

# UDMTEK Platform User Manual

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# Screen Configuration

UDMTEK

This is a demo version. Need the manual? Click [here](#) to download.

05:18:11 PM  
2025-05-18 | Wed

User Name  
User ID

Search Menu

FAVORITE

DASHBOARD

Factory Dashboard

Line Dashboard

REAL TIME

Production Status

Cycle Status

Alarm Status

Pattern Status

Trend Status

SEARCH

Production Search

Cycle Search

Alarm Search

Pattern Search

ANALYSIS

Pattern Analysis

Trend Analysis

Signal Analysis

SETTINGS




Default Settings

Production Plan Settings

Page Title

Selected Line

● Screen Setting / User Info



User Name  
User ID

1

User Name

2

User Group  
manager

3

Prev Login : 05/20 09:21  
Logout

Full Screen

Language Selection

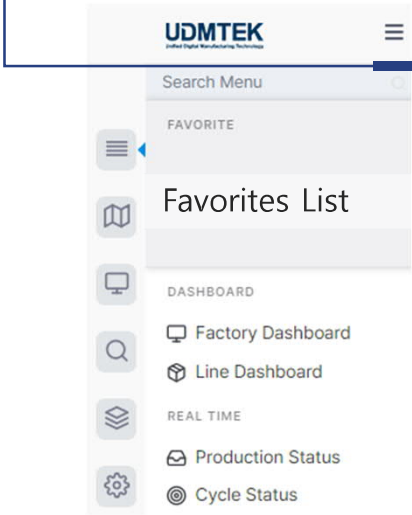
1. Move to User Profile

2. Display User Group

3. Logout

## ● Menu Bar

Expand / Collapse Side Bar



## ● Page Info



Dropdown to Select Line

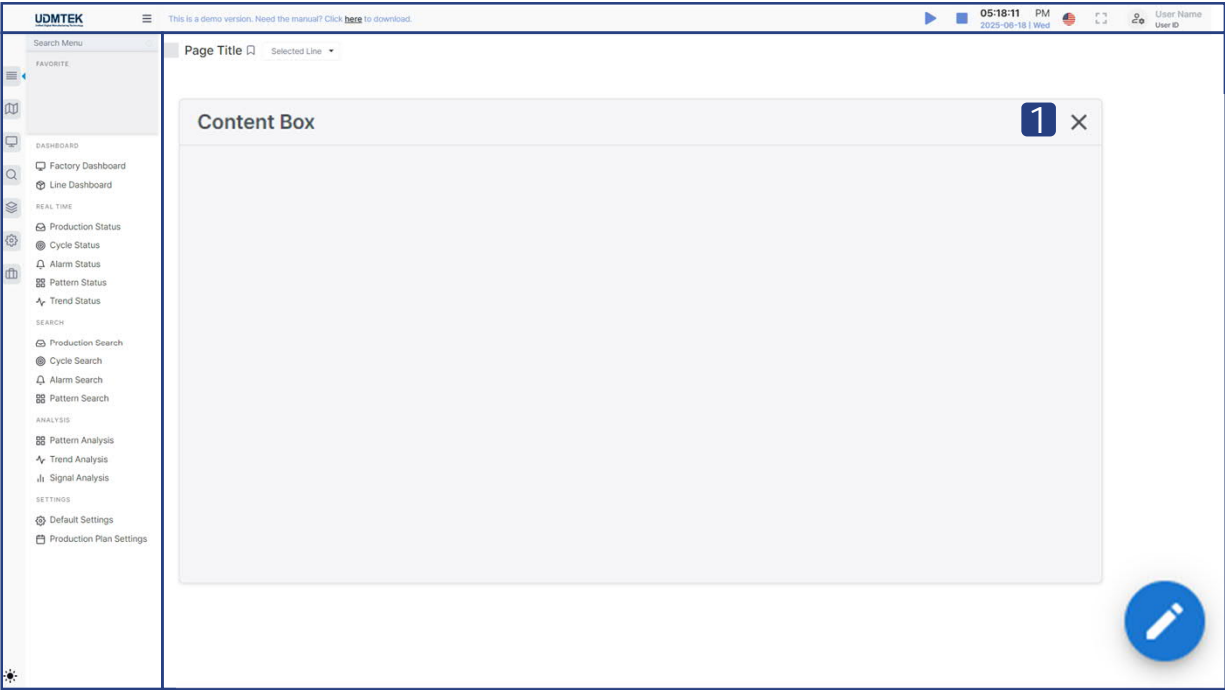
Set / Unset Page as Favorite

# Screen Configuration

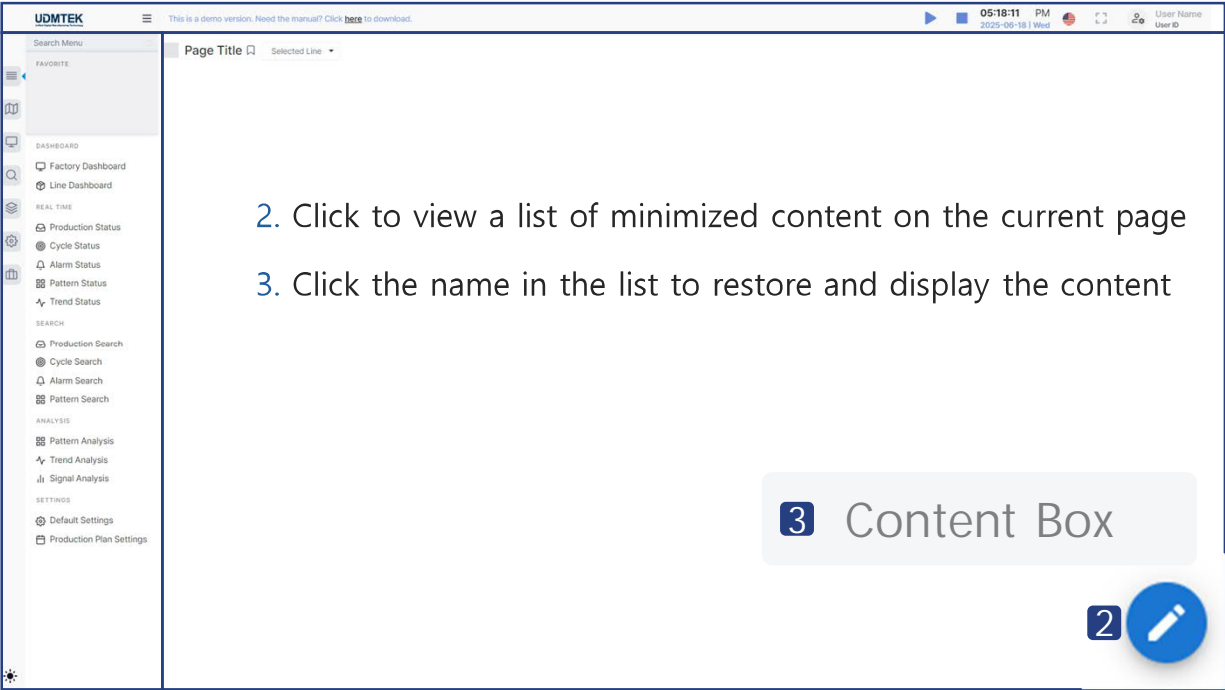
## ● Window Collapse / Display

- Some content windows can be minimized using the X button

### 1. Minimize Window



- 2. Click to view a list of minimized content on the current page
- 3. Click the name in the list to restore and display the content



# Screen Configuration

UDMTEK

This is a demo version. Need the manual? Click [here](#) to download.

05:18:11 PM  
2025-06-18 Wed  
User Name  
User ID

Search Menu

FAVORITE

DASHBOARD

Factory Dashboard

Line Dashboard

REAL TIME

Production Status

Cycle Status

Alarm Status

Pattern Status

Trend Status

SEARCH

Production Search

Cycle Search

Alarm Search

Pattern Search

ANALYSIS

Page Title Selected Line

Theme Settings

Switch between Light Theme and Dark Theme

Screen Configuration

● Grid Operation 1

Click on the column header to sort rows

- ↑ Sort Ascending
- ↓ Sort Descending

Date		Sch.
2025-06-18	↑	Shift1
2025-06-18		Shift1
		Shift1
		Shift1
		Shift1

Click the menu icon to apply grid filters

● Grid Operation 2

Contains

1

☒ AND ☐ OR

Contains

Filter...

Show items that have been filtered

Address

Source Address

[0]M1499[1]

[0]M1499[1]

[0]M1199[1]

[0]M1599[1]

[0]M1099[1]

Begins with

[0]

☒ AND ☐ OR

Contains

Filter...

● Grid Operation 3

Drag the column header to rearrange column order

Alarm Level	Alarm Type	Tracking Type
Heavy Alarm	System	Tracking
Heavy Alarm	System	Tracking

Alarm Level

on(sec)	Alarm Type	Tracking Type	Address	Alarm Level
	System	Tracking	[0]M1499[1]	Heavy Alarm
	System	Tracking	[0]M1499[1]	Heavy Alarm
	System	Tracking	[0]M1199[1]	Heavy Alarm
	System	Tracking	[0]M1599[1]	Heavy Alarm

# 1

## Dashboard

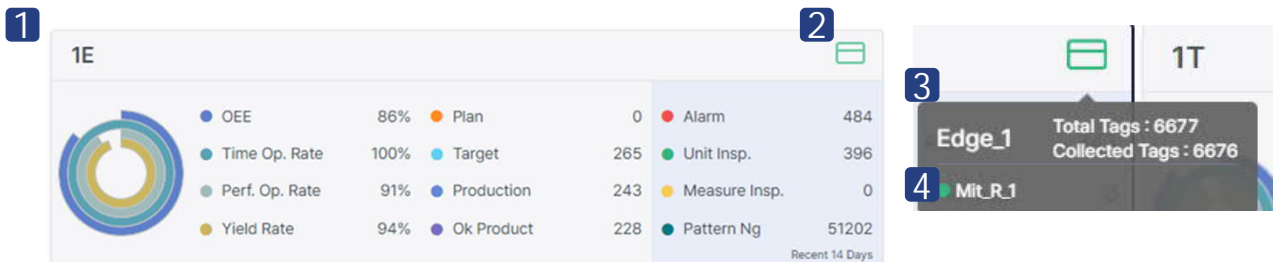


## 1. Factory Dashboard

- Display cycle status of each registered line
- Display current operation status of each line
- Display the number of occurrences over the past 14 days for alarms, actuator inspections, measurement inspections, abnormal patterns

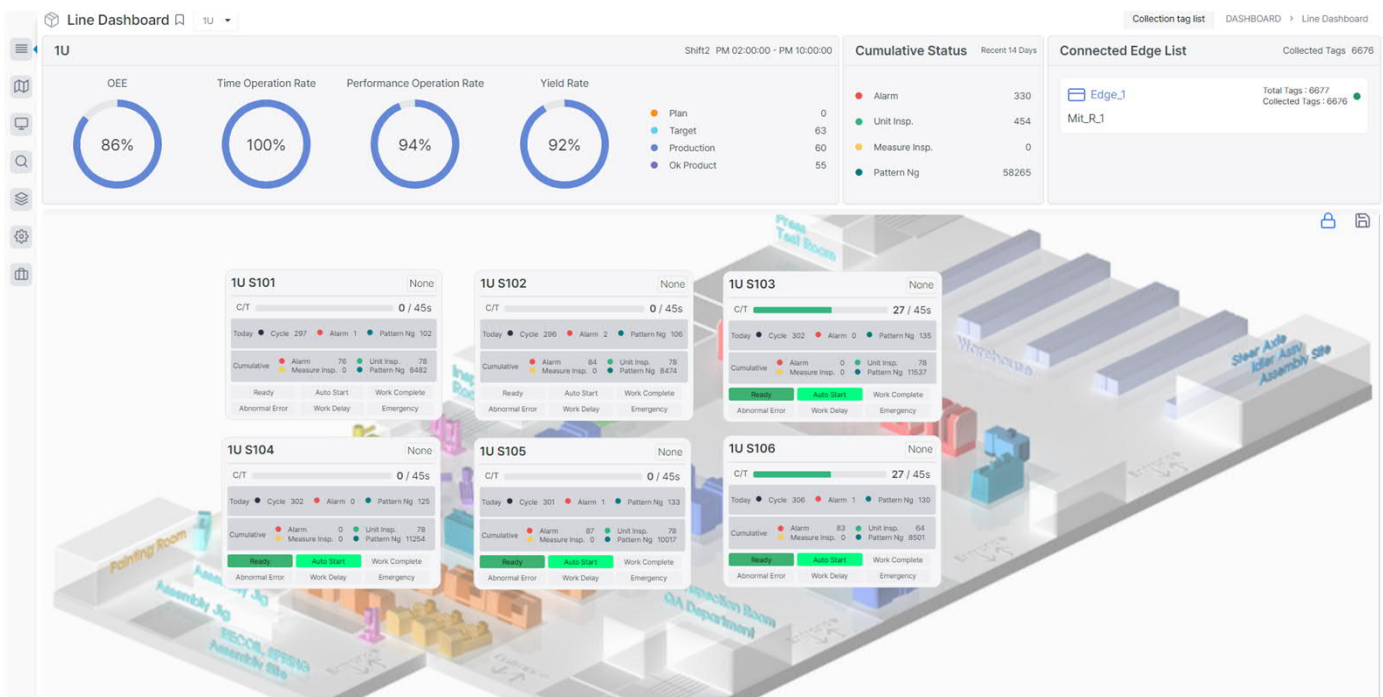


- Navigate to the Lind Dashboard after clicking on a specific line
  1. Line Name
  2. UDM Edge Info: Show information about the Edge devices connected to the line
  3. Tooltip with Edge information appears when hovering over the Edge icon
  4. Status and name of each device under the Edge are also displayed



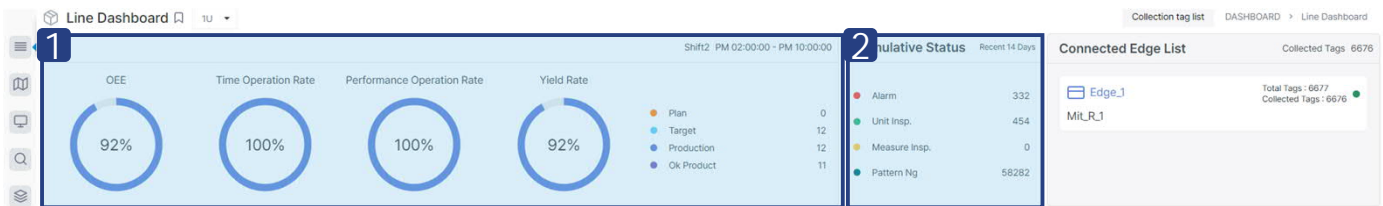
## 2. Line Dashboard

- Display the production status of the clicked line
- Show the number of occurrences over the past 14 days for alarms, unit inspection, measurement inspections, abnormal patterns
- Show the list of UDM Edge devices connected to
- Show cycle status for the stations in the line

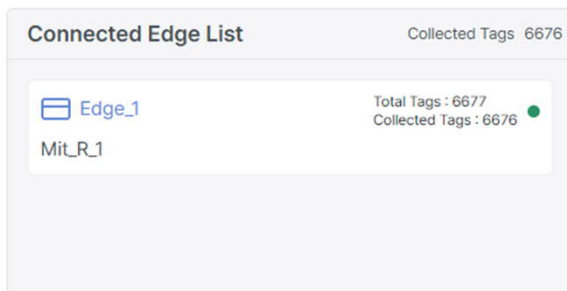


## 2. Line Dashboard

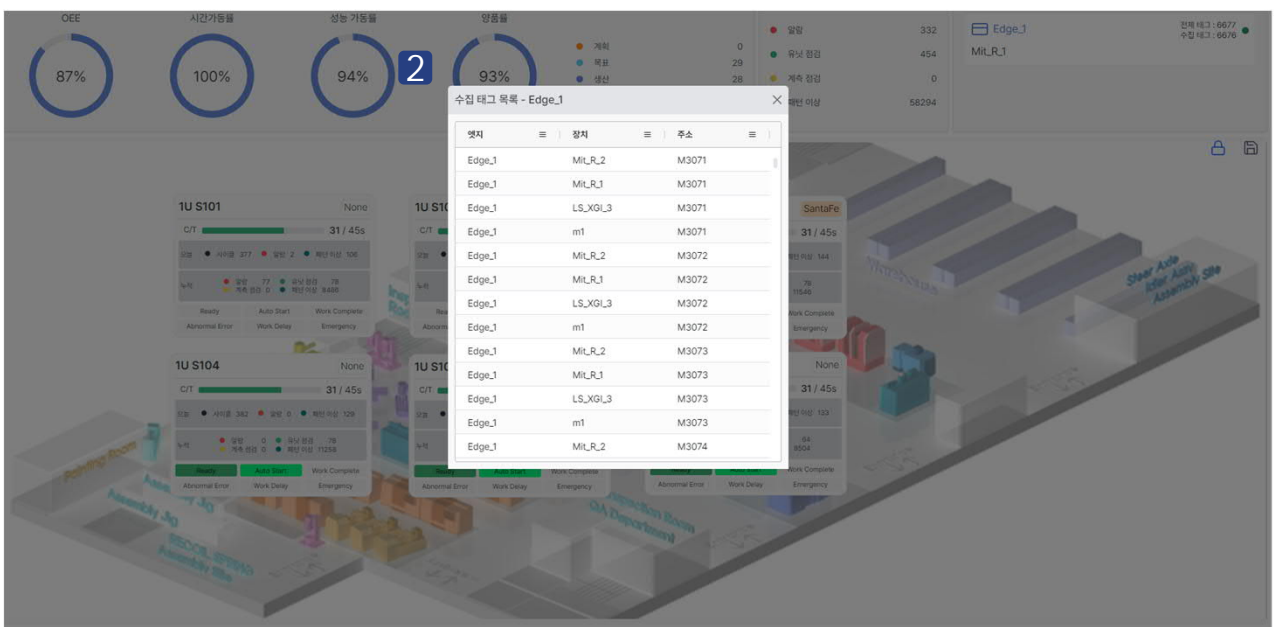
- Display the production status of the clicked line
  1. Line production status
  2. Cumulative status over the past 14 days



- Connected UDM Edge list
  1. Double-click the Edge to view the list of collected tags for that Edge

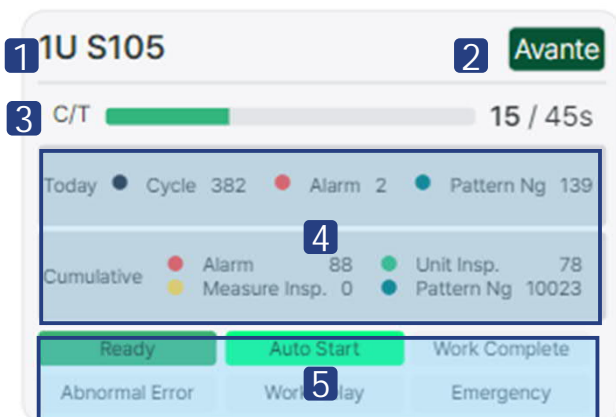
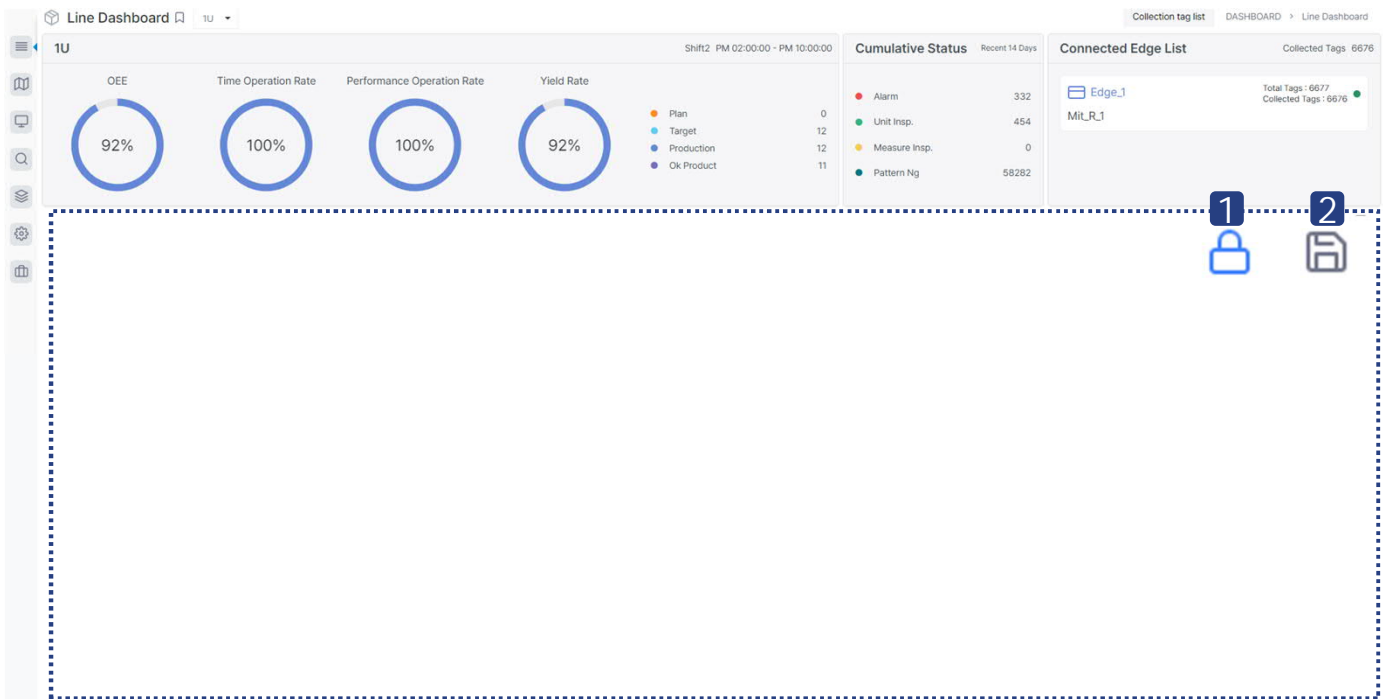


1 Double Click



## 2. Line Dashboard

- Process cards can be positioned freely with the dashboard layout
  1. Lock/Unlock Process Card: Enable/Disable to placement of process cards
  2. Save Process Card Layout: Saves the current placement of process cards



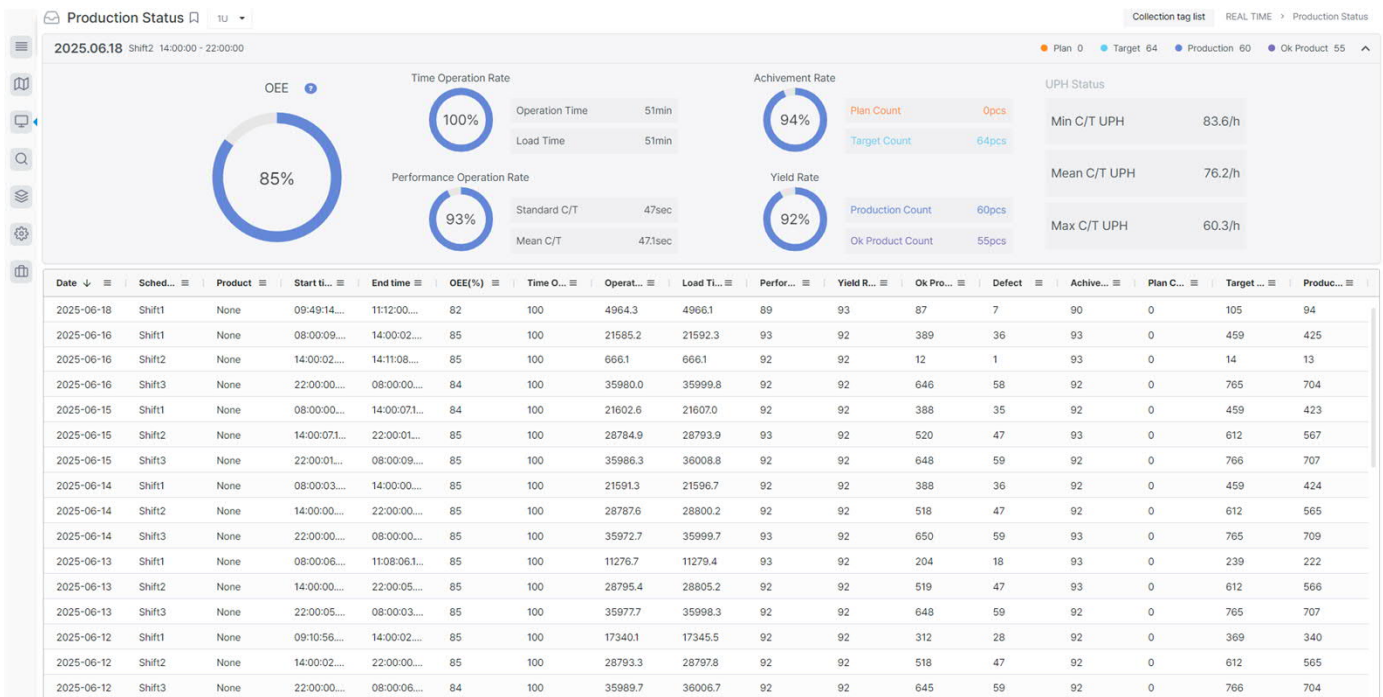
- Process Cards
  1. Display process name
  2. Display Product Model
  3. Show current C/T and standard C/T
  4. Show production status
  5. Show cycle status

# 2

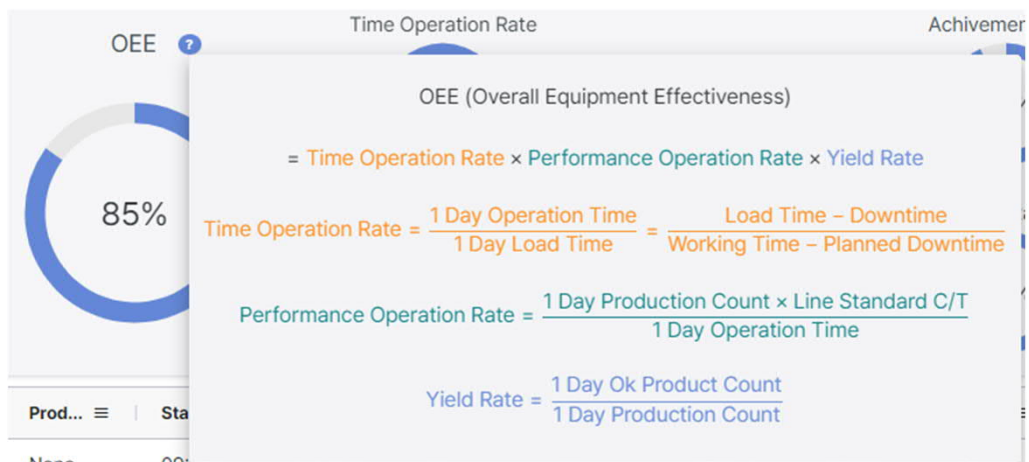
## Production

## 1. Production Status

- Show current shift of production status
- Search production logs for each line by schedule

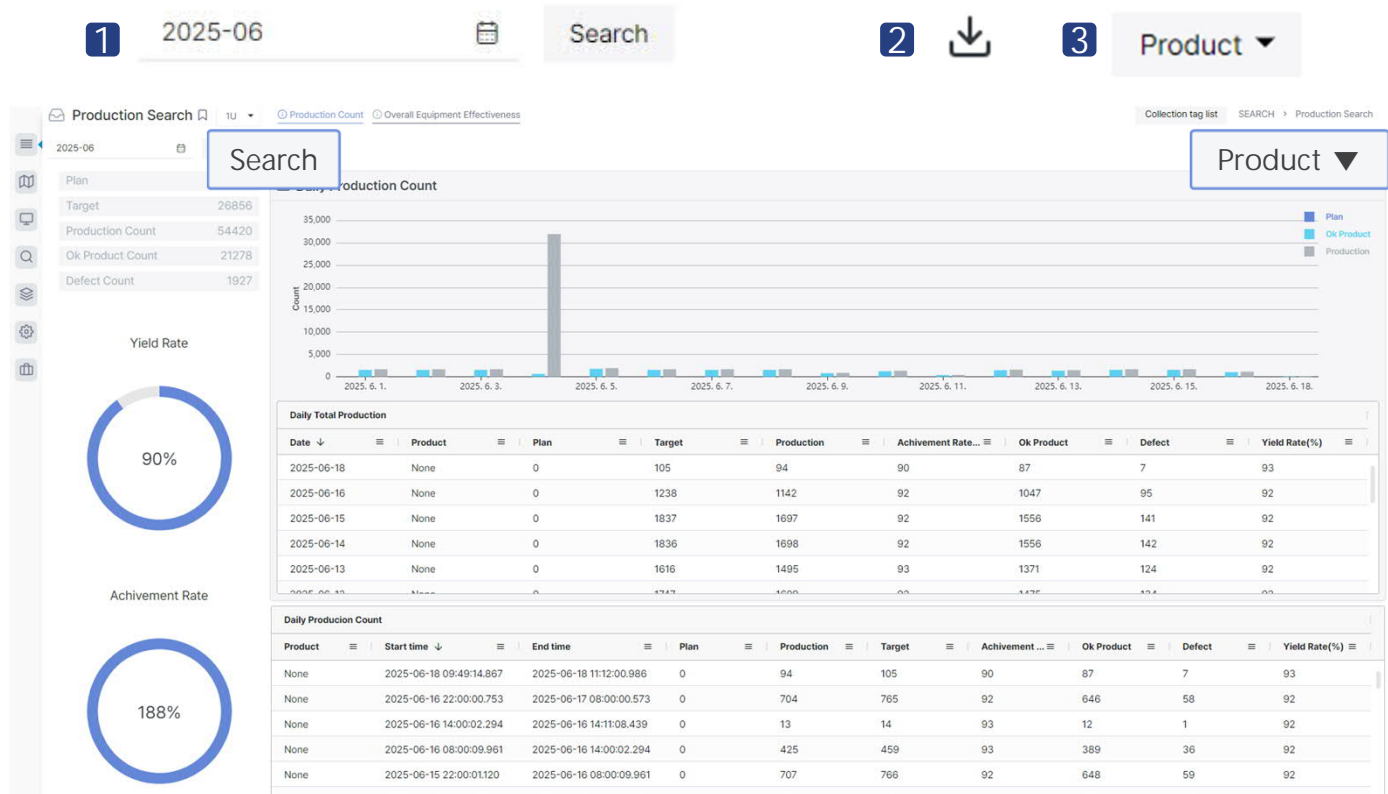


? When clicking on the question mark, a tooltip appears explaining the calculation



## 2. Production Search

- Production Count
- View daily product output
- Display monthly statistics, total daily production quantity, detailed daily production quantity

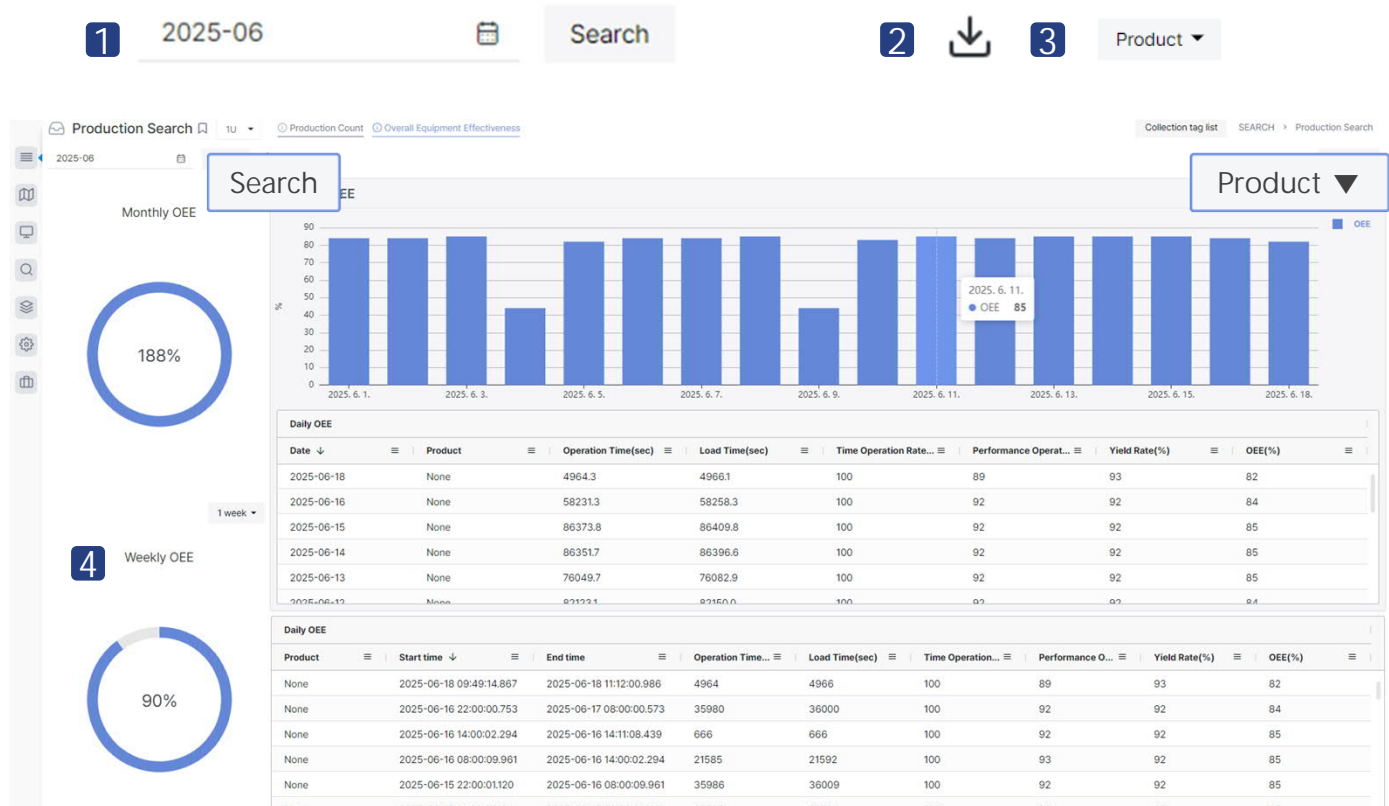


1. Select date range and click "Search" button
2. Download daily production quantity for selected month
3. Use the dropdown to choose which product item(s) to display in the chart



## 2. Production Search

- Overall Equipment Effectiveness
- View daily Overall Equipment Effectiveness (OEE)
- Display monthly OEE, daily OEE, detailed daily production output



1. Select a time range and click "Search" button
2. Download monthly OEE data
3. Use the dropdown to select the product items to be displayed in the chart
4. Check weekly OEE performance

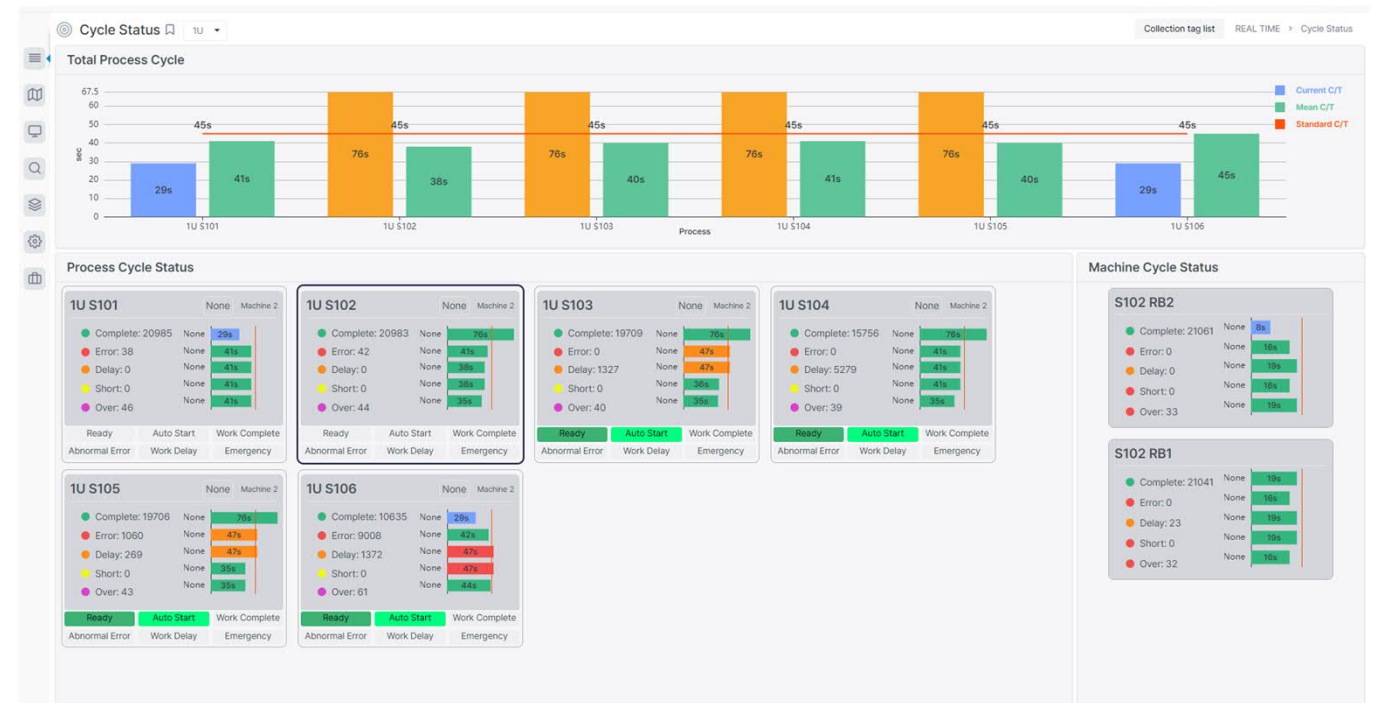
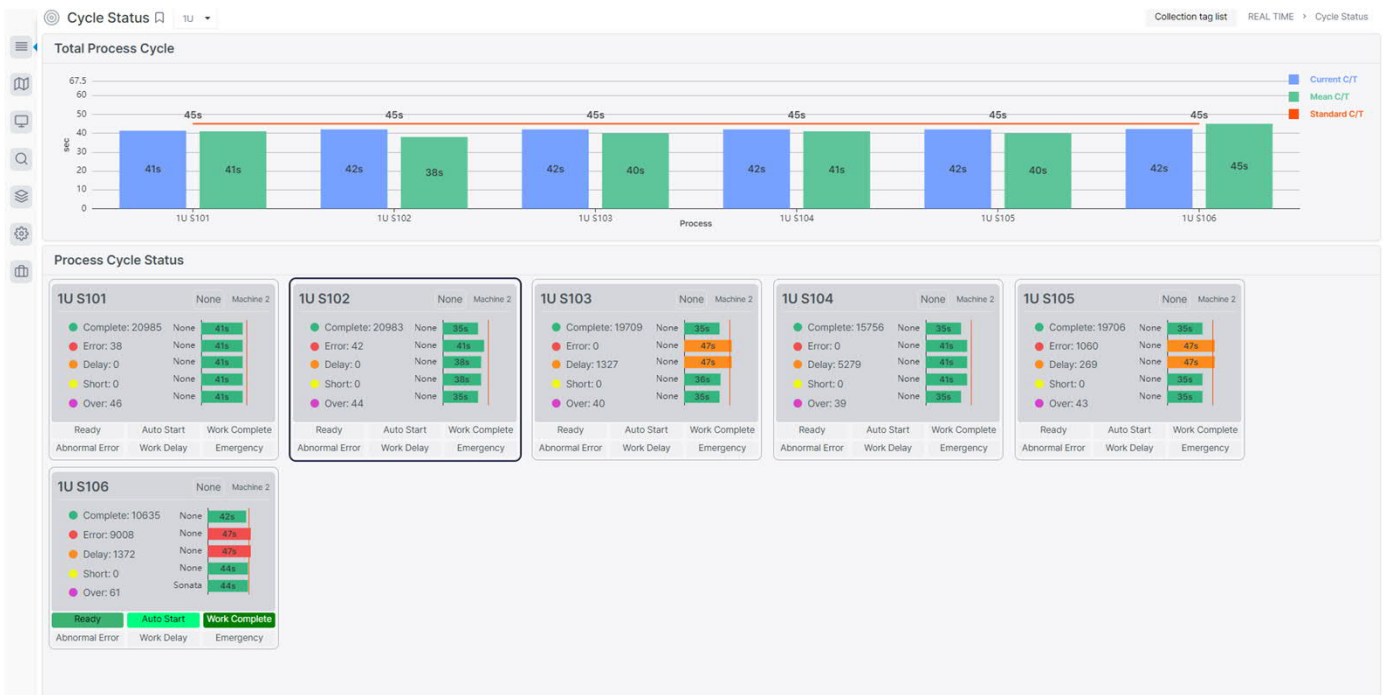


# 3

## Cycle

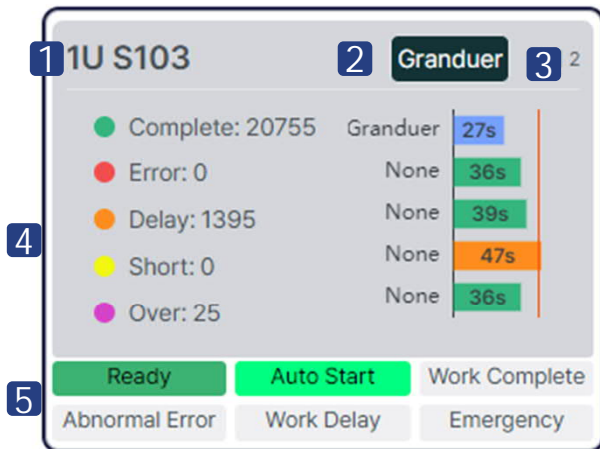
## 1. Cycle Status

- View the selected line's process cycle and related machines' cycle
- Display current C/T, standard C/T, average C/T



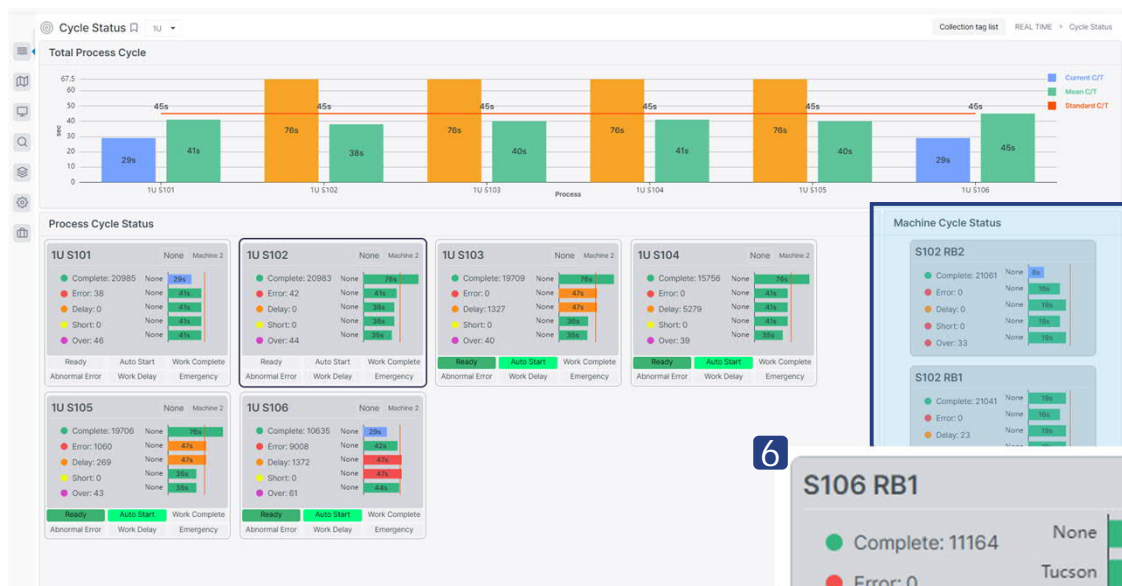
## 1. Cycle Status

- When clicking a process cycle card, the equipment cycle cards linked to that process will be displayed



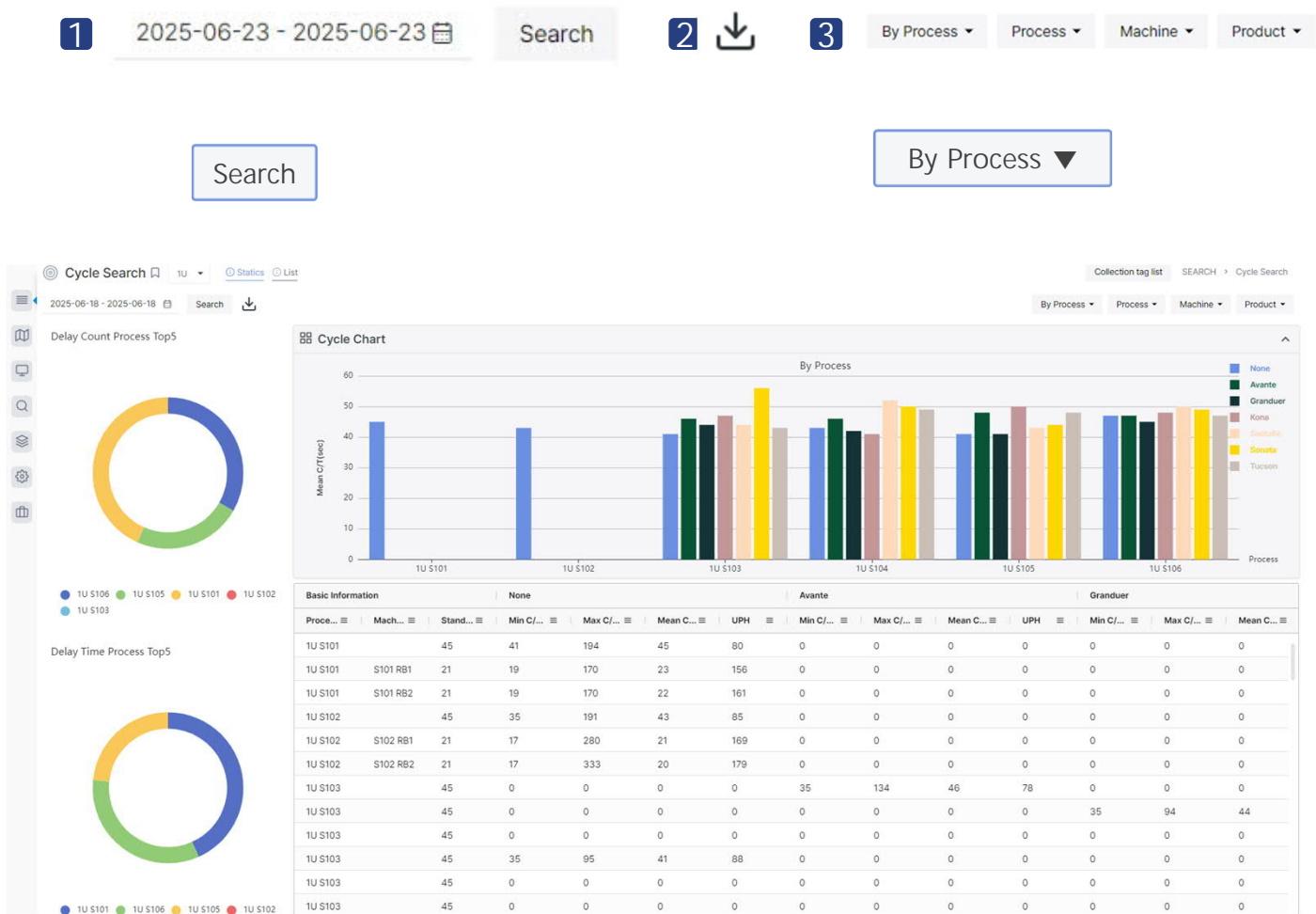
1. Name of the process or station
2. Product related with the current operation cycle
3. Number of equipment in the process
4. View cumulative cycle logs / view the current cycle and the last 4 cycles
5. Current Cycle Status (Ready, Auto Start, Work Complete, etc.)

6. Detailed equipment cycle data per equipment including completion, error, delays and C/T information



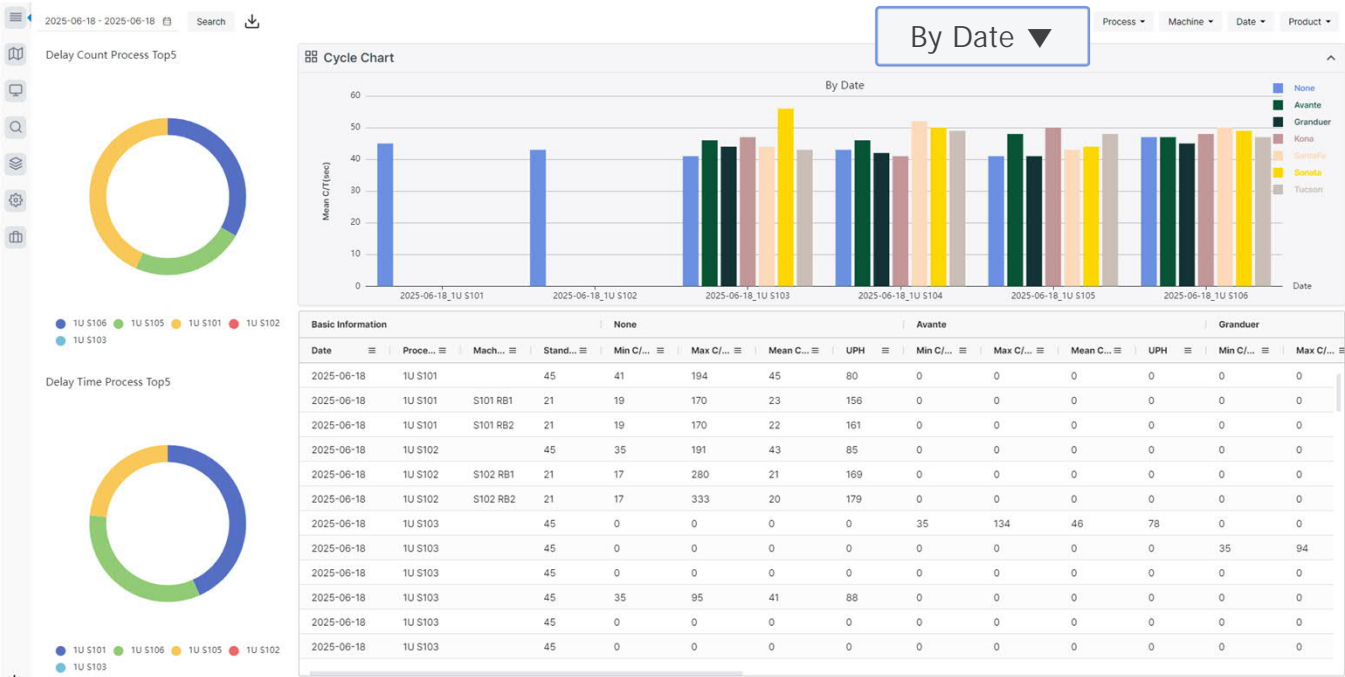
2. Cyle Search

- Search cycle log (Statistics)
- View the cycle log of the selected line
- Display Top 5 processes with the most delays during the selected period



2. Cycle Search

- Search cycle log (Statistics)



2025-06-18 - 2025-06-18

Search

Delay Count Process Top5

1U S106

1U S105

1U S101

1U S102

1U S103

Delay Time Process Top5

1U S101

1U S106

1U S105

1U S101

1U S102

1U S103

By Product

Cycle Chart

By Product

1U S101

1U S102

1U S103

1U S104

1U S105

1U S106

Mean C/T (sec)

50

40

30

20

10

0

None

Granduer

Tucson

SantaFe

Sonata

Kona

Avante

Product

Basic Information										None				Avante				Granduer			
Proce...	Mach...	Stand...	Min C/...	Max C/...	Mean C...	UPH	Min C/...	Max C/...	Mean C...	UPH	Min C/...	Max C/...	Mean C...	UPH							
1U S101		45	41	194	43	83	0	0	0	0	0	0	0	0							
1U S101	S101 RB1	21	19	170	21	167	0	0	0	0	0	0	0	0							
1U S101	S101 RB2	21	19	170	21	171	0	0	0	0	0	0	0	0							
1U S102		45	35	191	41	89	0	0	0	0	0	0	0	0							
1U S102	S102 RB1	21	17	280	20	181	0	0	0	0	0	0	0	0							
1U S102	S102 RB2	21	17	333	19	187	0	0	0	0	0	0	0	0							
1U S103		45	35	95	41	88	0	0	0	0	0	35	94	42							
1U S103		45	0	0	0	0	0	0	0	0	0	0	0	0							
1U S103		45	0	0	0	0	0	0	0	0	0	0	0	0							
1U S103		45	0	0	0	0	0	0	0	0	0	0	0	0							
1U S103		45	0	0	0	0	0	0	0	0	0	0	0	0							
1U S103		45	0	0	0	0	0	0	0	0	0	0	0	0							

## 2. Cycle Search

- Search cycle log (List)
- Display cycle logs of the selected line in grid format

Cycle Search 1U Statics List Collection tag list SEARCH Cycle Search

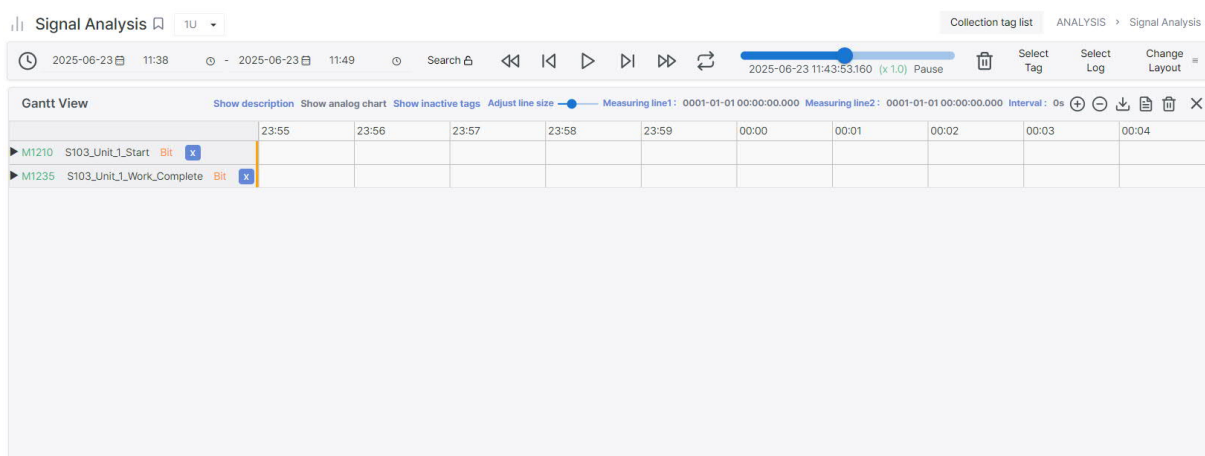
2025-06-18 - 2025-06-18 Search

Line	Process	Machine	Standard C/T	Cycle Type	Start time	End time	Duration(sec)	Product	S...	VIN	SSN
1U	1U S101	S101 RB2	21	Complete	2025-06-18 14:52...	2025-06-18 14:5...	19.7			2229.0	4469.0
1U	1U S103	S103 RB2	21	Complete	2025-06-18 14:52...	2025-06-18 14:5...	16.7			1516.0	3756.0
1U	1U S105	S105 RB2	21	Complete	2025-06-18 14:52...	2025-06-18 14:5...	16.7	Avante		2069.0	4309.0
1U	1U S102	S102 RB2	21	Complete	2025-06-18 14:52...	2025-06-18 14:5...	19.6			1458.0	3698.0
1U	1U S104	S104 RB2	21	Delay	2025-06-18 14:52...	2025-06-18 14:5...	22.6			1470.0	3710.0
1U	1U S101	S101 RB1	21	Complete	2025-06-18 14:52...	2025-06-18 14:52...	19.5			2229.0	4469.0
1U	1U S102	S102 RB1	21	Complete	2025-06-18 14:52...	2025-06-18 14:52...	16.8			1458.0	3698.0
1U	1U S103	S103 RB1	21	Complete	2025-06-18 14:52...	2025-06-18 14:52...	19.6			1516.0	3756.0
1U	1U S104	S104 RB1	21	Complete	2025-06-18 14:52...	2025-06-18 14:52...	16.8			1470.0	3710.0
1U	1U S105	S105 RB1	21	Complete	2025-06-18 14:52...	2025-06-18 14:52...	19.6	Avante		2069.0	4309.0
1U	1U S106	S106 RB1	21	Delay	2025-06-18 14:52...	2025-06-18 14:52...	22.7			1468.0	3708.0
1U	1U S101		45	Complete	2025-06-18 14:52...	2025-06-18 14:5...	41.3			2229.0	4469.0
1U	1U S102		45	Complete	2025-06-18 14:52...	2025-06-18 14:5...	38.3			1458.0	3698.0
1U	1U S103		45	Complete	2025-06-18 14:52...	2025-06-18 14:5...	38.3			1516.0	3756.0
1U	1U S104		45	Complete	2025-06-18 14:52...	2025-06-18 14:5...	41.3			1470.0	3710.0
1U	1U S105		45	Complete	2025-06-18 14:52...	2025-06-18 14:5...	38.3	Avante			4309.0
1U	1U S103	S103 RB2	21	Delay	2025-06-18 14:51...	2025-06-18 14:52...	22.6				3710.0
1U	1U S104	S104 RB2	21	Complete	2025-06-18 14:51...	2025-06-18 14:52...	16.7	Avante			4309.0
1U	1U S105	S105 RB2	21	Delay	2025-06-18 14:51...	2025-06-18 14:52...	22.6				3708.0
1U	1U S106	S106 RB2	21	Delay	2025-06-18 14:51...	2025-06-18 14:52...	22.6	Sonata			4230.0
1U	1U S101	S101 RB2	21	Complete	2025-06-18 14:51...	2025-06-18 14:52...	19.6			1458.0	3698.0
1U	1U S102	S102 RB2	21	Complete	2025-06-18 14:51...	2025-06-18 14:52...	16.7			1516.0	3756.0
1U	1U S101	S101 RB1	21	Complete	2025-06-18 14:51...	2025-06-18 14:51...	19.7			1458.0	3698.0
1U	1U S102	S102 RB1	21	Complete	2025-06-18 14:51...	2025-06-18 14:51...	19.6			1516.0	3756.0

### ● Signal Analysis for cycle

1. When clicking the play button in the Search row,
2. the platform navigates to Signal Analysis for deeper analysis

2

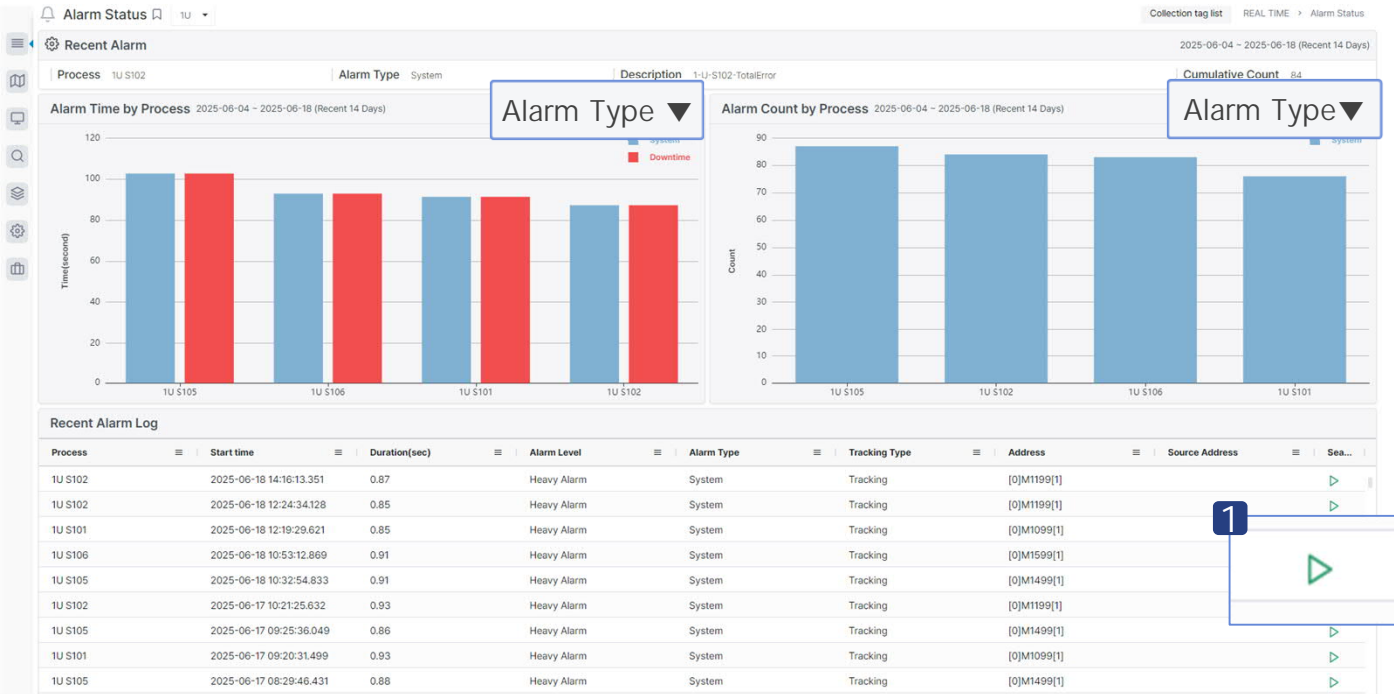


# 4

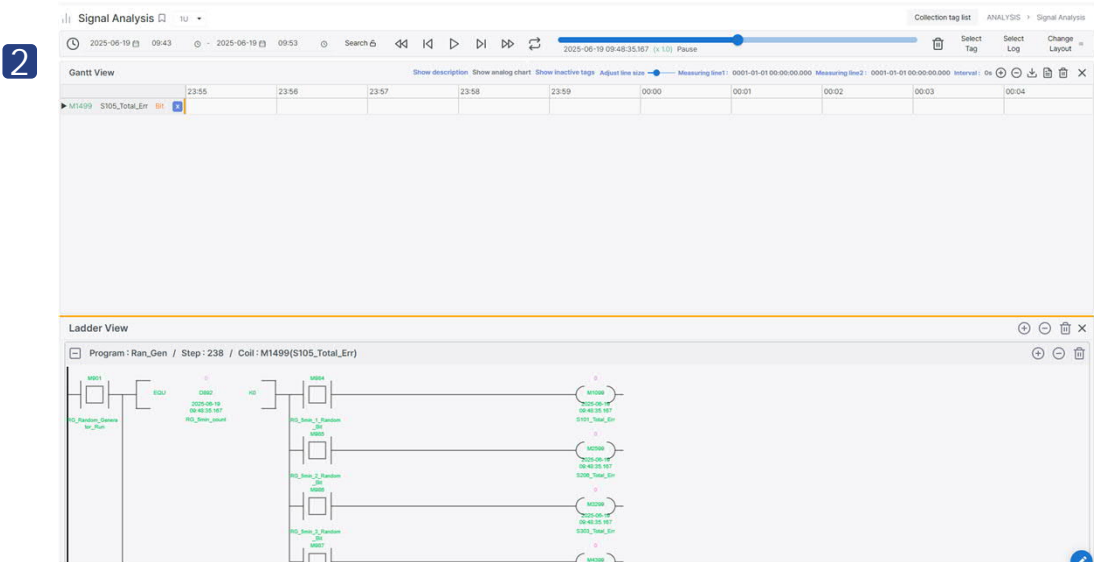
## Alarm

1. Alarm Status

- Show the most recent alarms that occurred on the selected line
- Show the total amount of alarm time and alarm counts in the station
- Filter alarms by process, alarm level, alarm type, and tracking type via dropdown options



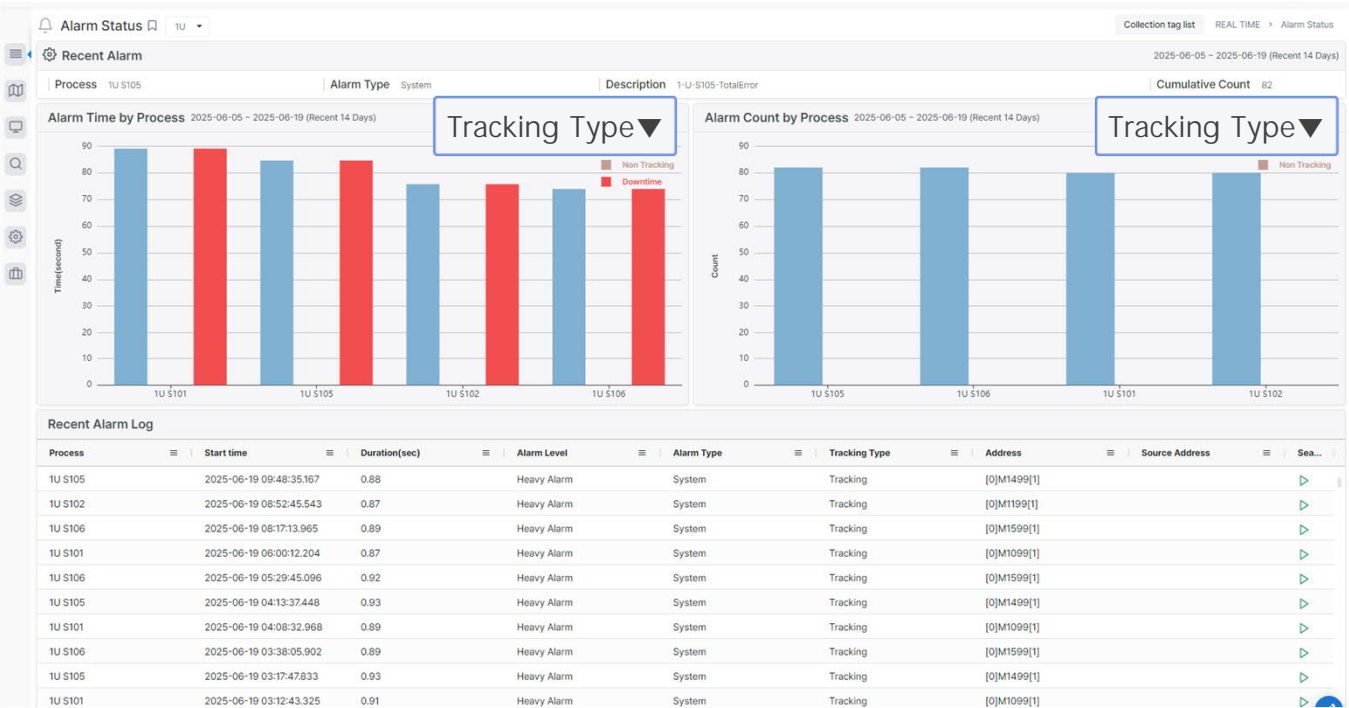
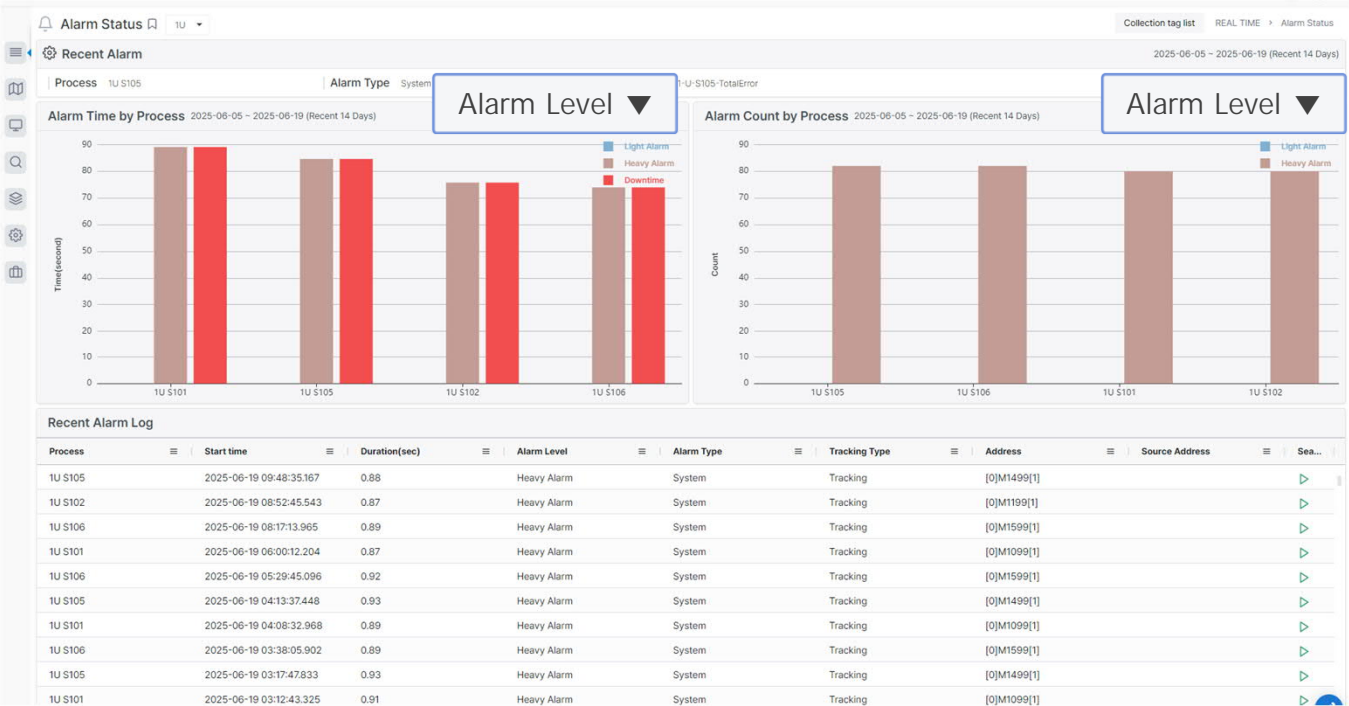
1. When clicking the play button in the Search row,
2. Platform navigates to Signal Analysis for root cause analysis



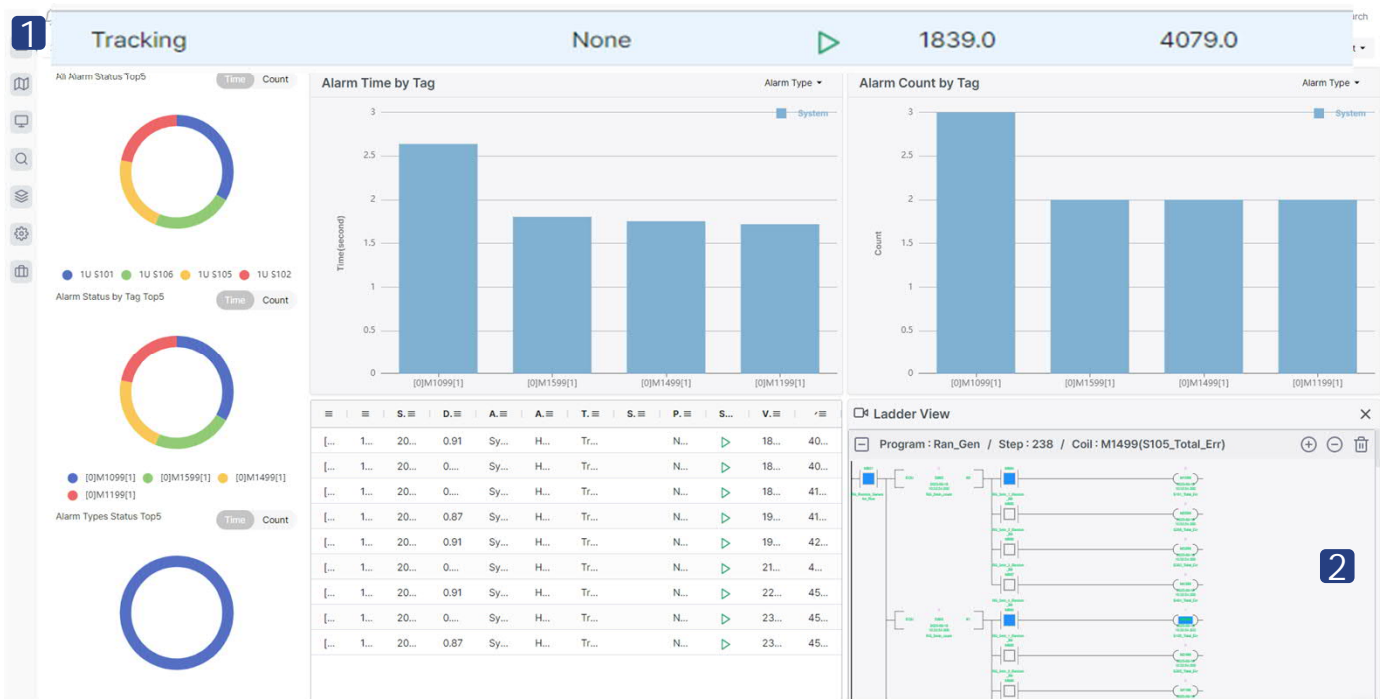


1. Alarm Status

- Use the aggregation dropdown to display charts by category



1. Alarm Status



- Show Ladder View after double-clicking alarm logs
  - 1.Close Ladder View
  - 2.Open Ladder View

1 Ladder View



2. Search Alarms

- View alarm logs of the selected line
- Show statistic charts within the selected time

1

2025-06-19 - 2025-06-19

Search

2

3

4

By Process

Process

Total

Total

Alarm Type

Product

Search

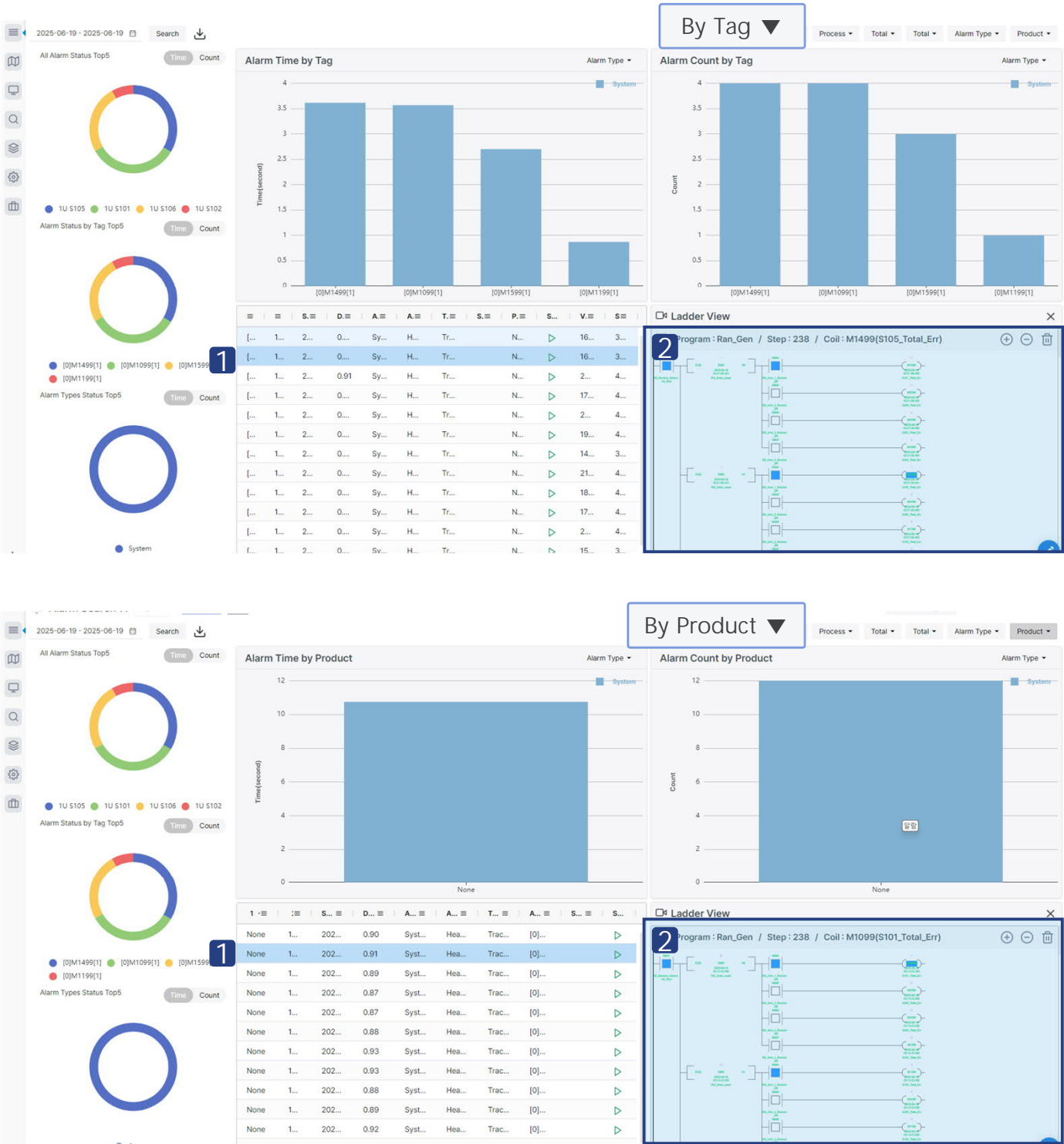
By Product



- 1.Select period and click the "Search" button
- 2.Download the alarm log
- 3.Change option through dropdown menu
- 4.Change chart display option through dropdown menu

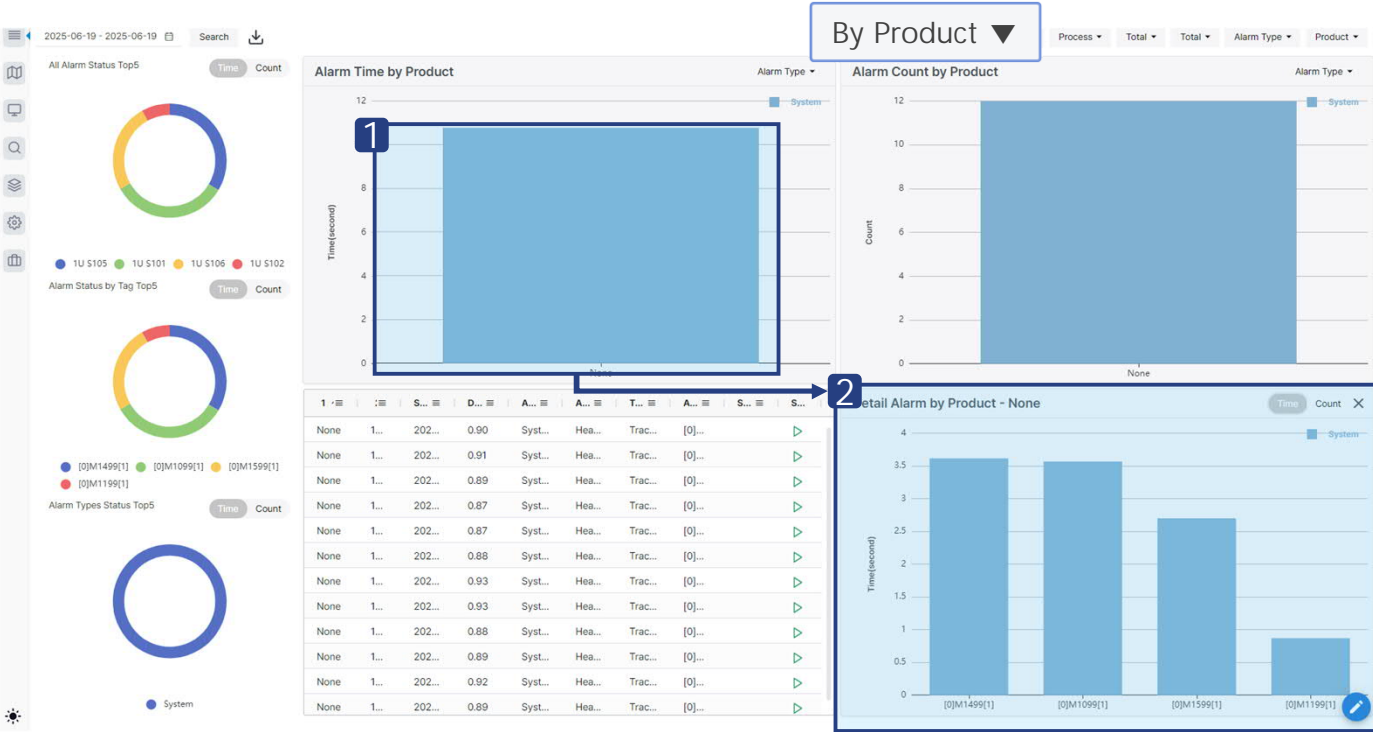
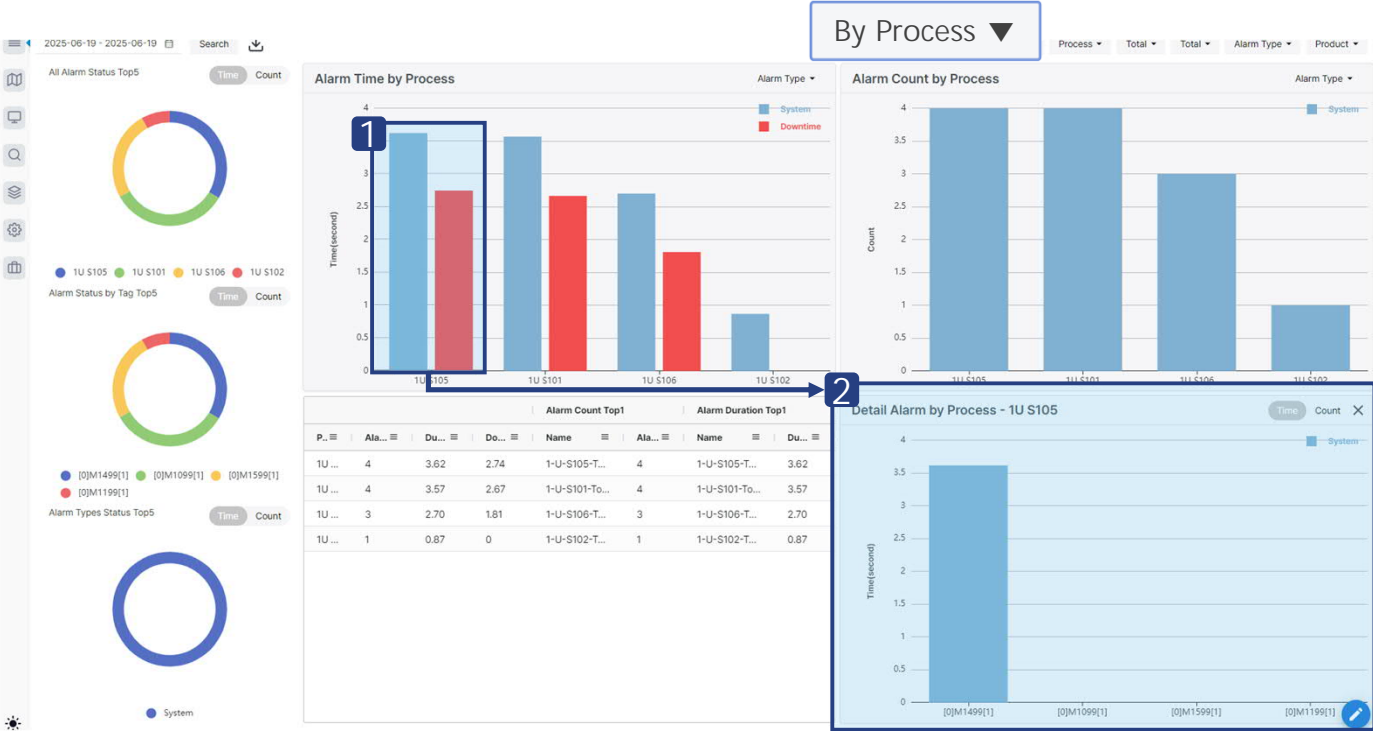
2. Search Alarms

- Double-clicking on a row in alarm tag displays the Ladder View



2. Search Alarms

- When clicking a chart bar in process or alarm type, detailed alarm information is displayed



## 2. Search Alarms

- Clicking the play button in the Search column navigates to the Signal Analysis page, allowing for root cause analysis and check timestamp
- When clicking by tag or product, it will redirect to Signal Analysis
  - Click ▶ button for signal analysis
  - Selected alarm is displayed on Signal Analysis

The screenshot displays the UDM Platform Alarm Search interface. On the left, there are donut charts for 'All Alarm Status Top5' and 'Alarm Types Status Top5'. The main area shows two bar charts: 'Alarm Time by Tag' and 'Alarm Count by Tag'. Below these is a table of alarm events. A blue arrow points from a play button in the table to the 'Signal Analysis' page. The 'Signal Analysis' page shows a timeline view of the selected alarm.

Tag	P...	Start time	Duration(s...)	Alarm Type	Alarm Level	Tracking T...	Source Ad...	Prod...	S...	VIN	SSN
[0]M109...	1U S101	2025-06-19 ...	0.90	System	Heavy Alarm	Tracking	None	▶	1692.0	3932.0	
[0]M109...	1U S101	2025-06-19 ...	0.91	System	Heavy Alarm	Tracking	None	▶	2039.0	4279.0	
[0]M109...	1U S101	2025-06-19 ...	0.89	System	Heavy Alarm	Tracking	None	▶		4145.0	
[0]M109...	1U S101	2025-06-19 ...	0.87	System	Heavy Alarm	Tracking	None	▶		4124.0	
[0]M1199...	1U S102	2025-06-19 ...	0.87	System	Heavy Alarm	Tracking	None	▶		4497.0	
[0]M149...	1U S105	2025-06-19 ...	0.88	System	Heavy Alarm	Tracking	None	▶		3938.0	
[0]M149...	1U S105	2025-06-19 ...	0.93	System	Heavy Alarm	Tracking	None	▶		4026.0	
[0]M149...	1U S105	2025-06-19 ...	0.93	System	Heavy Alarm	Tracking	None	▶	1454.0	3694.0	
[0]M149...	1U S105	2025-06-19 ...	0.88	System	Heavy Alarm	Tracking	None	▶	1519.0	3759.0	
[0]M159...	1U S106	2025-06-19 ...	0.89	System	Heavy Alarm	Tracking	None	▶	2090.0	4330.0	
[0]M159...	1U S106	2025-06-19 ...	0.92	System	Heavy Alarm	Tracking	None	▶	2197.0	4437.0	
[0]M159...	1U S106	2025-06-19 ...	0.89	System	Heavy Alarm	Tracking	None	▶	1769.0	4009.0	

The 'Signal Analysis' page shows a timeline view of the selected alarm. The timeline includes a 'Show description' button, a 'Show analog chart' button, a 'Show inactive tags' button, and an 'Adjust line size' slider. The timeline itself shows a sequence of events over time, with a 'Measuring line1' and 'Measuring line2' displayed at the bottom.



2. Search Alarms

- View the alarm logs of the selected line

Alarm Search1UStatisticsListCollection tag listSEARCHAlarm Search

2025-06-09 - 2025-06-18Search

Process	Alarm Level	Alarm Type	Tracking Type	Detail Address	Source Tag Address	Start time	End time	Duration(sec)	VIN	SSN
1U S106	Heavy Alarm	System	Tracking	[0]M1599[1]		2025-06-09 01:01:...	2025-06-09 01:01:...	0.88	2280.0	4520.0
1U S105	Heavy Alarm	System	Tracking	[0]M1499[1]		2025-06-09 01:37:...	2025-06-09 01:37:...	0.90	2051.0	4291.0
1U S106	Heavy Alarm	System	Tracking	[0]M1599[1]		2025-06-09 02:53:...	2025-06-09 02:53:...	0.90	1801.0	4041.0
1U S102	Heavy Alarm	System	Tracking	[0]M1199[1]		2025-06-09 03:29:...	2025-06-09 03:29:...	0.91	2055.0	4295.0
1U S102	Heavy Alarm	System	Tracking	[0]M1199[1]		2025-06-09 05:20:...	2025-06-09 05:20:...	0.90	1397.0	3637.0
1U S102	Heavy Alarm	System	Tracking	[0]M1199[1]		2025-06-09 06:16:...	2025-06-09 06:16:...	0.88	1489.0	3729.0
1U S102	Heavy Alarm	System	Tracking	[0]M1199[1]		2025-06-09 08:08:...	2025-06-09 08:08:...	0.90	1476.0	3716.0
1U S102	Heavy Alarm	System	Tracking	[0]M1199[1]		2025-06-09 09:04:...	2025-06-09 09:04:...	0.87	1962.0	4202.0
1U S101	Heavy Alarm	System	Tracking	[0]M1099[1]		2025-06-09 09:54:...	2025-06-09 09:54:...	0.88	2073.0	4313.0
1U S102	Heavy Alarm	System	Tracking	[0]M1199[1]		2025-06-09 10:55:...	2025-06-09 10:55:...	0.92	2001.0	4241.0
1U S102	Heavy Alarm	System	Tracking	[0]M1199[1]		2025-06-09 11:51:...	2025-06-09 11:51:...	0.90	2046.0	4286.0
1U S105	Heavy Alarm	System	Tracking	[0]M1499[1]		2025-06-09 12:47:...	2025-06-09 12:47:...	0.89	2109.0	4349.0
1U S105	Heavy Alarm	System	Tracking	[0]M1499[1]		2025-06-09 13:43:...	2025-06-09 13:43:...	0.91	2315.0	4555.0
1U S106	Heavy Alarm	System	Tracking	[0]M1599[1]		2025-06-09 14:03:...	2025-06-09 14:03:...	0.90	2117.0	4357.0
1U S105	Heavy Alarm	System	Tracking	[0]M1499[1]		2025-06-09 14:39:...	2025-06-09 14:39:...	0.90	2113.0	4353.0
1U S102	Heavy Alarm	System	Tracking	[0]M1199[1]		2025-06-09 15:34:...	2025-06-09 15:34:...	0.89	1572.0	3812.0
1U S106	Heavy Alarm	System	Tracking	[0]M1599[1]		2025-06-09 16:50:...	2025-06-09 16:50:...	0.92	1684.0	3924.0
1U S101	Heavy Alarm	System	Tracking	[0]M1099[1]		2025-06-09 17:21:...	2025-06-09 17:21:...	0.89	2051.0	4291.0
1U S106	Heavy Alarm	System	Tracking	[0]M1599[1]		2025-06-09 17:46:...	2025-06-09 17:46:...	0.94	2115.0	4355.0
1U S106	Heavy Alarm	System	Tracking	[0]M1599[1]		2025-06-09 18:42:...	2025-06-09 18:42:...	0.93	2302.0	4542.0
1U S102	Heavy Alarm	System	Tracking	[0]M1199[1]		2025-06-09 19:18:...	2025-06-09 19:18:...	0.90	1903.0	4143.0
1U S106	Heavy Alarm	System	Tracking	[0]M1599[1]		2025-06-09 19:38:...	2025-06-09 19:38:...	0.94	1715.0	3955.0
1U S101	Heavy Alarm	System	Tracking	[0]M1099[1]		2025-06-09 20:08:...	2025-06-09 20:08:...	0.93	1544.0	3784.0
1U S101	Heavy Alarm	System	Tracking	[0]M1099[1]		2025-06-09 23:52:...	2025-06-09 23:52:...	0.94	2042.0	4282.0

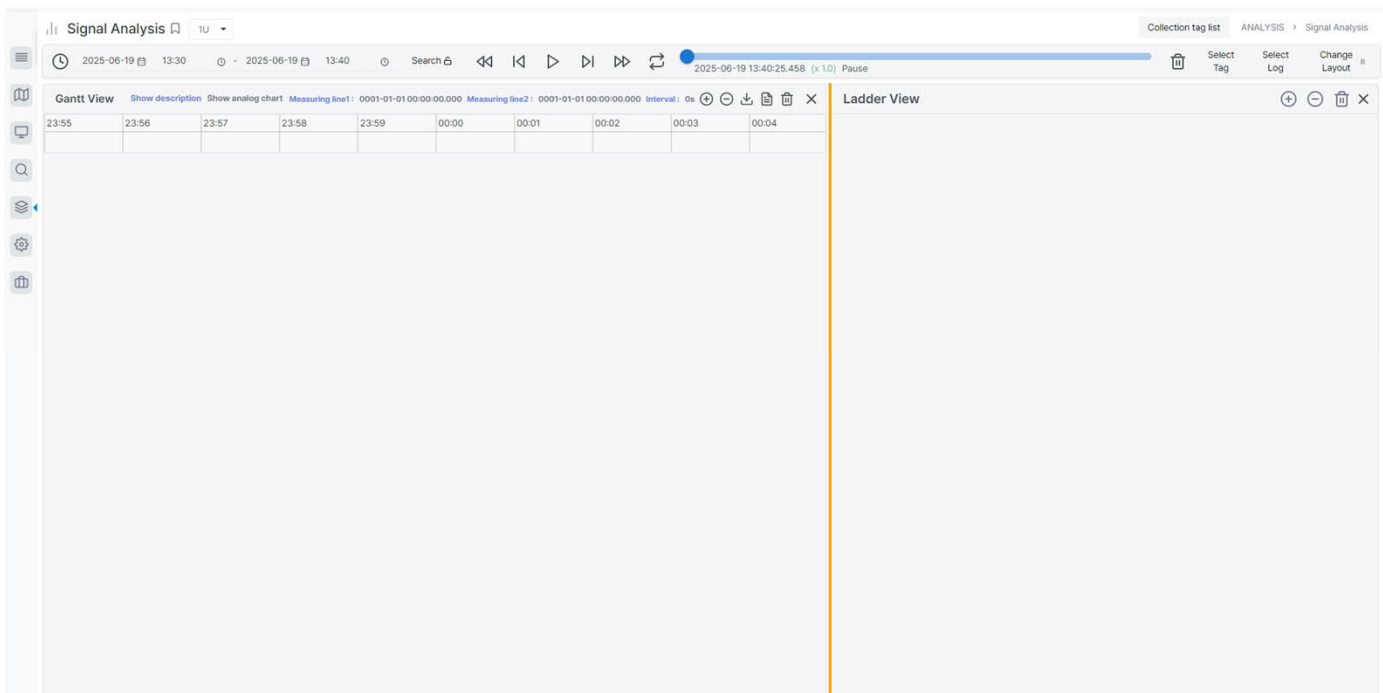
# 5

## Signal



## 1. Signal Analysis

- Search registered tags based on time periods
- Trace the root cause of faults through Gantt View and Ladder View
- Replay past operations

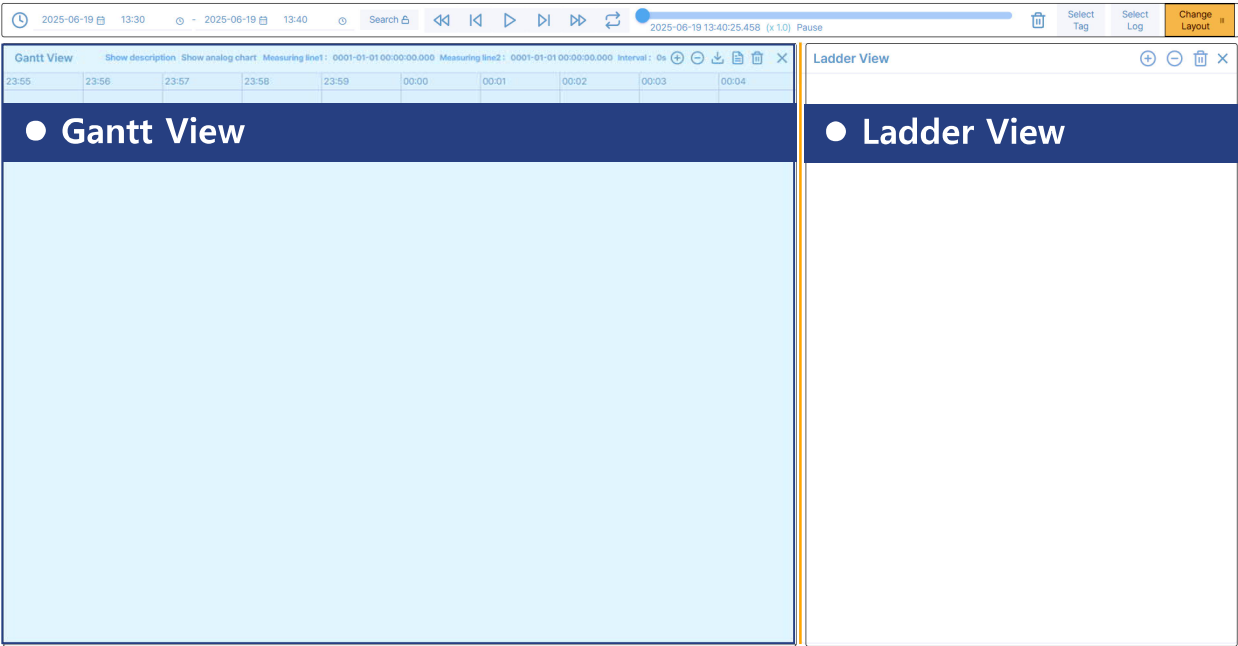


- Detailed Contents
  1. Screen Configuration
  2. How to Search
    - Search Tags
    - Search Logs
  3. Chart Functions
    - Gantt View
    - Ladder View

# 1.1 Screen Configuration

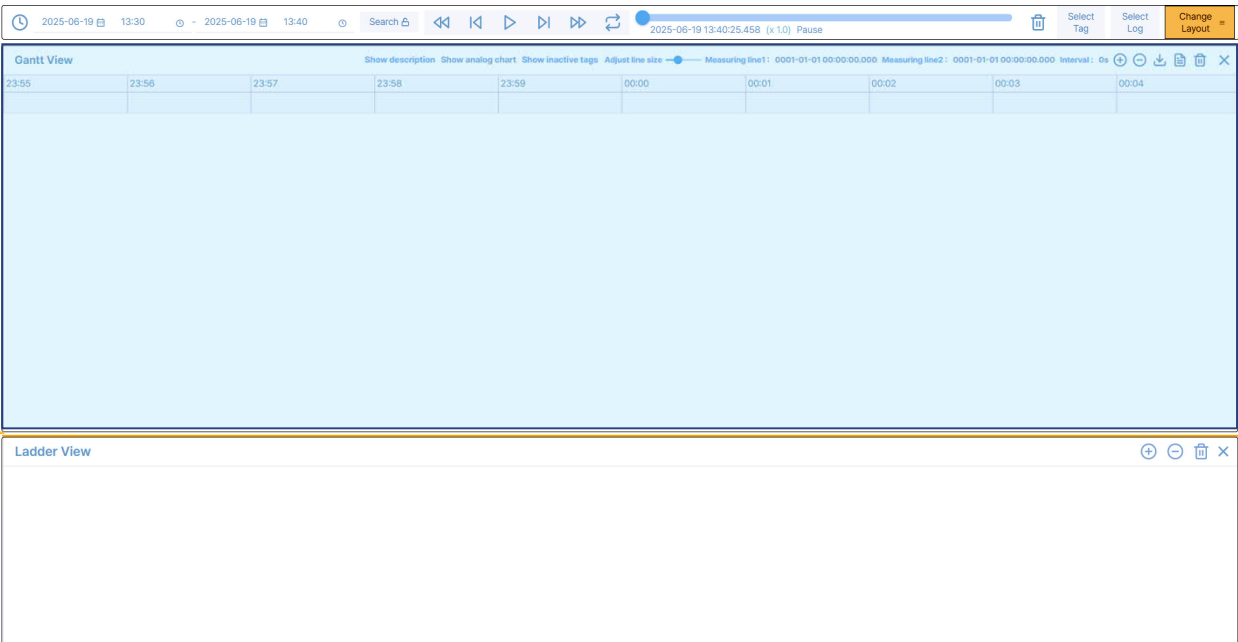
- Composed of Top Bar, Gantt

- **Top Bar**    Period Search / Simulation Control / Tag Registration



Switch layout between horizontal and vertical arrangement of Gantt View and Ladder View

Switch View



Drag to resize and split the screen

## 1.2 Search Data: Tags

- Select item for analysis → choose tag

1 Select Tag

2

3

4

Edge	Device	Address	Data T...	Type	Comm...	Name
Edge_1	Mit_R_1	D102	Word	Production	Line_U_Pr...	D102
Edge_1	Mit_R_1	D104	Word	Production	Line_U_O...	D104
Edge_1	Mit_R_1	D106	Word	Production	Line_U_N...	D106
Edge_1	Mit_R_1	M101	Bit	Cycle	Line_U_R...	M101
Edge_1	Mit_R_1	M106	Bit	Cycle	Line_U_C...	M106
Edge_1	Mit_R_1	D1740	Word	Product	S103_SN...	D1740
Edge_1	Mit_R_1	D1760	Word	Product	S104_SN...	D1760
Edge_1	Mit_R_1	D1780	Word	Product	S105_SN...	D1780
Edge_1	Mit_R_1	D1800	Word	Product	S106_SN...	D1800
Edge_1	Mit_R_1	M1001	Bit	Cycle	S101_Start	M1001

Search

### • Checking Tag Registration

1. Click the Select Tag button
2. List of currently collected tags pop up
3. Select Process / Type
4. Select Tag

- Single Tag Search: Click the row then press "Search" or double click the row
- Multiple Tag Search : Select multiple rows for analysis then click "Search"

5

Gantt View

23:55 23:56 23:57 23:58 23:59 00:00 00:01 00:02 00:03 00:04

Line\_U\_Restart Bit

Line\_U\_OK\_Count Word

Line\_U\_Production\_Count Word

Ladder View

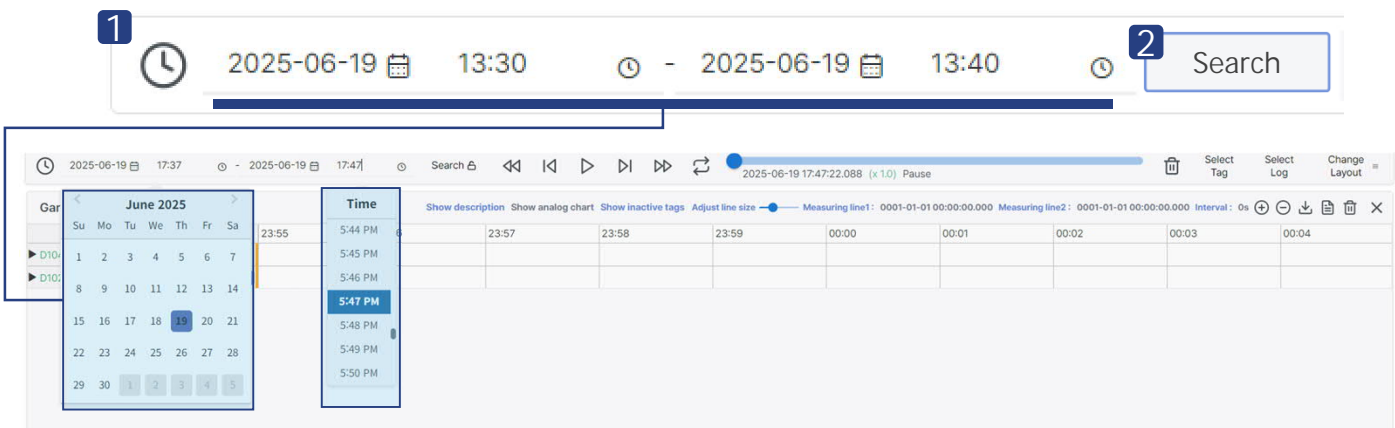
Program: Line\_U\_Main / Step: 36 / Coil: M101(Line\_U\_Restart)

Program: Line\_U\_Main / Step: 53 / Coil: D104(Line\_U\_OK\_Count)

5. Ladder Step and Gantt Item linked to the selected tag will be registered and displayed

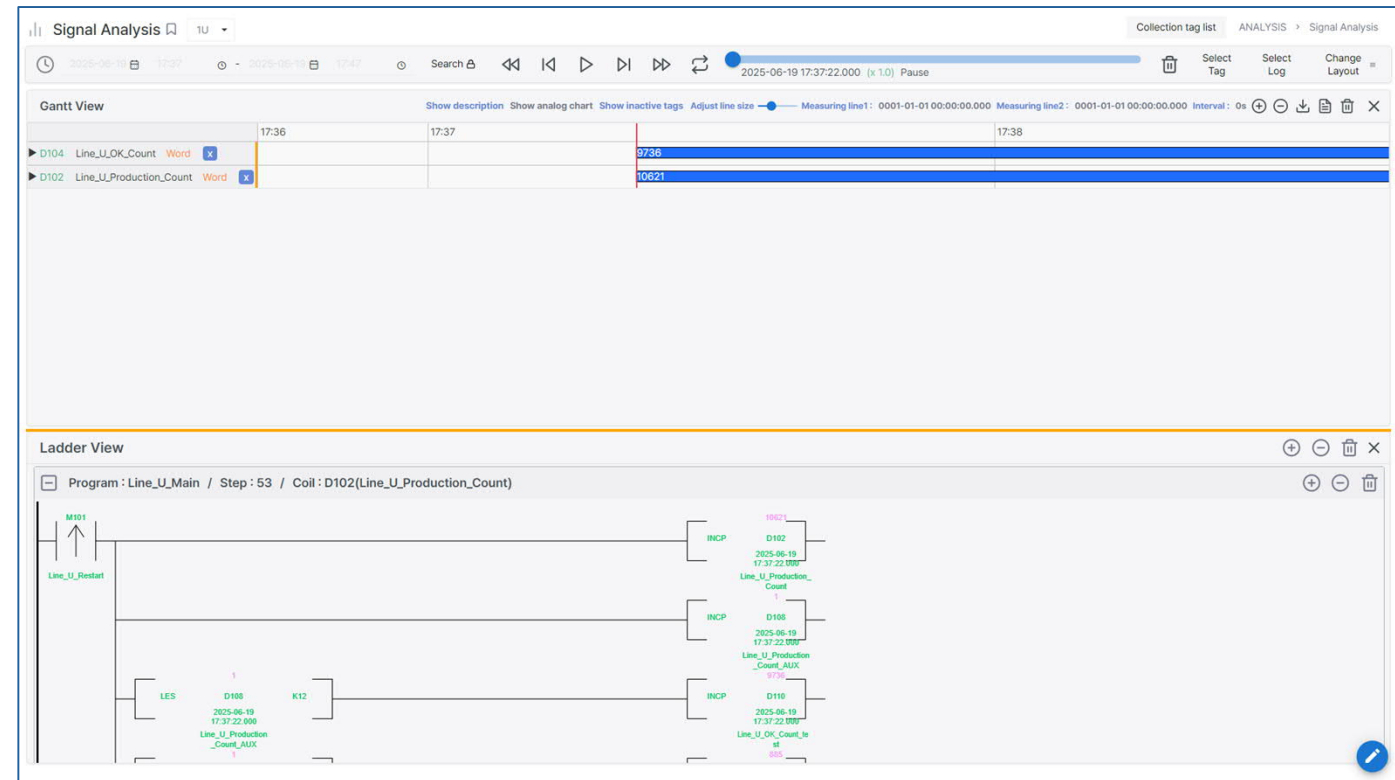
## 1.2 Search Data: Tags

- Select time period



1. Enter start time and end times for the period of the logs to analyze
2. Click Search Button after entering the time

- Search Complete



## 1.2 Data Search: Logs

- Select item for analysis → choose logs

1 Select Log

2

3

4

Search period  
Start time 2025-06-18 14:28  
End time 2025-06-18 15:28  
Process Total  
Type Total  
Interval -10min 1 +10min

Search

Type	Name	S...	End t...	Addr...	Com...	Prod...	Prod...
Cycle	[Machi...	2025-0...	2025-0...	[0]M23...	S204...	None	
Cycle	[Machi...	2025-0...	2025-0...	[0]M23...	S204...	None	
Cycle	[Machi...	2025-0...	2025-0...	[0]M33...	S304...	None	
Cycle	[Machi...	2025-0...	2025-0...	[0]M33...	S304...	None	
Cycle	[Machi...	2025-0...	2025-0...	[0]M20...	S201_U...	None	
Cycle	[Machi...	2025-0...	2025-0...	[0]M20...	S201_U...	None	
Cycle	[Machi...	2025-0...	2025-0...	[0]M21...	S202...	None	
Cycle	[Machi...	2025-0...	2025-0...	[0]M21...	S202...	None	
Cycle	[Machi...	2025-0...	2025-0...	[0]M31...	S302...	None	

Page Size: 1000 0 to 0 of 0 1K < Page 0 of 0 > 1K

Search

### ● Checking Log Registration

1. Click the "Select Log" button

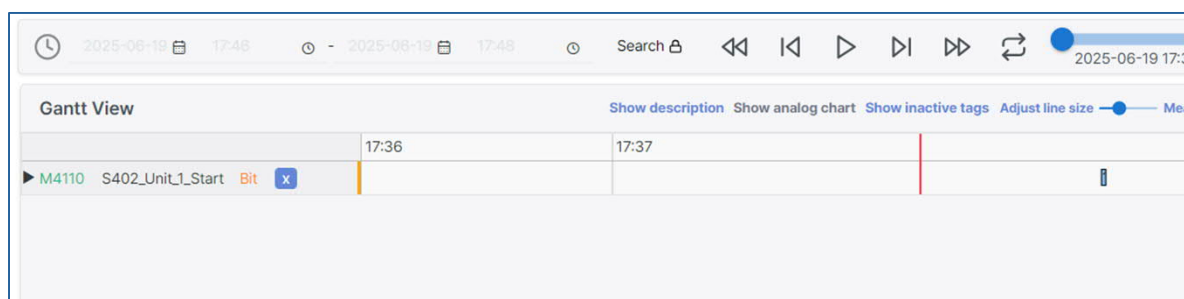
2. List of available logs will pop up

3. Choose logs to analyze then click "Search" button

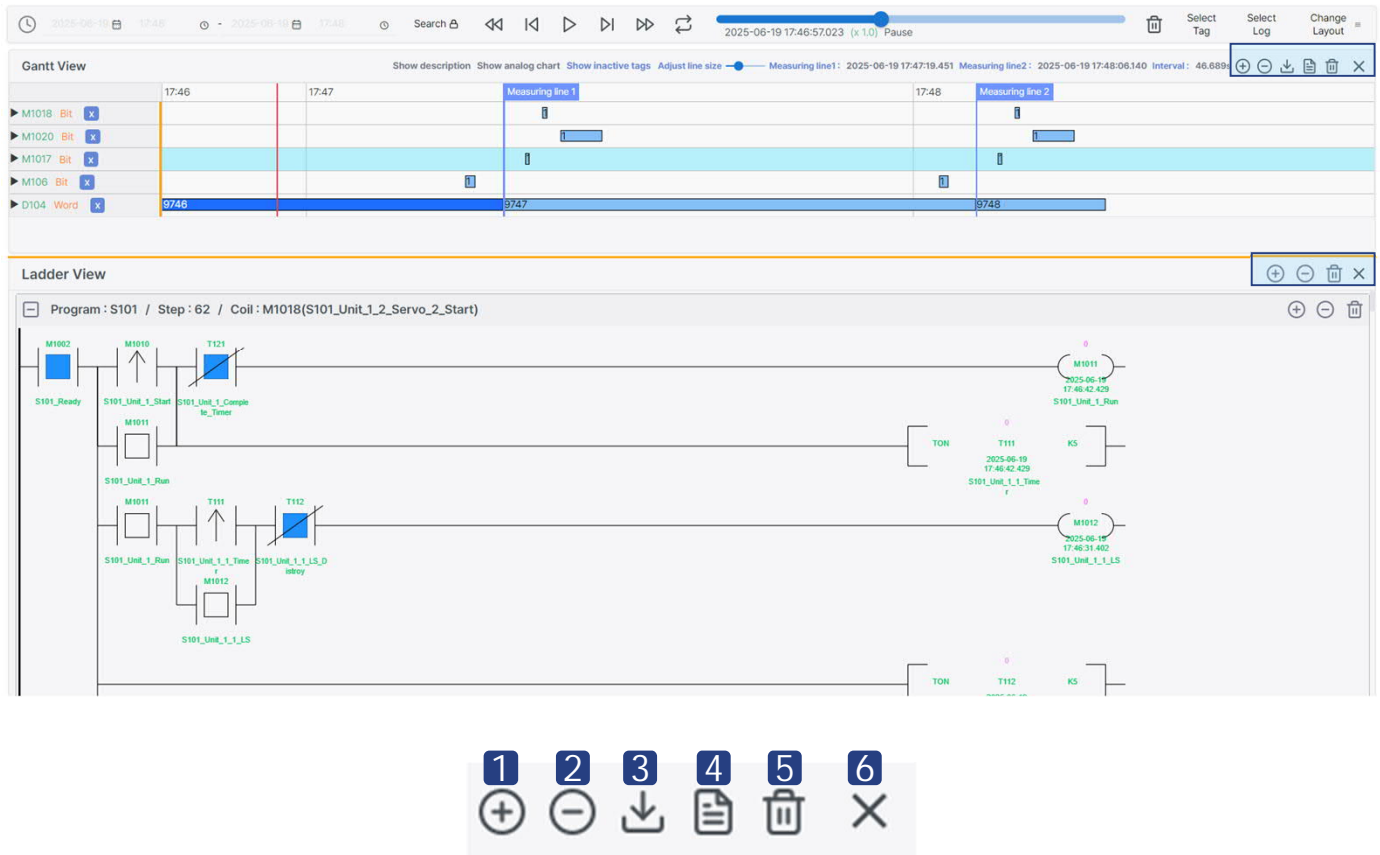
4. Select Log

- Search Single Log : Select a row then click the 'Search' button or double-click the row
- Search Multiple Log : Select multiple rows for analysis then click "Search"

### ● Search Complete



## 1.3 Chart Functions



### 1. Zoom In

Enlarge the chart (Shift + Mouse Scroll Up)

### 2. Zoom Out

Shrink the chart (Shift + Mouse Scroll Down)

### 3. Download

Download the selected tag

### 4. Current Bar Value

Display the current bar value

### 5. Delete Entire Tags

Clear all registered tags from the chart

### 6. Close

Close the chart display

1.3 Chart Functions – Gantt View

● Tag List

Show related tags

Tag Address

Tag Description

Tag Type

Remove tags into the list

Related tag list

Tag Address	Tag Description	Tag Type	Remove tags into the list
D302	Line_M_Production_Count	Word	<input checked="" type="checkbox"/>
D304	Line_M_OK_Count	Word	<input checked="" type="checkbox"/>
D306	Line_M_NG_Count	Word	<input checked="" type="checkbox"/>
D310	Line_M_OK_Count_test	Word	<input checked="" type="checkbox"/>
D308	Line_M_Production_Count_AUX	Word	<input checked="" type="checkbox"/>
M301	Line_M_Restart	Bit	<input checked="" type="checkbox"/>

	16:26	16:27	16:28	16:29	Measuring line	Measuring line 2	16:32	16:33	16:34	16:35			
► D1740 Word <input checked="" type="checkbox"/>	2680	3057	3151	3138	2942	3069	2328	2977	2351	2908	2896	2473	30
▼ M106 Bit <input checked="" type="checkbox"/>													
T11 Timer <input checked="" type="checkbox"/>													
T605 Timer <input checked="" type="checkbox"/>													
T505 Timer <input checked="" type="checkbox"/>													

● Function List

Measuring Line 2

Measuring Line 1

Displays tag description

Displays analog charts for Word-based tags

Option to display Gantt items without logs in the selected period

Adjust the thickness of measurement lines

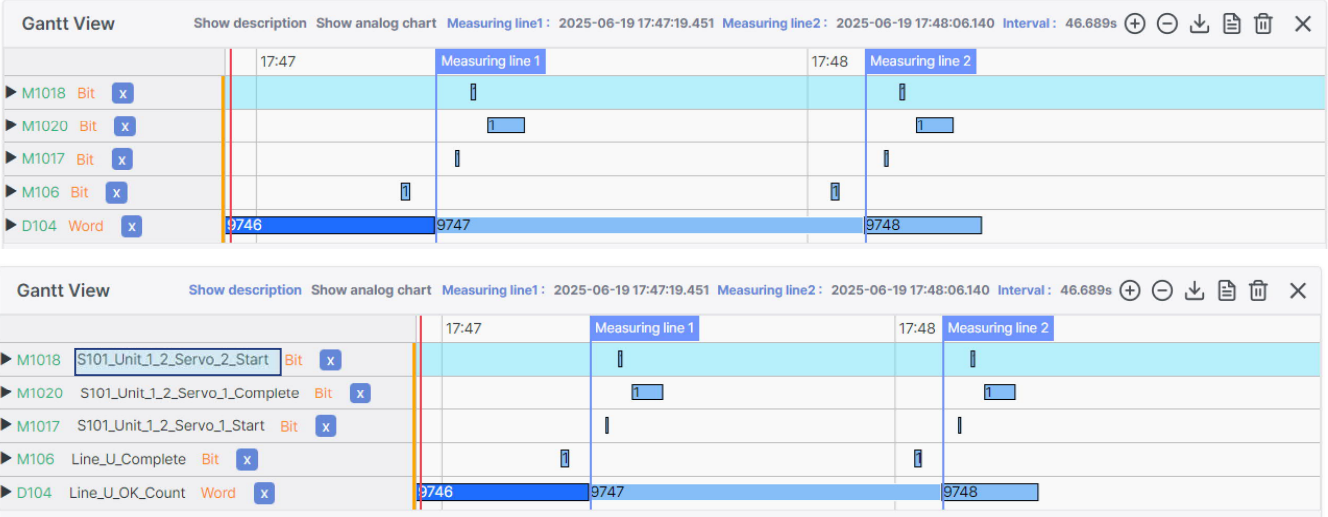
Display time intervals between two measurement lines

Show description Show analog chart Show inactive tags Adjust line size Measuring line1: 0001-01-01 00:00:00.000 Measuring line2: 0001-01-01 00:00:00.000 Interval: 0s

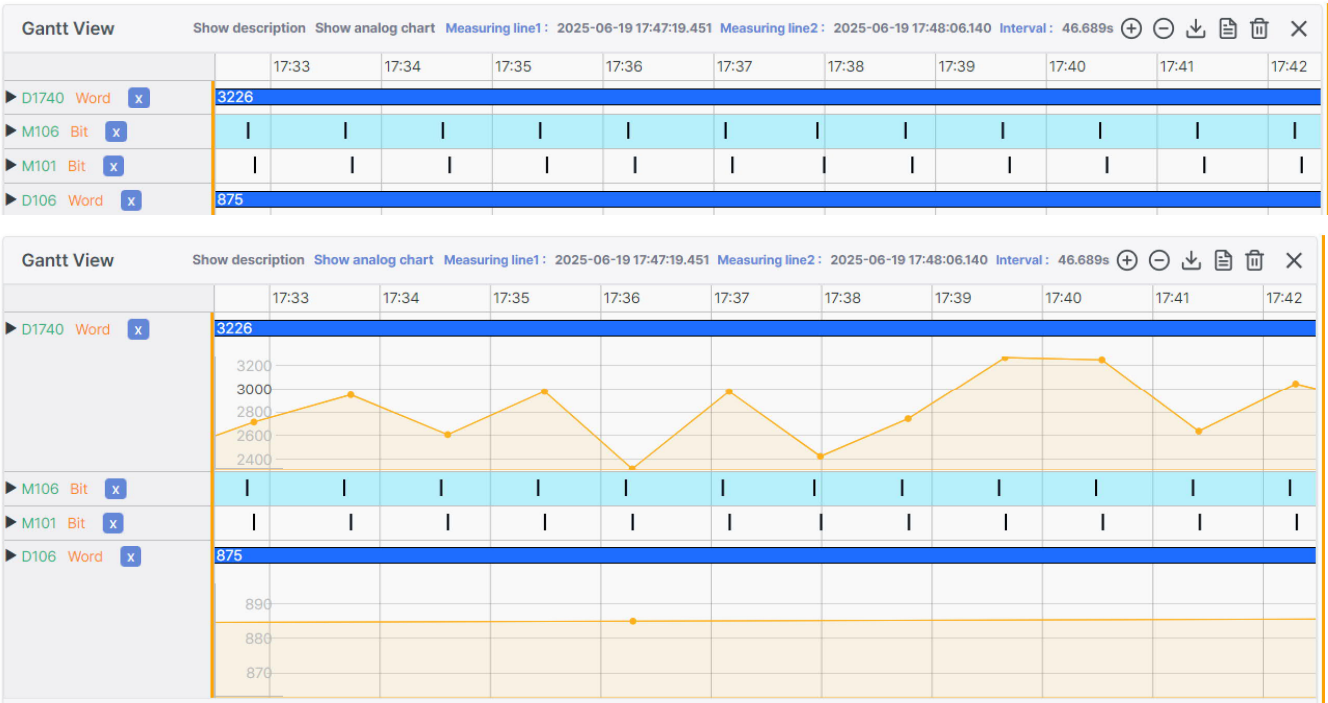
Display time intervals between two measurement lines

1.3 Chart Function – Gantt View

Show description | Display tag descriptions

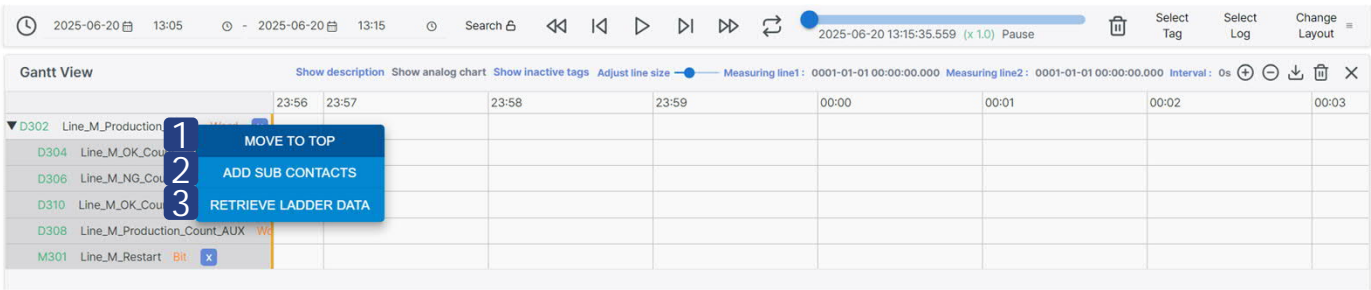


Show analog Chart | Display analog chart for word-based tags





### 1.3 Chart Functions – Gantt View

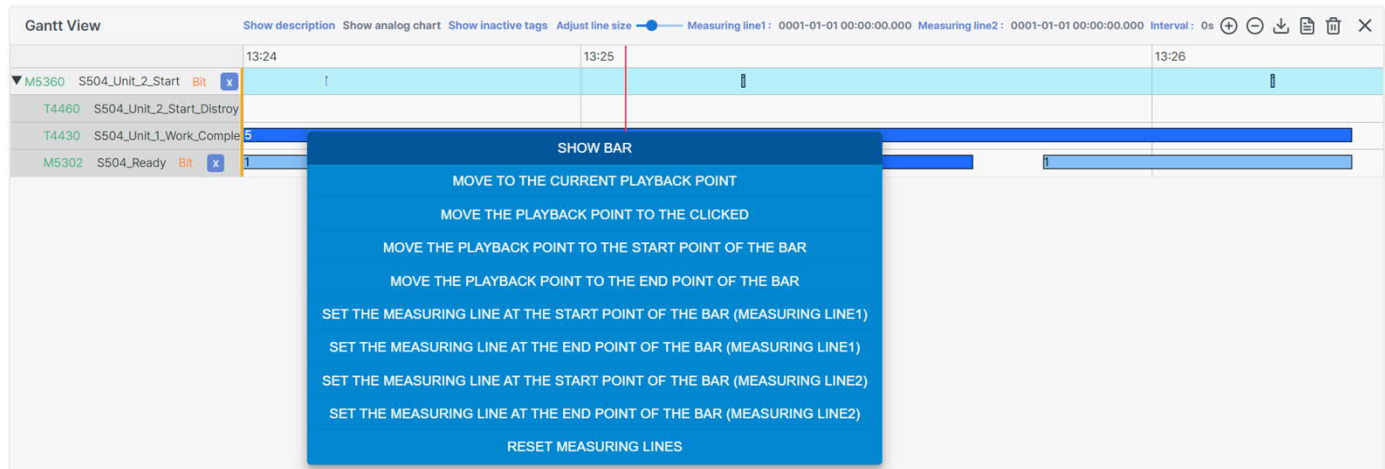


● Right click to view details on Gantt list

- |  |  |
|--|--|
| <p><b>1. Move to top</b></p> <p><b>2. Add related tags</b></p> <p><b>3. View Ladder View</b></p> | <p>Move the selected item to the top of the Gantt chart (can also be dragged with the mouse)</p> <p>Add related tags that are related to the register coil</p> <p>Register the step used by the selected tag to the Ladder View and move to the top of the Ladder View</p> |
|--|--|

## 1.3 Chart Functions – Gantt View

- Double-click the bar of a Bit tag to display measurement lines



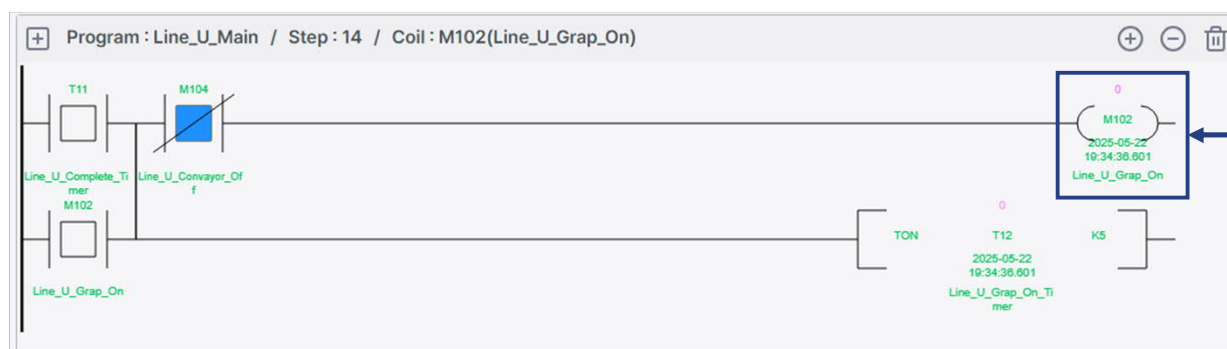
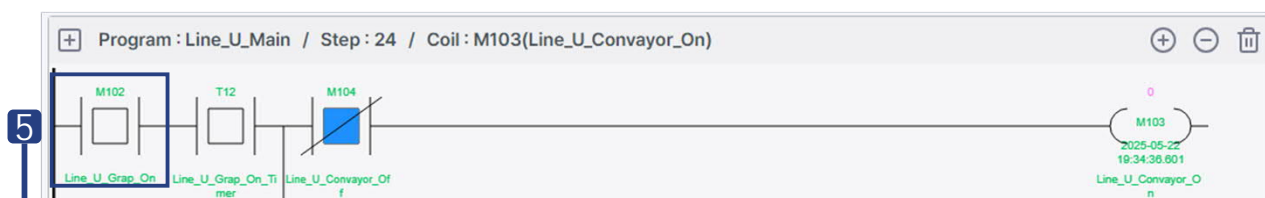
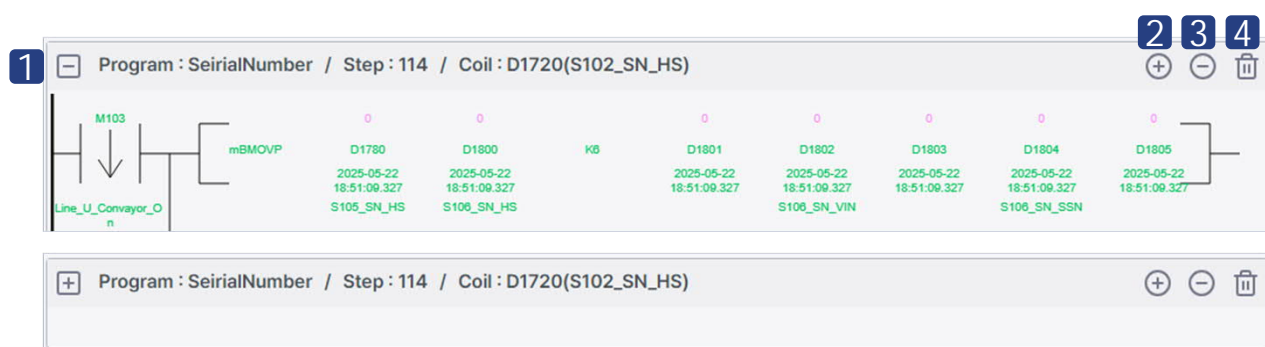
- Right click to view details on Gantt chart

1. Show Bar	Toggle display of the Gantt bar
2. Move to the current playback time	Jump to the current playback time
3. Move to clicked time	Jump to the clicked time
4. Move to start point of bar	Jump to the start time of the selected bar
5. Move to end point of bar	Jump to the end time of the selected bar
6. Set start of the Measuring line 1	Set measurement marker line 1 at the bar's start
7. Set end of the Measuring line 1	Set measurement marker line 1 at the bar's end
8. Set start of the Measuring line 2	Set measurement marker line 2 at the bar's start
9. Set end of the Measuring line 2	Set measurement marker line 2 at the bar's end
10. Reset measuring line	Clear all measurement marker lines

## 1.3 Chart Functions – Ladder View

### ● Ladder View Features

- |                            |   |
|----------------------------|---|
| <b>1. Toggle</b>           | Toggle the ladder diagram for the selected coil                         |
| <b>2. Zoom In</b>          | Enlarge the chart (Shift + Mouse Scroll Up)                             |
| <b>3. Zoom Out</b>         | Shrink the chart (Shift + Mouse Scroll Down)                            |
| <b>4. Close</b>            | Remove the logic  |
| <b>5. Double-Click Tag</b> | Add the Ladder Step item corresponding to the Coil for the selected tag |

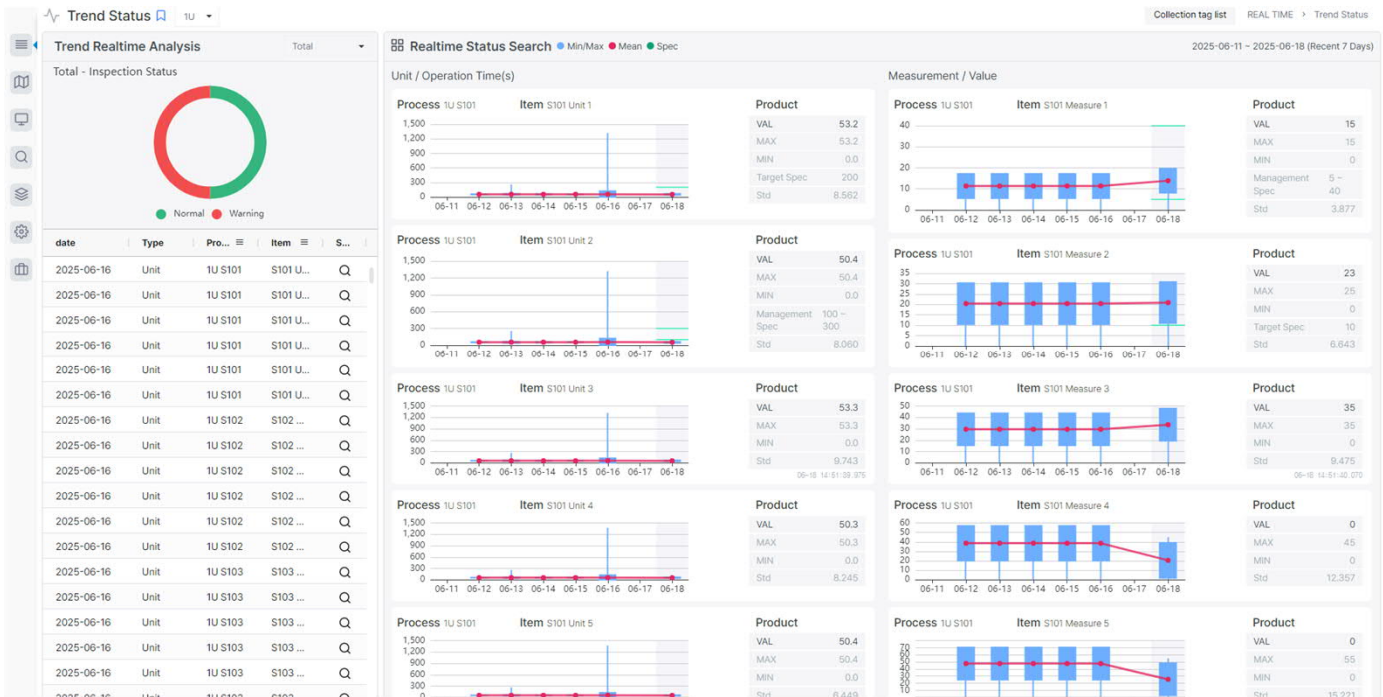


# 6

## Trend

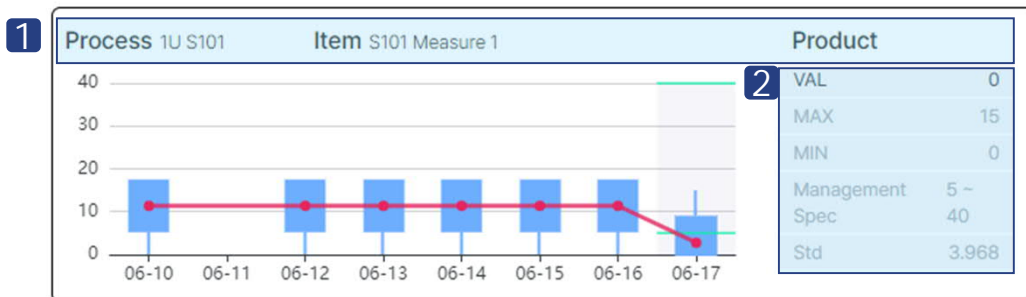
## 1. Trend Status

- Display real-time status of registered actuators or measurement
- Display inspection list for registered assets



### ● Trend Status Card

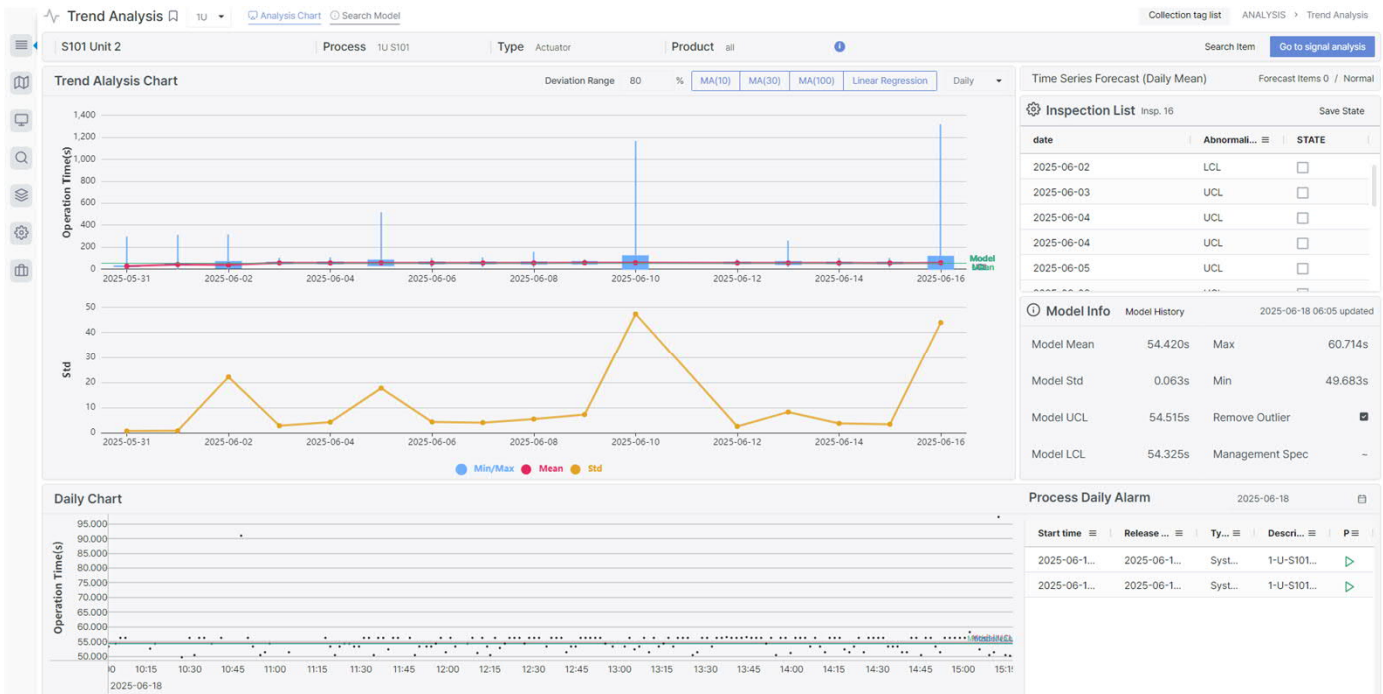
1. Show station name, item name, and product name
2. Display real-time values



- **Daily average** | Display the daily or real-time average of operation time (or measurement values)
- **Min/Max & Confidence level** | Line : Show maximum and minimum operation time  
Bar : Display confidence interval for the data
- **Spec** | Target spec / manage spec value or range

## 2. Trend Analysis

- Check the trends of registered actuators and measurements
- Provide time series-based predictions and model details (Mean, Max., Min., etc.)
- Display average operation time, upper and lower limits of abnormal thresholds



## 2. Trend Analysis

- Search Actuators and Measurement

1. Click "Search" button
2. View the list of registered assets
3. Select the assets by process/type/product category
  - Double click to view the statistical data
  - Trend of the operation time and predicted values will be displayed

The screenshot displays the UDM Platform Trend Analysis interface. The top navigation bar includes 'Trend Analysis', '1U', 'Analysis Chart', and 'Search Model'. The main area is divided into several sections: 'Trend Analysis Chart' on the left, a central search and filter area, and a right sidebar with 'Time Series Forecast (Daily Mean)', 'Inspection List', and 'Model Info'.

Numbered callouts indicate the search process:

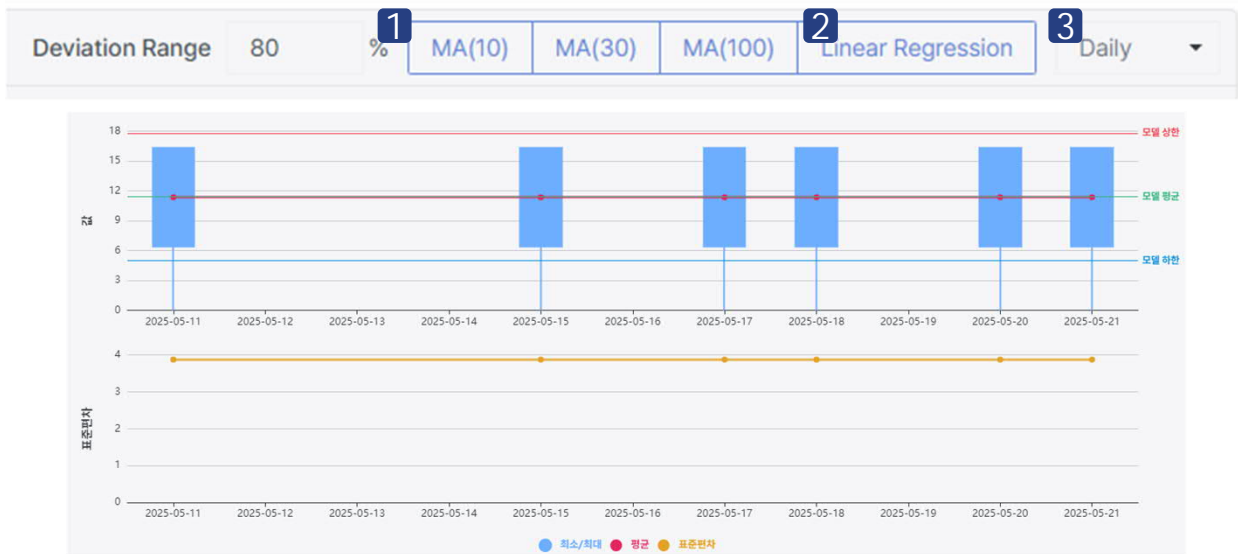
- 1** Search Item: Points to the 'Search Item' button in the top right.
- 2** Search Item: Points to the 'Search Item' dropdown menu.
- 3** Total: Points to the 'Total' dropdown menu.
- 4**: Points to the 'Search Item' dropdown menu.

The 'Search Item' dropdown menu is open, showing a list of assets. The table below represents the data shown in this menu:

Process	Type	Product	Name	Time S...	Inspect...
1U S101	Actuator	all	S101 Unit 1	Normal	0
1U S101	Actuator	all	S101 Unit 2	Normal	0
1U S101	Actuator	all	S101 Unit 3	Normal	0
1U S101	Actuator	all	S101 Unit 4	Normal	0
1U S101	Actuator	all	S101 Unit 5	Normal	0
1U S101	Actuator	all	S101 Unit 6	Normal	0
1U S102	Actuator	all	S102 Unit 1	Normal	0
1U S102	Actuator	all	S102 Unit 2	Normal	0
1U S102	Actuator	all	S102 Unit 3	Normal	0
1U S102	Actuator	all	S102 Unit 4	Normal	0
1U S102	Actuator	all	S102 Unit 5	Normal	0
1U S102	Actuator	all	S102 Unit 6	Normal	0
1U S103	Actuator	all	S103 Unit 1	Normal	0

## 2. Trend Analysis

1. Displays a moving average line based on the daily operating time (or measured value) and standard deviation
2. Displays a linear regression trend line based on the daily operating time (or measured value) and standard deviation
3. Allows users to set the desired period for trend chart analysis







	<b>Upper Limit</b>	Shows upper limit of the asset's operation time (or measure values)
	<b>Model Average</b>	Shows the average value of operation time or measured value
	<b>Lower Limit</b>	Shows lower limit of the asset's operation time (or measure values)
	<b>Daily Average</b>	Shows the daily average of operating time (or measured value)
	<b>Daily Average Prediction</b>	Shows the predicted daily average of operating time (or measured value)
	<b>Max./Min. &amp; Confidence Interval</b>	Line: Shows the maximum and minimum operating time (or measured value) Box: shows the confidence interval for the operating time (or measured value) * Click the box to view the corresponding day's daily chart
	<b>Daily Standard Deviation</b>	Shows the standard deviation of daily operating time (or measured value)



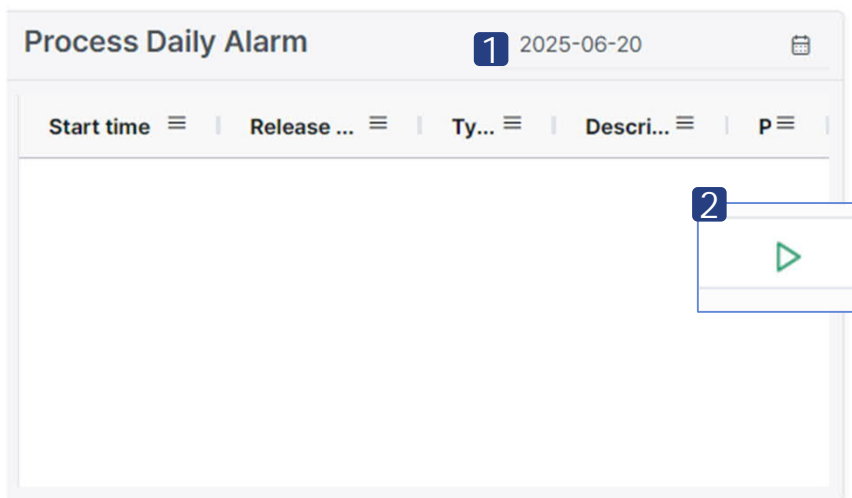
## 2. Trend Analysis

- **Daily Chart:** Displays detailed history of asset's operation time or measured value



	<b>Upper Limit</b>	Shows upper limit of the asset's operation time (or measure values)
	<b>Average</b>	Shows the average value of operation time or measured value
	<b>Lower Limit</b>	Shows lower limit of the asset's operation time (or measure values)
	<b>Operation Time (Measured value)</b>	Displays individual data points of the asset

- View Alarms during operation
  1. Search period and dates
  2. Move to Singal Analysis to trace the root cause of alarms




2. Trend Analysis

• Time Series Prediction

Time Series Forecast (Daily Mean)

Forecast Items 0 / Normal

 Inspection List Insp. 0

Save State

date	Abnormality types	STATE
------	-------------------	-------

Time Series Prediction


Displays predictions for daily values, average, standard deviation. If the value exceeds the upper or lower limit, it is marked as abnormal operation (shown in inspection list)

Inspection List

Highlights data points where the daily average operating time (measured value) exceeds the model's upper or lower threshold. Double-click the date to view that day's detailed chart

Save State

Update the inspection status of the selected alert

<div> Model Info</div>	Model History	2025-06-16 01:16 updated	
Model Mean	54.309s	Max	99.073s
Model Std	0.111s	Min	16.333s
Model UCL	54.476s	Remove Outlier	<input type="checkbox"/>
Model LCL	54.142s	Management Spec	200


Model Info

Displays detailed statistical model information

Model History Button

Opens a pop-up window showing the model history, allowing to reset, generate, modify

Model History



User	Ch...	Cre...	Ch...	Tra...	Mean	Std	Max	Min

## 2. Trend Analysis

### • Model Status

Display detailed information on the statistical model and specifications for each assets

#### Reset Model

Reset the statistical model

#### Regenerate Model

Customize the learning cycle time and modify the model

Trend Analysis

1U

Analysis Chart

Search Model

Model Status

Reset Model

Regenerate Model

Changed...	Process	Type	Name	Log Count	Mean	Std	UCL	LCL	Max	Min	Range			
<input type="checkbox"/>	2025-06-16	1U S101	Actuator	S101 Unit 1	1000	54.309	0.111	54.476	54.142	99.073	16.333	200	-	-
<input type="checkbox"/>	2025-06-18	1U S101	Actuator	S101 Unit 2	974	54.420	0.063	54.515	54.325	60.714	49.683	-	300	100
<input type="checkbox"/>	2025-06-02	1U S101	Actuator	S101 Unit 3	217	55.644	1.226	57.483	53.806	312.811	50.284	-	-	-
<input type="checkbox"/>	2025-06-02	1U S101	Actuator	S101 Unit 4	24	54.542	2.714	58.613	50.472	63.139	50.208	-	-	-
<input type="checkbox"/>	2025-06-02	1U S101	Actuator	S101 Unit 5	24	53.966	1.819	56.695	51.238	56.317	50.404	-	-	-
<input type="checkbox"/>	2025-06-02	1U S101	Actuator	S101 Unit 6	24	53.963	1.829	56.707	51.220	56.327	50.356	-	-	-
<input type="checkbox"/>	2025-06-02	1U S102	Actuator	S102 Unit 1	24	54.539	2.716	58.613	50.466	63.136	50.231	-	-	-
<input type="checkbox"/>	2025-06-02	1U S102	Actuator	S102 Unit 2	24	54.637	2.716	58.712	50.563	63.237	50.299	-	-	-
<input type="checkbox"/>	2025-06-02	1U S102	Actuator	S102 Unit 3	24	54.636	2.717	58.712	50.561	63.269	50.277	-	-	-
<input type="checkbox"/>	2025-06-02	1U S102	Actuator	S102 Unit 4	24	54.660	3.174	59.420	49.899	63.177	50.196	-	-	-
<input type="checkbox"/>	2025-06-02	1U S102	Actuator	S102 Unit 5	24	53.720	2.504	57.475	49.964	59.196	50.365	-	-	-

Model History

User	Process	Type	Name	Change Hist...	Created Date	Changed Date	Training Log ...	Mean	Std	Max	Min		
System	1U S101	Unit	S101 Unit 2	Changed	2025-06-18		974	54.420	0.063	60.714	49.683		
System	1U S101	Unit	S101 Unit 2	Changed	2025-06-18		974	54.406	0.063	60.714	49.683		
System	1U S101	Unit	S101 Unit 1	Changed	2025-06-16		1000	54.309	0.111	99.073	16.333		
System	1U S101	Unit	S101 Unit 1	Reset	2025-06-02	2025-06-16	0	0.000	0.000	0.000	0.000		
System	1U S101	Unit	S101 Unit 1	Changed	2025-06-16		1000	54.310	0.111	99.073	16.333		
System	1U S101	Unit	S101 Unit 1	Changed	2025-06-16		1000	54.310	0.111	99.073	16.333		
System	1U S106	Unit	S106 Unit 6	Changed	2025-06-05		1000	56.083	1.335	1376.520	50.267		
System	1U S106	Measurement	S106 Measure 6	Changed	2025-06-05		1000	56.814	0.571	65.000	0.000		
System	1U S106	Unit	S106 Unit 6	Reset	2025-06-02	2025-06-05	0	0.000	0.000	0.000	0.000		
System	1U S106	Measurement	S106 Measure 6	Reset	2025-06-02	2025-06-05	0	0.000	0.000	0.000	0.000		

### • Model History

Display full history of the statistical model for all assets

# 7

## Pattern

## 1. Pattern Status

- Display process pattern in real-time

The screenshot displays the 'Pattern Status' interface. On the left, a sidebar lists units from 1U S101 to 1U S106. Each unit card shows a progress bar (C/T), product and custom pattern counts, and status buttons (Ready, Auto Start, Work Complete, Abnormal Error, Work Delay, Emergency). The center panel shows the 'Real time process pattern (None)' for unit 1-U-S103\_CP, listing various steps like S103\_Ready, S103\_AutoStart, and S103\_Unit\_1\_Run. The right panel shows the 'Pattern status' table with columns for Pattern Name, Pattern Type, Start time, Duration(sec), Result, and Search.

Patte...	Pattern Type	Start time	Duration(sec)	Result	Search
None	Process	2025-06-18 14:23:59.326	47.21	Ng	<a href="#">Q</a>
None	Process	2025-06-18 14:03:28.542	37.15	Ng	<a href="#">Q</a>
None	Process	2025-06-18 13:40:18.462	42.19	Ng	<a href="#">Q</a>
None	Process	2025-06-18 13:14:04.471	47.22	Ng	<a href="#">Q</a>
None	Process	2025-06-18 13:03:57.049	47.28	Ng	<a href="#">Q</a>
None	Process	2025-06-18 12:50:10.881	47.16	Ng	<a href="#">Q</a>
None	Process	2025-06-18 12:45:13.671	44.22	Ng	<a href="#">Q</a>
None	Process	2025-06-18 12:33:58.484	47.25	Ng	<a href="#">Q</a>
None	Process	2025-06-18 12:23:43.999	42.22	Ng	<a href="#">Q</a>
None	Process	2025-06-18 12:10:40.968	47.26	Ng	<a href="#">Q</a>

- Process Pattern Status
  1. Display station name and product
  2. Display current status (Pass / Fail)
  3. Display current operation status in real-time

This block shows a detailed view of the 1U S103 unit status card. It includes the unit name '1U S103' and the product name 'Tucson'. The C/T (Current/Total) status is shown as 0 / 45s. Below this, the 'Product pattern' is 17 / 2 and the 'Custom pattern' is 0 / 0. At the bottom, there are two rows of status buttons: 'Ready', 'Auto Start', and 'Work Complete' in the top row, and 'Abnormal Error', 'Work Delay', and 'Emergency' in the bottom row.

1. Pattern Status

- Button to select the pattern to display in 1

Real time process pattern

user pattern button

Real time process pattern    Real time custom pattern    1-U-S103\_CP

Real time process pattern (None)    Scroll Lock

1

S103\_Ready  
S103\_AutoStart  
S103\_Unit\_1\_Run  
S103\_Unit\_1\_1\_Location  
S103\_Unit\_1\_2\_Location  
S103\_Unit\_1\_3\_Location  
S103\_Unit\_1\_Return\_Home  
S103\_Unit\_2\_Run  
S103\_Unit\_2\_1\_Location  
S103\_Unit\_2\_2\_Location  
S103\_Unit\_2\_3\_Location  
S103\_Unit\_2\_Return\_Home

4 Before

Pattern status

Patte...	Pattern Type	Start time	Duration(sec)	Result	Search
None	Process	2025-06-18 14:23:59.326	47.21	Ng	2
None	Process	2025-06-18 14:03:28.542	37.15	Ng	
None	Process	2025-06-18 13:40:18.462	42.19	Ng	
None	Process	2025-06-18 13:14:04.471	47.22	Ng	
None	Process	2025-06-18 13:03:57.049	47.28	Ng	Q
None	Process	2025-06-18 12:50:10.881	47.16	Ng	Q
None	Process	2025-06-18 12:45:13.671	44.22	Ng	Q
None	Process	2025-06-18 12:33:58.484	47.25	Ng	Q
None	Process	2025-06-18 12:23:43.999	42.22	Ng	Q
None	Process	2025-06-18 12:10:40.968	47.26	Ng	Q

Alarm status

Type	Start time	Duration(sec)	Address	Description	3
------	------------	---------------	---------	-------------	---

1. Display real-time pattern status
2. Navigate to Pattern Analysis page to view the selected pattern
3. Navigate to Singal Analysis to view the corresponding pattern logic
4. Previout Pattern

2. Pattern Search

- View pattern logs of the selected line
- Show cumulative pattern chart and pattern log grid for the selected period

1

2025-06-20 - 2025-06-20

Search

2

3

Total

1U S101

1U S102

1U S103

1U S104

1U S105

1U S106

Ok

Ng

Pattern Search

2025-06-18 - 2025-06-18

Search

Pattern NG Top5

1U S106-1-U-S10...

1U S105-1-U-S10...

1U S103-1-U-S10...

1U S104-1-U-S10...

1U S101-1-U-S10...

Pattern status

Status by Pattern

Count

1U S106-1-U-S106\_CP

1U S102-None

1U S104-None

1U S103-Kona

1U S104-Tucson

1U S106-Avante

1U S103-SantaFe

1U S104-Sonata

Process

Pattern Type

Pattern name

Start time

Duration(ms)

Result

Se...

1U S101

Process

1-U-S101\_CP

2025-06-18 09:52:00.893

94046

Ng

1U S104

Process

1-U-S104\_CP

2025-06-18 09:52:00.893

94046

Ng

1U S103

Process

1-U-S103\_CP

2025-06-18 09:52:00.893

44212

Ng

1U S105

Process

1-U-S105\_CP

2025-06-18 09:52:00.893

44212

Ng

1U S102

Process

1-U-S102\_CP

2025-06-18 09:52:00.893

93951

Ng

1U S103

Process

None

2025-06-18 09:52:00.893

44212

Ng

1U S106

Process

1-U-S106\_CP

2025-06-18 09:52:00.893

240172

Ng

1U S102

Process

None

2025-06-18 09:52:00.893

93951

Ng

1U S106

Process

None

2025-06-18 09:52:00.893

240172

Ng

1U S101

Process

None

2025-06-18 09:52:00.893

94046

Ng

1U S104

Process

None

2025-06-18 09:52:00.893

94046

Ng

1U S105

Process

Kona

2025-06-18 09:52:00.893

44212

Ng

1U S103

Process

1-U-S103\_CP

2025-06-18 09:58:42.566

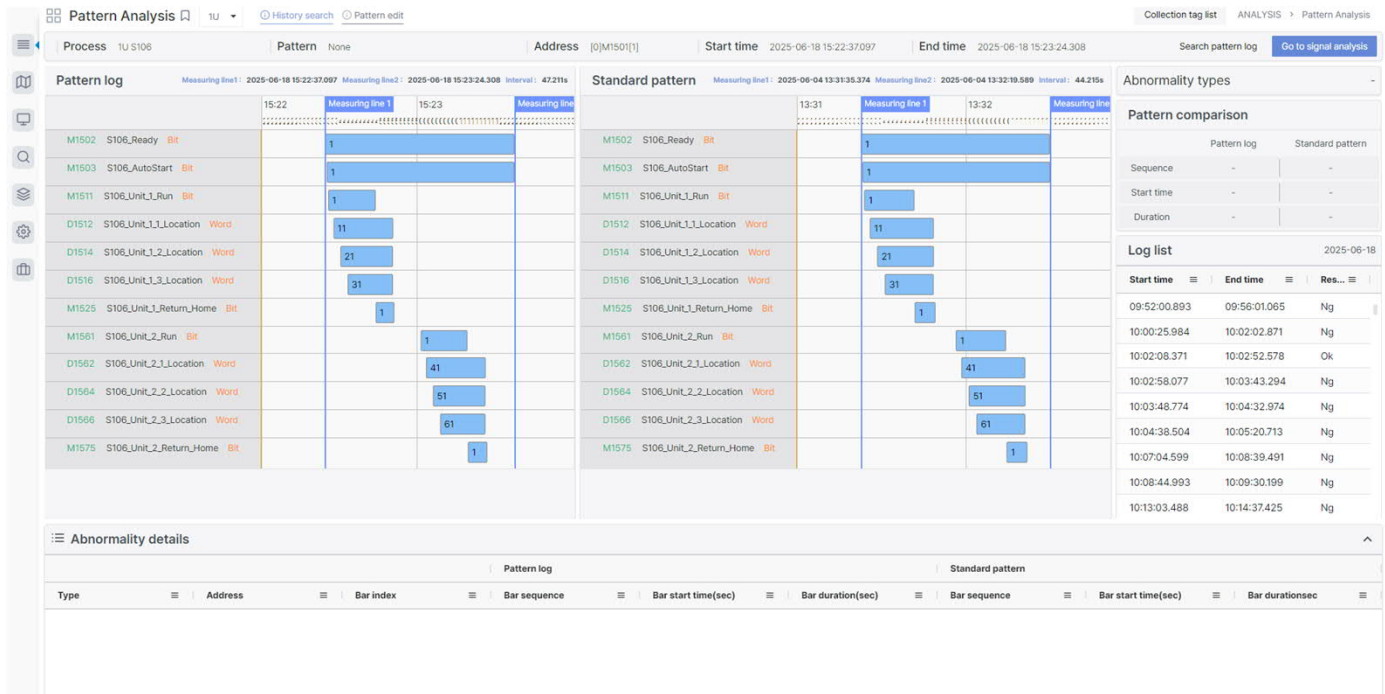
94910

Ng

1. Select period and click the "Search" button
2. Download pattern log
3. Dropdown to select display of all processes or a specific process
4. Navigate to Pattern Analysis to compare the current pattern with standard pattern

### 3. Pattern Analysis

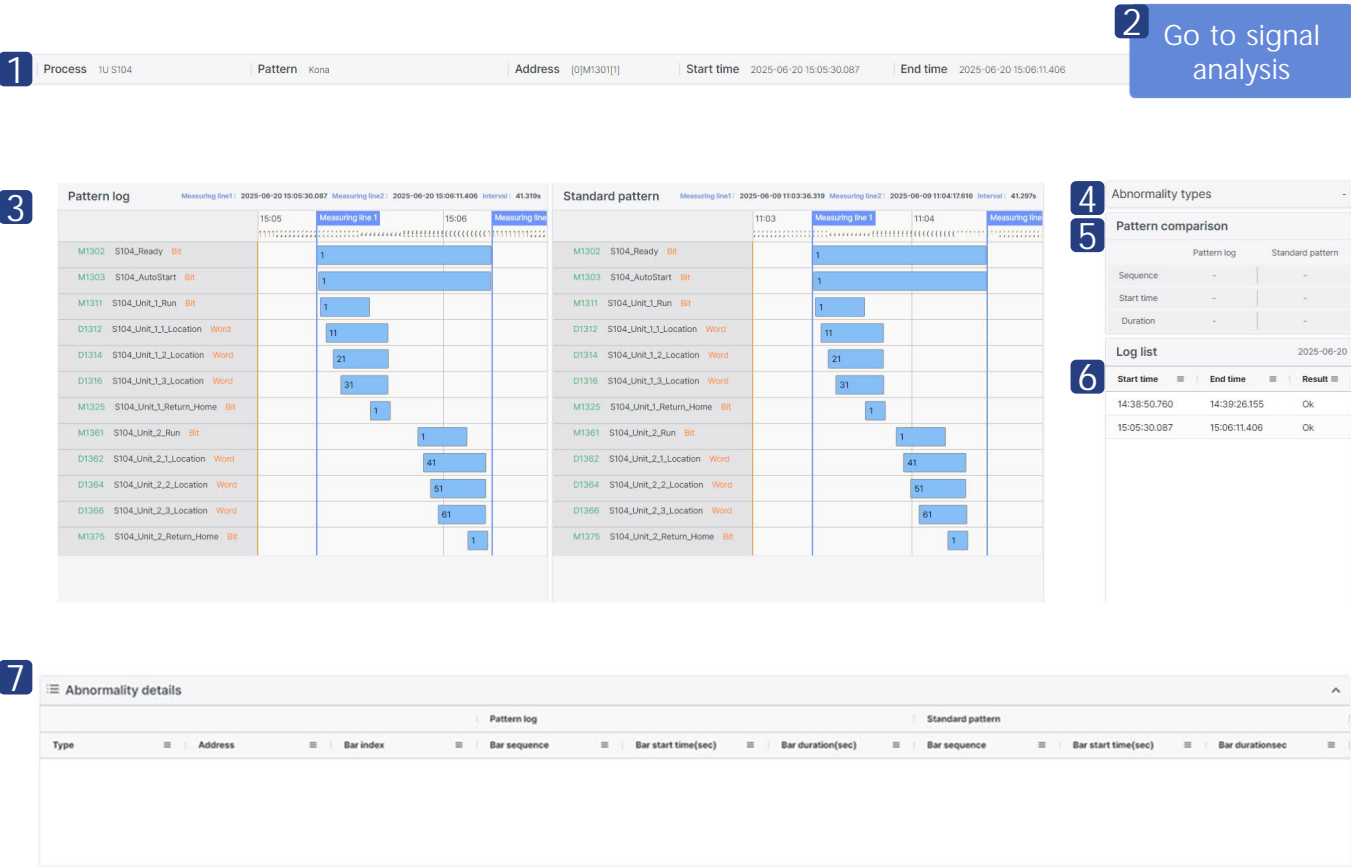
- Search coil and related tags of the registered patterns
- Show the process pattern in Gantt chart
- Show the details of anomalies





3. Pattern Analysis

• Pattern Analysis Screen



1. Pattern Log Info

Displays process, pattern, reference address, and start/end time

2. Signal Analysis Button

Opens the signal analysis screen for the relevant cycle

3. Pattern Log / Reference Pattern Gantt Chart

Visual comparison of actual log patterns and standard reference patterns

4. Abnormality Types

Highlights anomalies detected on the Gantt chart bar

5. Pattern Comparison

Shows detailed information when a Gantt bar is clicked

6. Log List

Lists pattern logs for the same product/user

7. Abnormality Details

Displays a list of logs determined to be anomalies

### 3. Pattern Analysis

- Search pattern logs

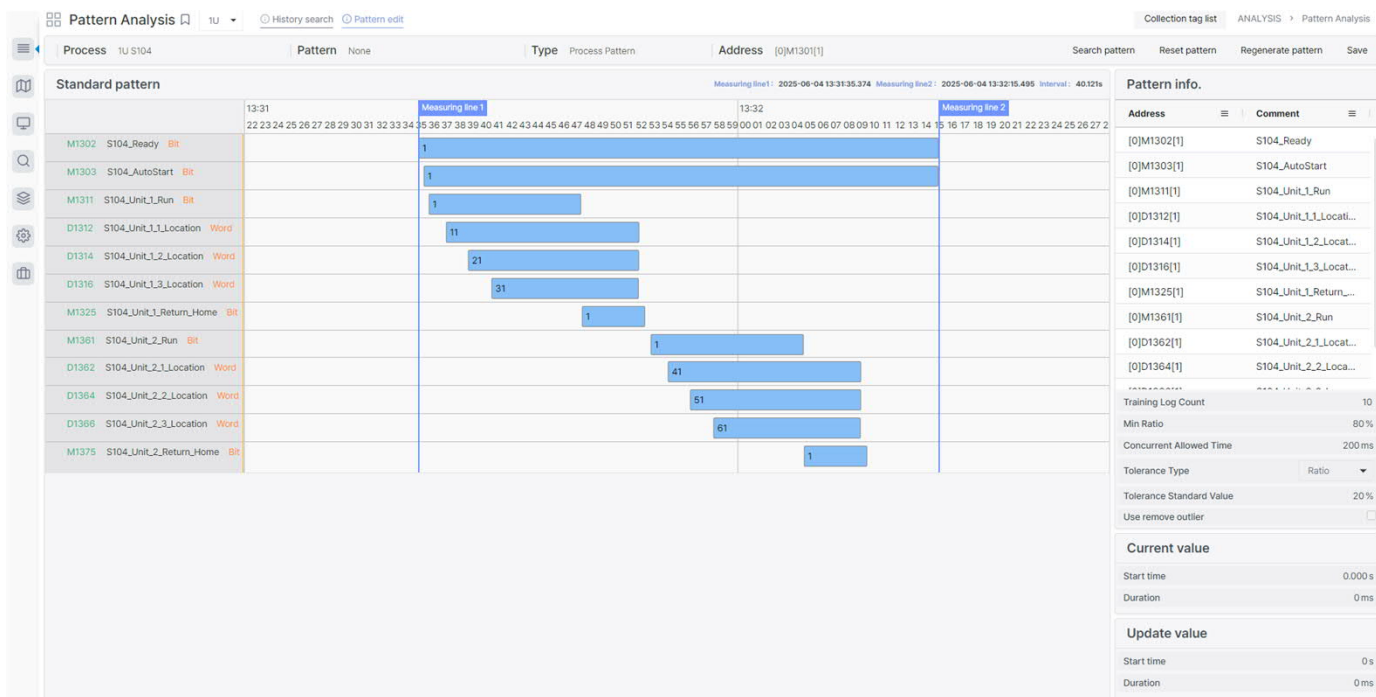
The screenshot displays the 'Pattern Analysis' interface. At the top, there are tabs for 'Pattern Analysis', 'History search', and 'Pattern edit'. Below these are filters for 'Process', 'Pattern', 'Address', 'Start time', and 'End time'. A 'Search pattern log' button is highlighted with a red box and the number 1. The main area shows a 'Pattern log' table with columns for 'Measuring line', 'Start time', 'End time', and 'Interval'. A 'Standard pattern' table is also visible. On the right, there are sections for 'Abnormality types', 'Pattern comparison', and 'Log list'. A search modal is open, showing filter criteria like 'Process', 'Pattern Type', 'Pattern', 'Search period', 'Start time', and 'End time'. The modal has a 'Search' button and a table of results. The results table has columns: 'Pro...', 'Pattern', 'Type', 'Star...', 'Start time', 'End time', and 'Res...'. The results show several rows with process names like '1U S102', '1U S103', '1U S101', '1U S105', '1U S104', '1U S106', and '1U S104'. The 'Search' button is highlighted with a red box and the number 3. The results table is highlighted with a red box and the number 4. The 'Log list' table on the right shows a list of logs with columns 'Start time', 'End time', and 'Res...'. The 'Log list' table is highlighted with a red box and the number 5.

- How to search pattern logs
  1. Click "Search Pattern Log"
  2. Select filter criteria (e.g. process / product / user defined) and set Start Time and End Time
  3. Click "Search" button
  4. Double-click the row to search

### 3. Pattern Analysis

#### • Edit Patterns

- Search standard pattern
- Edit patterns



### 3. Pattern Analysis

The screenshot displays the UDM Platform Pattern Analysis interface. At the top, there is a header bar with the title 'Pattern Analysis' and a dropdown menu for '1U'. Below this, a search bar is labeled 'Search pattern' with a blue box and the number '1' indicating it is the first step. The main area shows a table with columns: Process, Pattern, Type, Address, and Address. A search pattern dialog is open, showing a table with columns: Process, Pattern, Type, Sta..., and Ref... The dialog has a blue box and the number '2' indicating it is the second step. The dialog also has a 'Total' dropdown menu. The main table has a blue box and the number '3' indicating it is the third step. The table shows several rows of data, including '1U S1...' and '1U S1...' with various patterns and addresses.

Search pattern

Process

Pattern Type

Pro...	Pattern	Type	Sta...	Ref...
1U S1...	None	Proce...	[0]M1...	10
1U S1...	None	Proce...	[0]M1...	10
1U S1...	None	Proce...	[0]M1...	10
1U S1...	None	Proce...	[0]M1...	10
1U S1...	None	Proce...	[0]M1...	10
1U S1...	None	Proce...	[0]M1...	10
1U S1...	Tucson	Proce...	[0]M1...	10
1U S1...	Tucson	Proce...	[0]M1...	10
1U S1...	Kona	Proce...	[0]M1...	10
1U S1...	Kona	Proce...	[0]M1...	10
1U S1...	Kona	Proce...	[0]M1...	10

Pattern info.

Address

Comment

Training Log Count

Min Ratio

Concurrent Allowed Time

Tolerance Type

Tolerance Standard Value

Use remove outlier

Current value

Start time

Duration

Update value

Start time

Duration

- How to search Pattern
  1. Click "Search Pattern"
  2. Select Criteria
  3. Double-click the pattern to view

