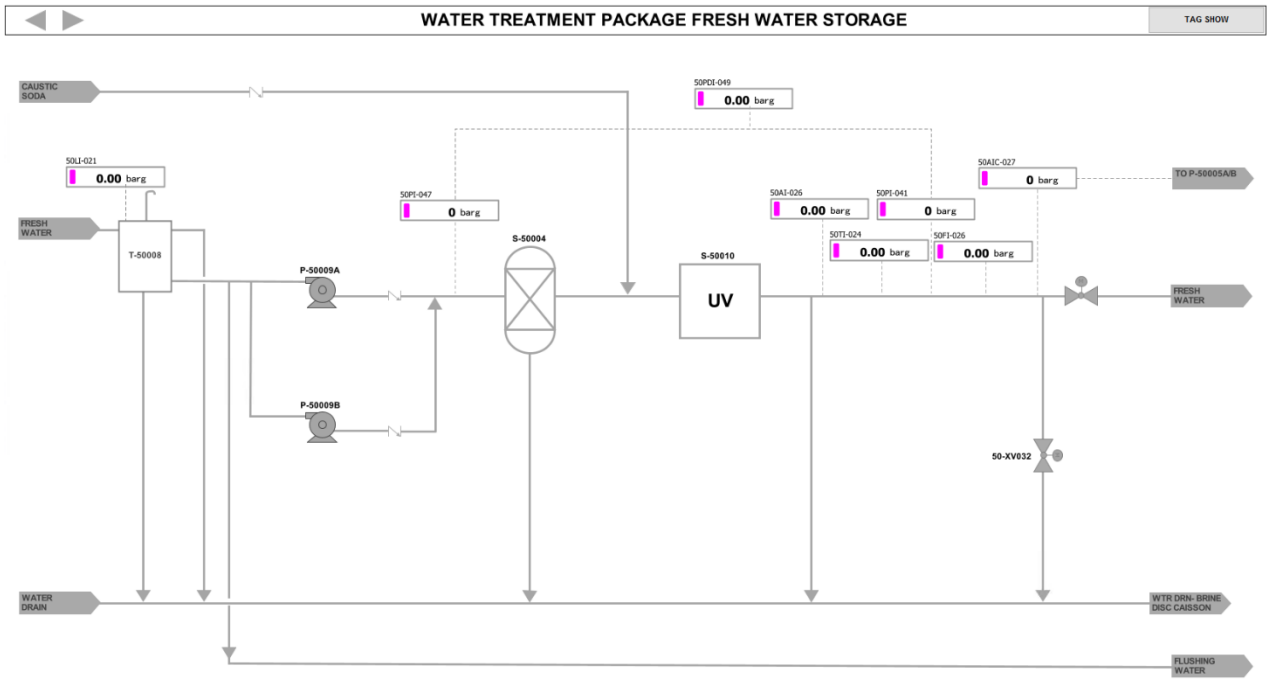
- OPEN_DRAIN_SYSTEM



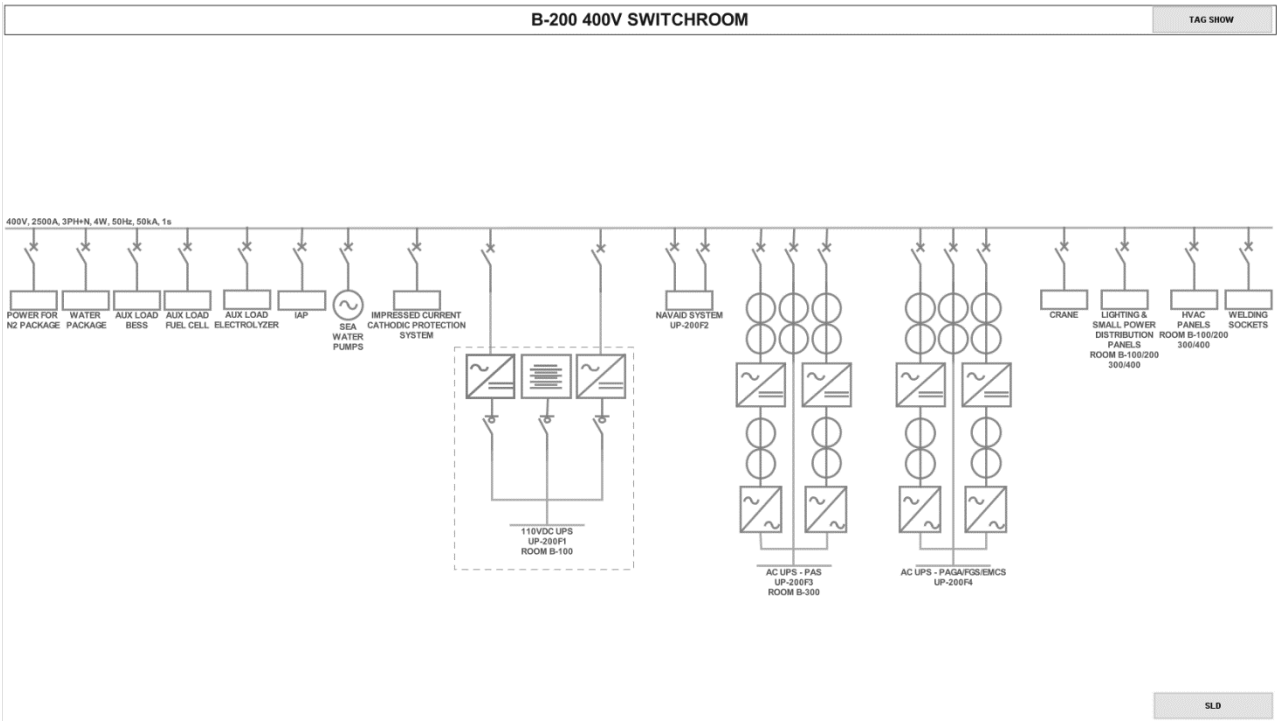
- ACID_ANTISCALANT_DOSAGES



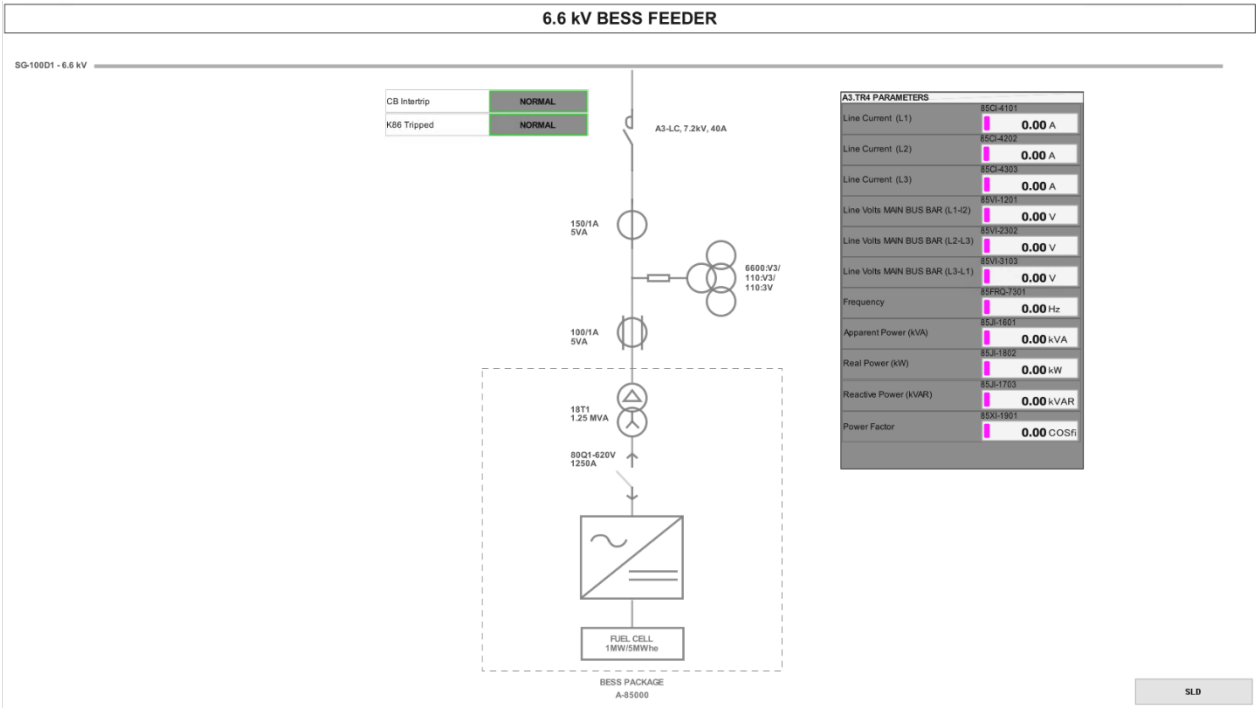
- WTP_FRESH_WATER_STORAGE



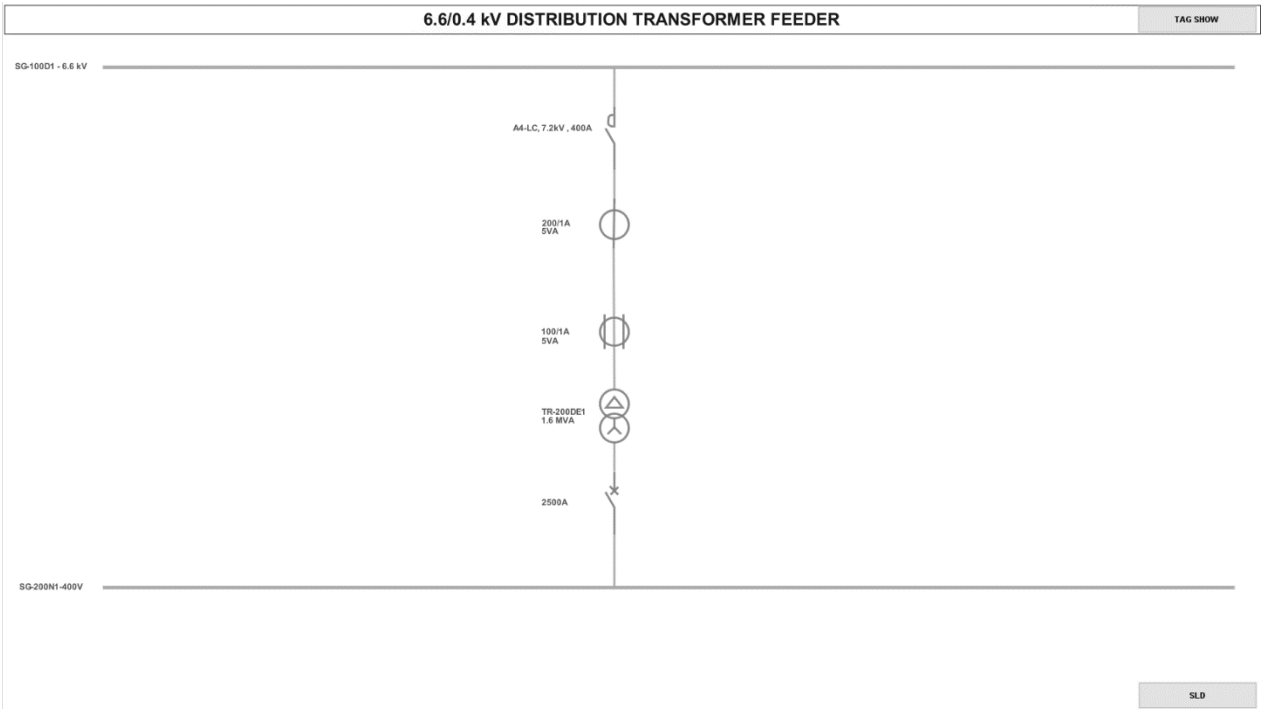
- B200_SWITCHROOM



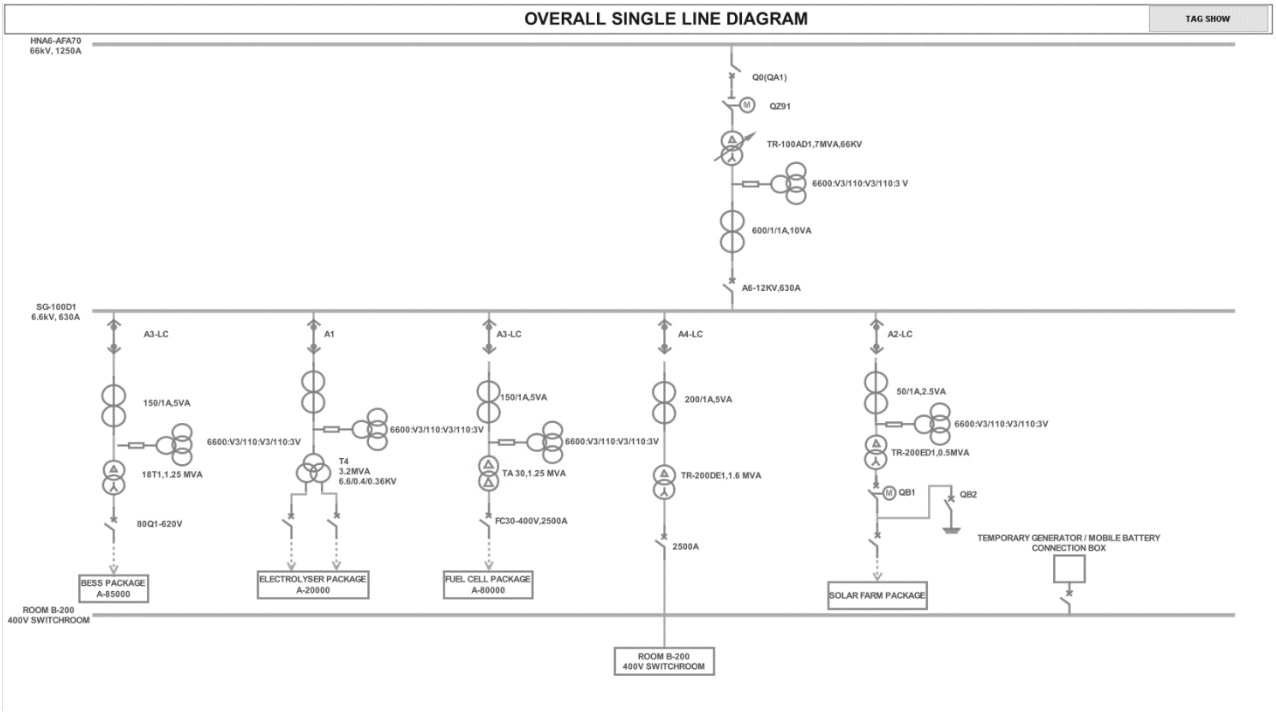
- BESS_FEEDER



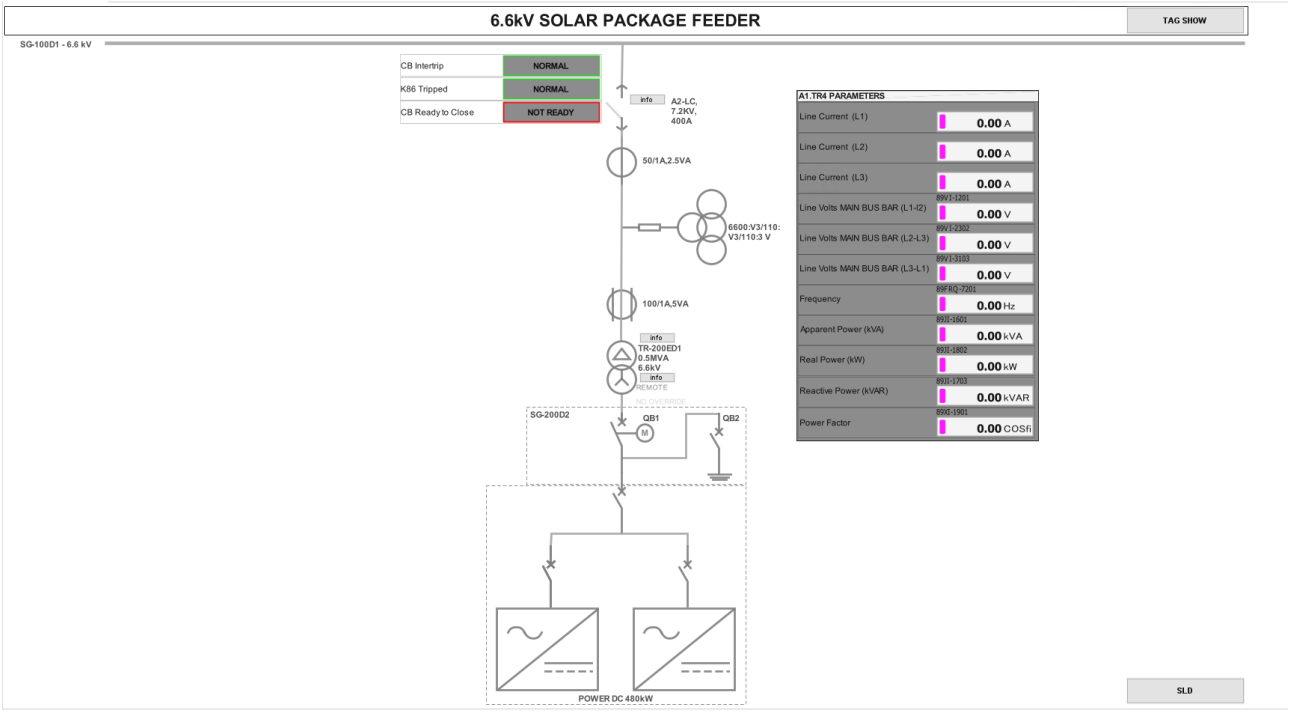
- DISTRIBUTION_TRANSFORMER_FEEDER



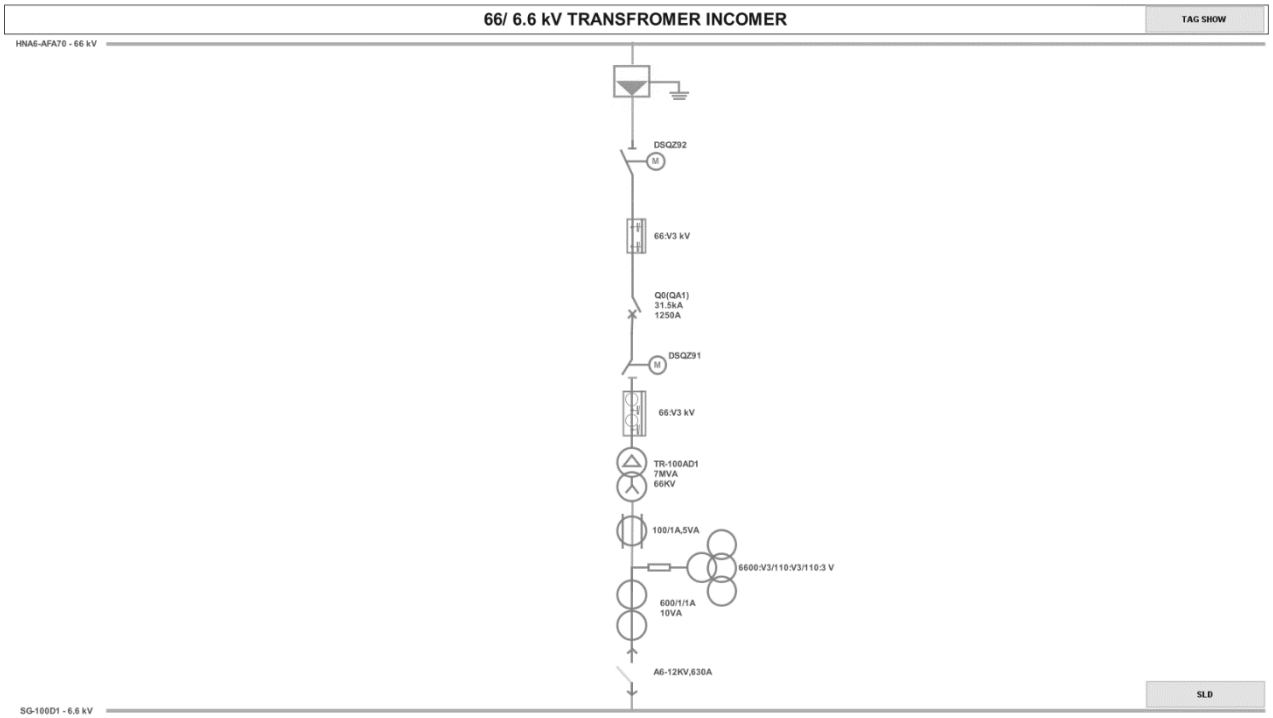
- OVERALL_SINGLE_LINE_DIAGRAM



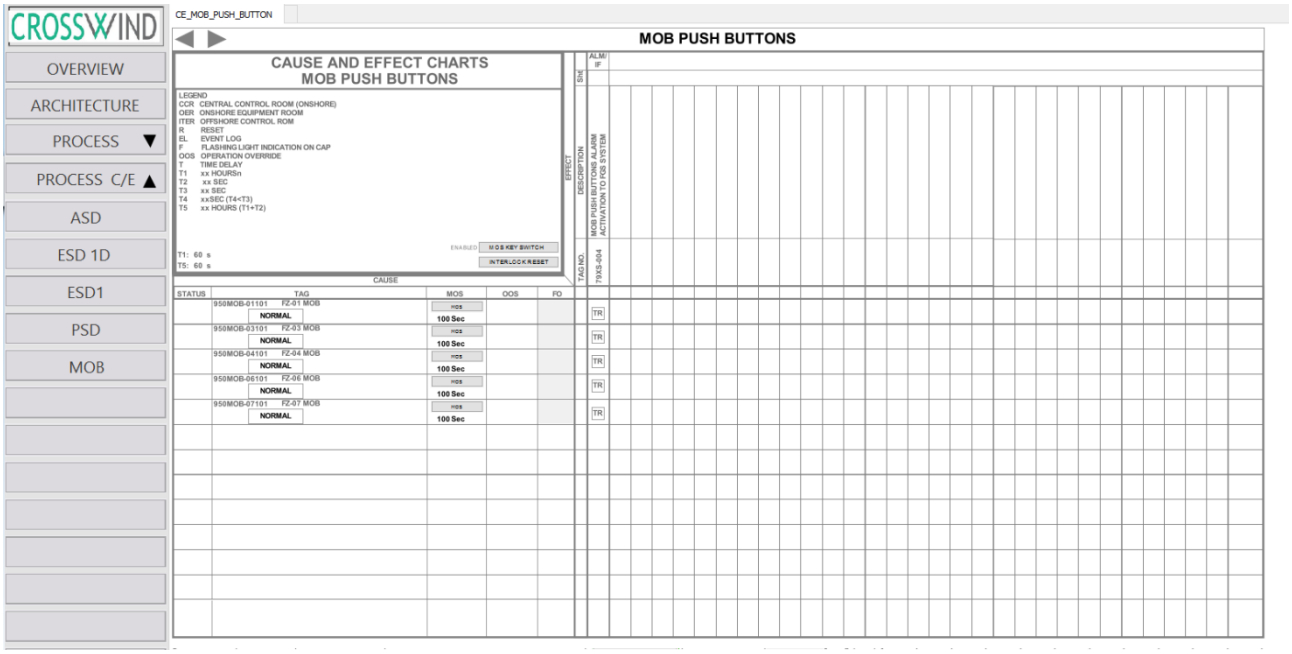
- SOLAR_PACKAGE_FEEDER



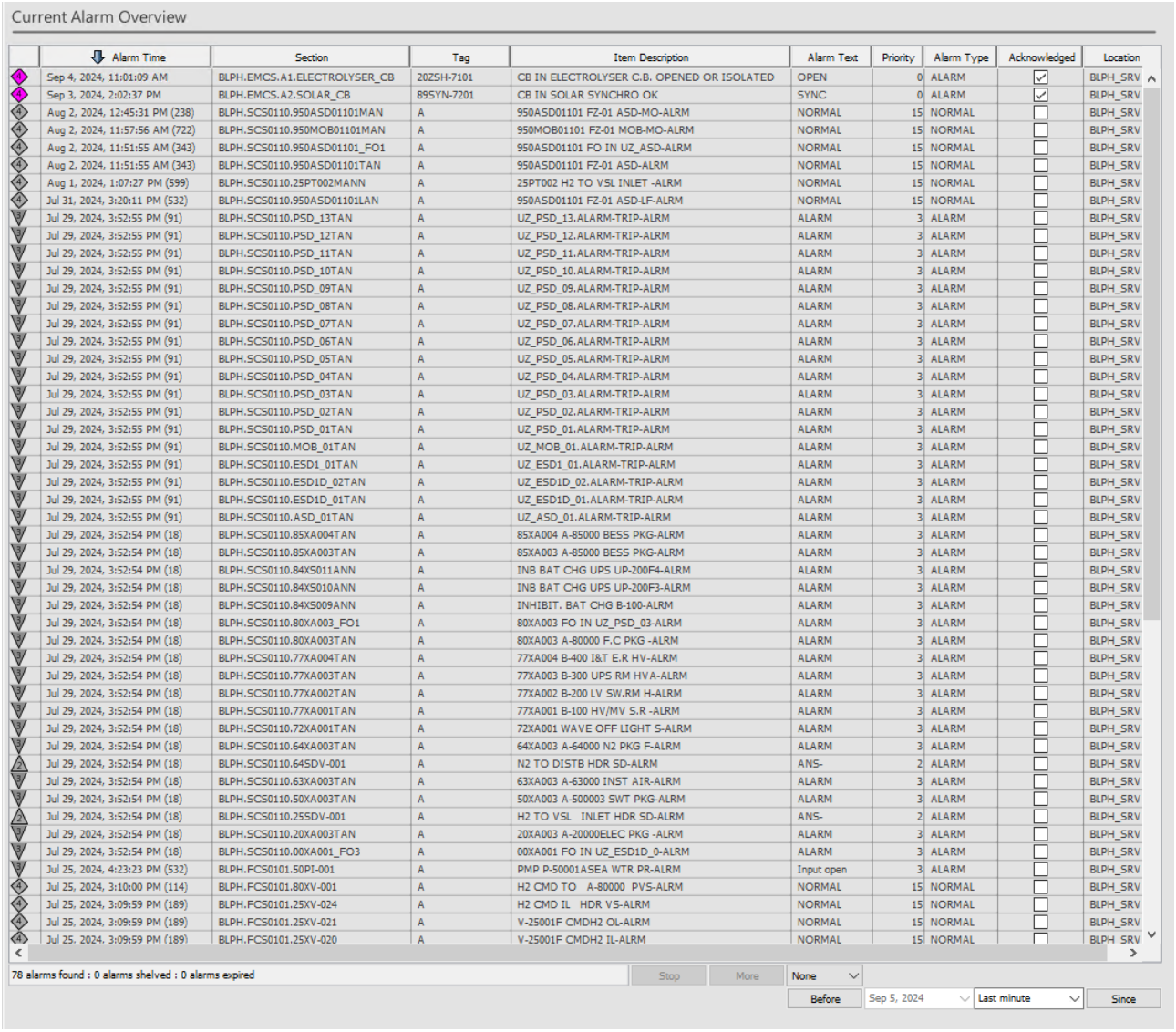
- TRANSFORMER_INCOMER



- MOB PUSH BUTTON



- CURRENT ALARM OVERVIEW



Alarm Time	Section	Tag	Item Description	Alarm Text	Priority	Alarm Type	Acknowledged	Location
Sep 4, 2024, 11:01:09 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20ZSH-7101	CB IN ELECTROLYSER C.B. OPENED OR ISOLATED	OPEN	0	ALARM	☑	BLPH_SRV
Sep 3, 2024, 2:02:37 PM	BLPH.EMCS.A2.SOLAR_CB	89SYN-7201	CB IN SOLAR SYNCHRO OK	SYNC	0	ALARM	☑	BLPH_SRV
Aug 2, 2024, 12:45:31 PM (238)	BLPH.SCS0110.950ASD01101MAN	A	950ASD01101 FZ-01 ASD-MO-ALRM	NORMAL	15	NORMAL	☐	BLPH_SRV
Aug 2, 2024, 11:57:56 AM (722)	BLPH.SCS0110.950MOB01101MAN	A	950MOB01101 FZ-01 MOB-MO-ALRM	NORMAL	15	NORMAL	☐	BLPH_SRV
Aug 2, 2024, 11:51:55 AM (343)	BLPH.SCS0110.950ASD01101_FO1	A	950ASD01101 FO IN UZ_ASD-ALRM	NORMAL	15	NORMAL	☐	BLPH_SRV
Aug 2, 2024, 11:51:55 AM (343)	BLPH.SCS0110.950ASD01101TAN	A	950ASD01101 FZ-01 ASD-ALRM	NORMAL	15	NORMAL	☐	BLPH_SRV
Aug 1, 2024, 1:07:27 PM (599)	BLPH.SCS0110.25PT002MANN	A	25PT002 H2 TO VSL INLET -ALRM	NORMAL	15	NORMAL	☐	BLPH_SRV
Jul 31, 2024, 3:20:11 PM (532)	BLPH.SCS0110.950ASD01101LAN	A	950ASD01101 FZ-01 ASD-LF-ALRM	NORMAL	15	NORMAL	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_13TAN	A	UZ_PSD_13.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_12TAN	A	UZ_PSD_12.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_11TAN	A	UZ_PSD_11.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_10TAN	A	UZ_PSD_10.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_09TAN	A	UZ_PSD_09.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_08TAN	A	UZ_PSD_08.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_07TAN	A	UZ_PSD_07.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_06TAN	A	UZ_PSD_06.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_05TAN	A	UZ_PSD_05.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_04TAN	A	UZ_PSD_04.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_03TAN	A	UZ_PSD_03.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_02TAN	A	UZ_PSD_02.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.PSD_01TAN	A	UZ_PSD_01.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.MOB_01TAN	A	UZ_MOB_01.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.ESD1_01TAN	A	UZ_ESD1_01.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.ESD1D_02TAN	A	UZ_ESD1D_02.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.ESD1D_01TAN	A	UZ_ESD1D_01.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:55 PM (91)	BLPH.SCS0110.ASD_01TAN	A	UZ_ASD_01.ALARM-TRIP-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.85XA004TAN	A	85XA004 A-85000 BESS PKG-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.85XA003TAN	A	85XA003 A-85000 BESS PKG-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.84XS011ANN	A	INB BAT CHG UPS UP-200F4-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.84XS010ANN	A	INB BAT CHG UPS UP-200F3-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.84XS009ANN	A	INHIBIT. BAT CHG B-100-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.80XA003_FO1	A	80XA003 FO IN UZ_PSD_03-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.80XA003TAN	A	80XA003 A-80000 F.C PKG -ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.77XA004TAN	A	77XA004 B-400 I&T E.R HV-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.77XA003TAN	A	77XA003 B-300 UPS RM HVA-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.77XA002TAN	A	77XA002 B-200 LV SW.RM H-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.77XA001TAN	A	77XA001 B-100 HV/MV S.R -ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.72XA001TAN	A	72XA001 WAVE OFF LIGHT S-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.64XA003TAN	A	64XA003 A-64000 N2 PKG F-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.64SDV-001	A	N2 TO DISTB HDR SD-ALRM	ANS-	2	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.63XA003TAN	A	63XA003 A-63000 INST AIR-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.50XA003TAN	A	50XA003 A-500003 SWT PKG-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.25SDV-001	A	H2 TO VSL INLET HDR SD-ALRM	ANS-	2	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.20XA003TAN	A	20XA003 A-20000ELEC PKG -ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 29, 2024, 3:52:54 PM (18)	BLPH.SCS0110.00XA001_FO3	A	00XA001 FO IN UZ_ESD1D_0-ALRM	ALARM	3	ALARM	☐	BLPH_SRV
Jul 25, 2024, 4:23:23 PM (532)	BLPH.FCS0101.50PI-001	A	PMP P-50001ASEA WTR PR-ALRM	Input open	3	ALARM	☐	BLPH_SRV
Jul 25, 2024, 3:10:00 PM (114)	BLPH.FCS0101.80XV-001	A	H2 CMD TO A-80000 PVS-ALRM	NORMAL	15	NORMAL	☐	BLPH_SRV
Jul 25, 2024, 3:09:59 PM (189)	BLPH.FCS0101.25XV-024	A	H2 CMD IL HDR VS-ALRM	NORMAL	15	NORMAL	☐	BLPH_SRV
Jul 25, 2024, 3:09:59 PM (189)	BLPH.FCS0101.25XV-021	A	V-25001F CMDH2 OL-ALRM	NORMAL	15	NORMAL	☐	BLPH_SRV
Jul 25, 2024, 3:09:59 PM (189)	BLPH.FCS0101.25XV-020	A	V-25001F CMDH2 IL-ALRM	NORMAL	15	NORMAL	☐	BLPH_SRV

- HISTORICAL ALARM OVERVIEW

Historical Alarm Overview

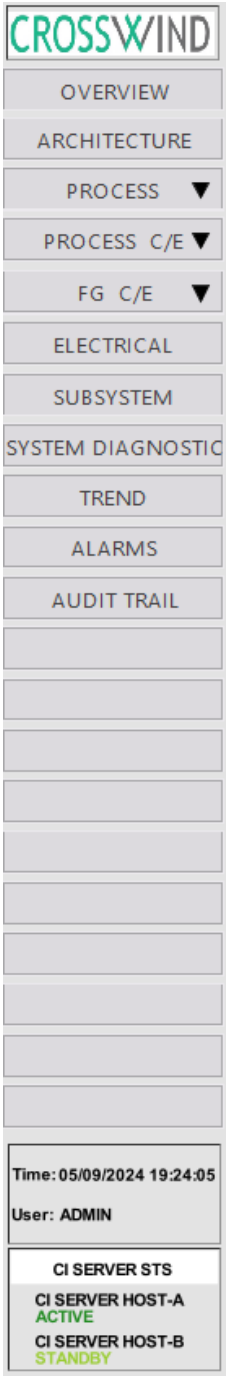
Alarm Time	Section	Tag	Item Description	Alarm Text	Priority	Alarm Type	Acknowledged	Eng Units
Sep 5, 2024, 5:24:19 PM	BLPH.EMCS.A3.BESS_CB	85XS-8713	CB IN BESS INTERTRIP TO SWITCHBOARD	NORMAL	0	NORMAL	☑	
Sep 5, 2024, 5:24:14 PM	BLPH.EMCS.A3.BESS_CB	85XS-8713	CB IN BESS INTERTRIP TO SWITCHBOARD	INTERTRIP	0	ALARM	☑	
Sep 5, 2024, 5:23:50 PM	BLPH.EMCS.A3.BESS_CB	85XS-8713	CB IN BESS INTERTRIP TO SWITCHBOARD	updated offline	0	NORMAL	☑	
Sep 5, 2024, 5:23:44 PM	BLPH.EMCS.A3.BESS_CB	85XS-8713	CB IN BESS INTERTRIP TO SWITCHBOARD	NORMAL	0	NORMAL	☑	
Sep 5, 2024, 5:23:32 PM	BLPH.EMCS.A3.BESS_CB	85XS-8713	CB IN BESS INTERTRIP TO SWITCHBOARD	INTERTRIP	0	ALARM	☑	
Sep 5, 2024, 5:23:15 PM	BLPH.EMCS.A3.BESS_CB	85XS-8614	CB IN BESS K86 TRIPPED	NORMAL	0	NORMAL	☑	
Sep 5, 2024, 5:23:06 PM	BLPH.EMCS.A3.BESS_CB	85XS-8614	CB IN BESS K86 TRIPPED	TRIP	0	ALARM	☑	
Sep 4, 2024, 11:04:16 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20OPC-7101	CB IN ELECTROLYSER C.B. OPENING COMMAND	RESET	0	NORMAL	☑	
Sep 4, 2024, 11:04:16 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20OPC-7101	CB IN ELECTROLYSER C.B. OPENING COMMAND	OPEN_CMD	0	NORMAL	☑	
Sep 4, 2024, 11:04:14 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20OPC-7101	CB IN ELECTROLYSER C.B. OPENING COMMAND	RESET	0	NORMAL	☑	
Sep 4, 2024, 11:04:14 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20OPC-7101	CB IN ELECTROLYSER C.B. OPENING COMMAND	OPEN_CMD	0	NORMAL	☑	
Sep 4, 2024, 11:04:09 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20CLC-7101	CB IN ELECTROLYSER C.B. CLOSING COMMAND	RESET	0	NORMAL	☑	
Sep 4, 2024, 11:04:09 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20CLC-7101	CB IN ELECTROLYSER C.B. CLOSING COMMAND	CLOSE_COMMAND	0	NORMAL	☑	
Sep 4, 2024, 11:04:02 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20CLC-7101	CB IN ELECTROLYSER C.B. CLOSING COMMAND	RESET	0	NORMAL	☑	
Sep 4, 2024, 11:04:02 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20CLC-7101	CB IN ELECTROLYSER C.B. CLOSING COMMAND	CLOSE_COMMAND	0	NORMAL	☑	
Sep 4, 2024, 11:04:01 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20CLC-7101	CB IN ELECTROLYSER C.B. CLOSING COMMAND	RESET	0	NORMAL	☑	
Sep 4, 2024, 11:04:01 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20CLC-7101	CB IN ELECTROLYSER C.B. CLOSING COMMAND	CLOSE_COMMAND	0	NORMAL	☑	
Sep 4, 2024, 11:01:53 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20OPC-7101	CB IN ELECTROLYSER C.B. OPENING COMMAND	RESET	0	NORMAL	☑	
Sep 4, 2024, 11:01:53 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20OPC-7101	CB IN ELECTROLYSER C.B. OPENING COMMAND	OPEN_CMD	0	NORMAL	☑	
Sep 4, 2024, 11:01:09 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20ZSH-7101	CB IN ELECTROLYSER C.B. OPENED OR ISOLATED	OPEN	0	ALARM	☑	
Sep 4, 2024, 11:01:03 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20OPC-7101	CB IN ELECTROLYSER C.B. OPENING COMMAND	RESET	0	NORMAL	☑	
Sep 4, 2024, 11:00:55 AM	BLPH.EMCS.A1.ELECTROLYSER_CB	20OPC-7101	CB IN ELECTROLYSER C.B. OPENING COMMAND	OPEN_CMD	0	NORMAL	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-3505	TRANS IN SOLAR TRANSFORMER PROTECTION TRIPPED OIL PRESSURE	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-5804	TRANS IN SOLAR PROTECTION TRIP 59N-1	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-5705	TRANS IN SOLAR PROTECTION TRIP 59N-2	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-1403	TRANS IN SOLAR PROTECTION TRIP 51N	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XA-4006	TRANS IN SOLAR TRANSFORMER PROTECTION ALARM WINDING TEMPERATURE	ALARM	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-3212	TRANS IN SOLAR TRANSFORMER PROTECTION TRIPPED BUCHHOLZ	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-3613	TRANS IN SOLAR TRANSFORMER PROTECTION TRIPPED OIL TEMPERATURE	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-6109	TRANS IN SOLAR PROTECTION TRIP 59-2	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-6108	TRANS IN SOLAR PROTECTION TRIP 59-1	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-2806	TRANS IN SOLAR PROTECTION TRIP 27-1	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89US-4801	TRANS IN SOLAR	UNHEALTHY	0	NORMAL	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XA-3503	TRANS IN SOLAR TRANSFORMER PROTECTION ALARM OIL PRESSURE	ALARM	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-2907	TRANS IN SOLAR PROTECTION TRIP 27-2	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XA-3602	TRANS IN SOLAR TRANSFORMER PROTECTION ALARM OIL TEMPERATURE	ALARM	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89UA-7202	TRANS IN SOLAR PROTECTION RELAY UNIT 1 HEALTHY	UNHEALTHY	0	NORMAL	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XA-3407	TRANS IN SOLAR TRANSF. GENERAL ALARM	ALARM	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XA-7204	TRANS IN SOLAR TRANSF. OIL LEVEL VERY LOW ALARM	ALARM	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-5001	TRANS IN SOLAR PROTECTION TRIP 50-1	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XA-3201	TRANS IN SOLAR TRANSFORMER PROTECTION ALARM BUCHHOLZ	ALARM	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-1102	TRANS IN SOLAR PROTECTION TRIP 51-1	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-6810	TRANS IN SOLAR PROTECTION TRIP 67-1	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-4014	TRANS IN SOLAR TRANSFORMER PROTECTION TRIPPED WINDING TEMPERATURE	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89XS-6911	TRANS IN SOLAR PROTECTION TRIP 67-2	TRIP	0	ALARM	☑	
Sep 3, 2024, 2:03:02 PM	BLPH.EMCS.A2.SOLAR_TRANS	89UA-3901	TRANS IN SOLAR WATCHDOG PROTECTION RELAY	FAIL	0	ALARM	☑	
Sep 3, 2024, 2:02:52 PM	BLPH.EMCS.A2.SOLAR_SWITCH	89REM-7201	A2_SELECTOR_SWITCHSELECTOR SWITCH IN REMOTE POSITION	REMOTE	0	NORMAL	☑	
Sep 3, 2024, 2:02:37 PM	BLPH.EMCS.A2.SOLAR_CB	89SYN-7201	CB IN SOLAR SYNCHRO OK	SYNC	0	ALARM	☑	
Sep 3, 2024, 2:02:37 PM	BLPH.EMCS.A2.SOLAR_CB	89XS-8715	CB IN SOLAR INTERTRIP TO SWITCHBOARD	NORMAL	0	NORMAL	☑	

130 alarms found (more available) Stop More None

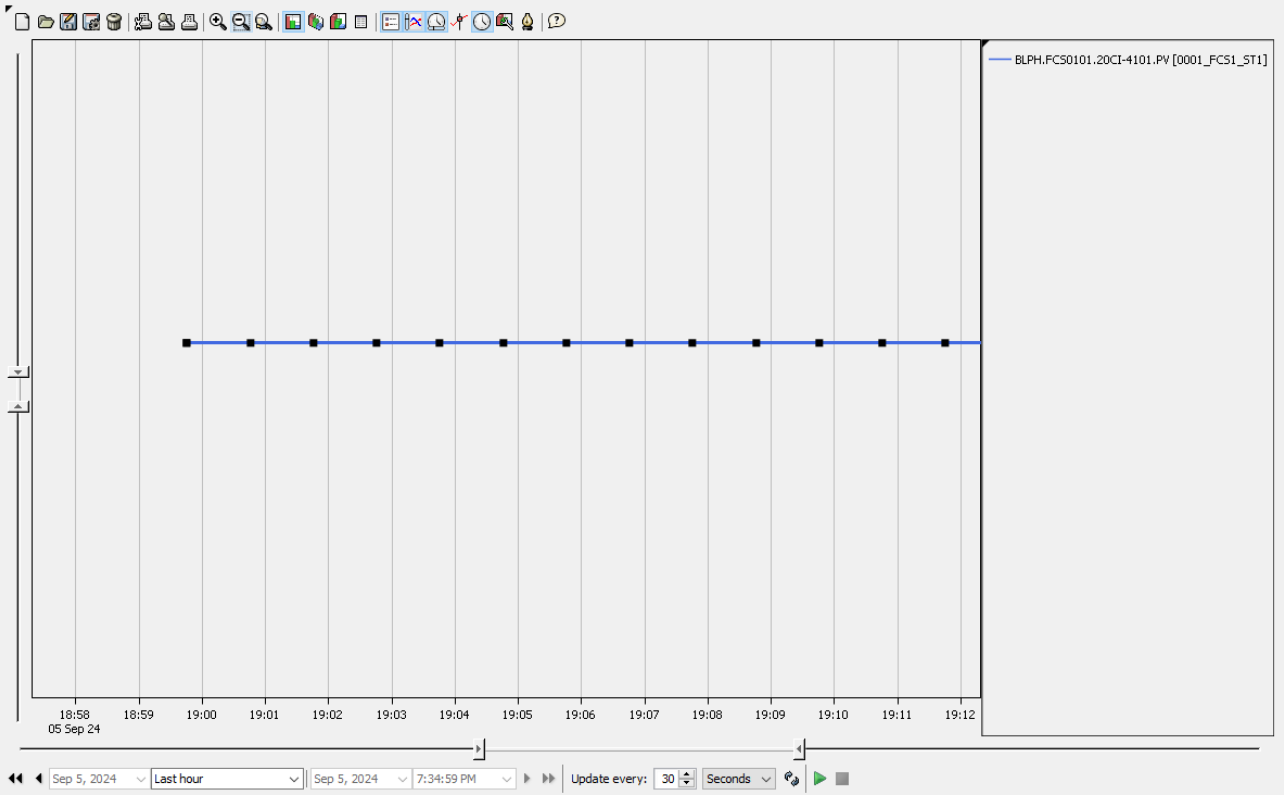
Before Sep 5, 2024 Last minute Since

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

- NAVIGATION


CROSSWIND
OVERVIEW
ARCHITECTURE
PROCESS
PROCESS C/E
FG C/E
ELECTRICAL
SUBSYSTEM
SYSTEM DIAGNOSTIC
TREND
ALARMS
AUDIT TRAIL
Time: 05/09/2024 19:24:05
User: ADMIN
CI SERVER STS
CI SERVER HOST-A
ACTIVE
CI SERVER HOST-B
STANDBY

- TREND


BLPH.FCS0101.20CI-4101.PV [0001_FCS1_ST1]
18:58
05 Sep 24
18:59
19:00
19:01
19:02
19:03
19:04
19:05
19:06
19:07
19:08
19:09
19:10
19:11
19:12
Sep 5, 2024
Last hour
Sep 5, 2024
7:34:59 PM
Update every:
30
Seconds