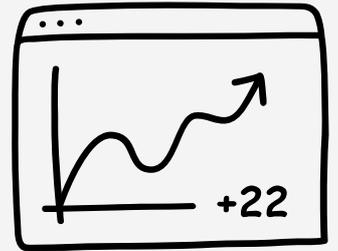
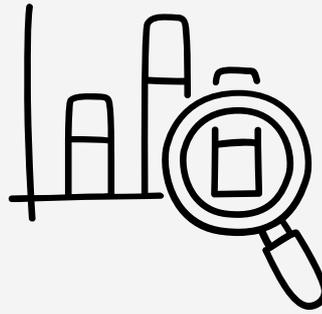
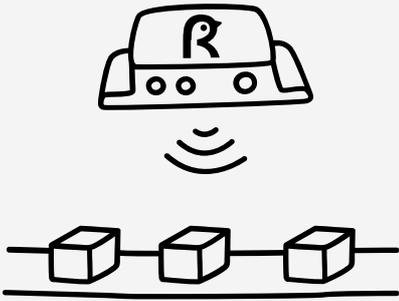


FACTBIRD

USER GUIDE | Preventive Maintenance



OEE

Preventive Maintenance Module

What is Preventive Maintenance module?

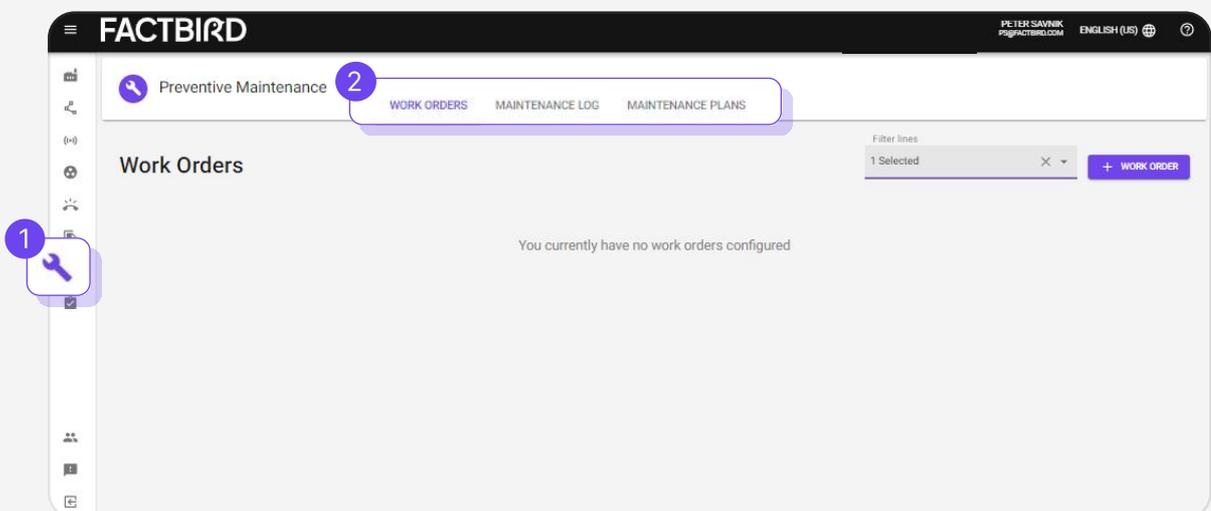
The Factbird Preventive Maintenance module enables dynamic planning and scheduling of recurring maintenance tasks based on production data and calendar time. Setup does not require complex PLC data integration with CMMS or daily manual entry of cycle counts into the system; it utilizes your existing Factbird data.

Accessing Preventive Maintenance

1

Access the Preventive Maintenance module

1. On the menu, click on **"Preventive Maintenance"**.
2. There are three tabs.
 - a. **"MAINTENANCE PLANS"**: You can create your maintenance plans, which will automatically generate work orders based on your specifications. This is for those who plan the maintenance schedule and view how all work orders are executed for each plan.
 - b. **"WORK ORDERS"**: You can see the list of work orders that have been automatically created based on defined maintenance plans. This is for those who perform maintenance work orders.
 - c. **"MAINTENANCE LOGS"**: You can see the list of completed maintenance logs, as well as log spontaneous maintenance activities. You can also add relevant information to each work order, e.g., associating it with assets or stop causes.

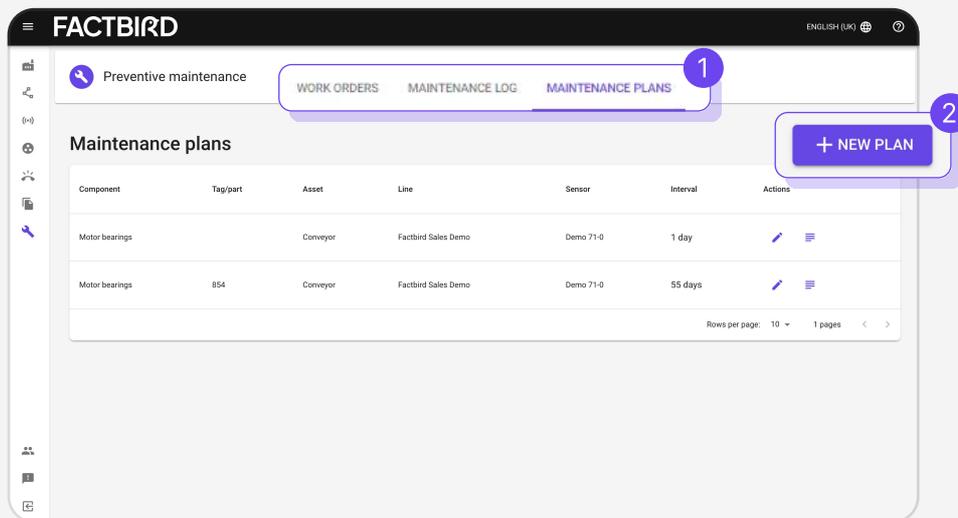


Maintenance plans

1

Create a maintenance plan

1. Click on **"MAINTENANCE PLANS"** tab.
2. Click on **"+ NEW PLAN"** to create a maintenance plan.



2

Fill out the details of the maintenance plan

General section

1. Type in **"Title"** and **"Asset"**, and select a line from **"Line"** drop down menu.
 - To trigger work orders based on production cycles, please select a line whose main sensor counts production output.
2. Select **"Role"** (**"Operator"** or **"Technician"**) to perform the work order.
 - The work orders created based on the maintenance plan for **"Operator"** appear on the **"REGISTER STOPS"** page, while work orders for **"Technician"** do not.
3. Type in **"Tag/part number"** and instructions in text format or include a link in **"Instructions"** field.

USER GUIDE

Preventive Maintenance

Trigger section

Choose whether the work order should be triggered by cycles, calendar time, or elapsed time, and then fill out the corresponding fields.

“Cycles”:

Work orders are issued based on production cycles specified in the **“Target”** field. e.g., A work order will be issued every 50,000 units produced (with 50,000 entered in the **“Target”** field)

- The grace period can be added by entering a number in the **“Overdue”** field. e.g., Entering 500 in **“Overdue”** means that once the cycle is reached, the work order will be issued but will not be marked as overdue until 500 additional units are produced.

“Calendar”:

Work orders are issued based on calendar intervals, such as daily, weekly, monthly, or yearly.

“Elapsed time”:

Work orders are issued based on the time elapsed since the last maintenance was performed.

- The grace period can be added by entering a number in **“Days”** and **“Hours”** in the **“Grace period”** field. e.g., Entering 2 days means that the issued work order will not be marked as overdue until 2 additional days have passed.
- If you choose **“Elapsed time”**, the **“Active on”** option will appear, allowing you to select or deselect days. Deselecting days will exclude them from the elapsed time calculation.

The screenshot shows a 'New plan' form with the following fields and sections:

- General**
 - Title * (text input)
 - Asset (text input)
 - Line * (dropdown menu, selected: Coffee Machine)
 - Tag/part number (text input)
 - Role * (dropdown menu)
- Trigger**
 - Define the trigger that issues the work order: Cycles, Calendar, Elapsed time
 - A work order will be issued when the specified cycle target is met. Once the work order is completed, the counter will be reset.
 - Sensor * (dropdown menu)
 - Starts on: August 14, 2024 at 9:35 AM (calendar icon)
 - Target * (text input)
 - Define the grace period:
 - Overdue (text input) units * (dropdown menu) after the target is met (checkbox)
- Instructions**
 - Add instructions for the job. You can also link to an external document.

A purple 'CREATE' button is located at the bottom right of the form.

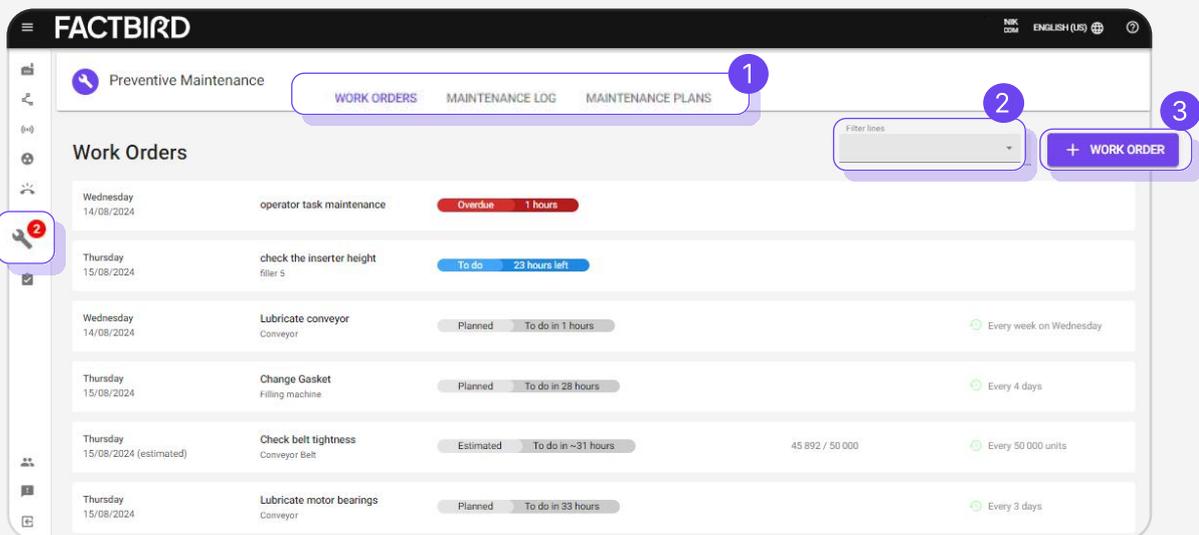
Click **“CREATE”**, and the maintenance plan will appear in the list.

Work orders

1

View work orders

1. Click on the “**WORK ORDERS**” tab. The work orders issued based on the maintenance plans will appear in the list.
2. By filtering, you can view the work orders for specific lines.



Planned

To-do in 6 days

- **Planned** work orders are displayed in grey, showing the number of days remaining until they need to be performed. If the maintenance plan is based on cycles, this date will be estimated based on historical production count data and shown as "**Estimated**".

To-do 3 days left

- **To-do** work orders are displayed in blue, indicating that the work order has reached its due and showing the remaining grace period.

Overdue 2 hours

- **Overdue** work orders are displayed in red, indicating that the grace period has ended and showing how long it has been since it ended.

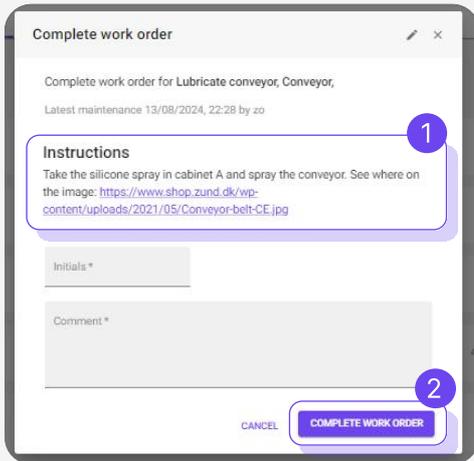
One-time maintenance work orders

3. Apart from recurring maintenance work orders issued automatically based on maintenance plans, you can create one-time maintenance work orders by clicking "**+ WORK ORDER**".

2

Perform and complete work orders

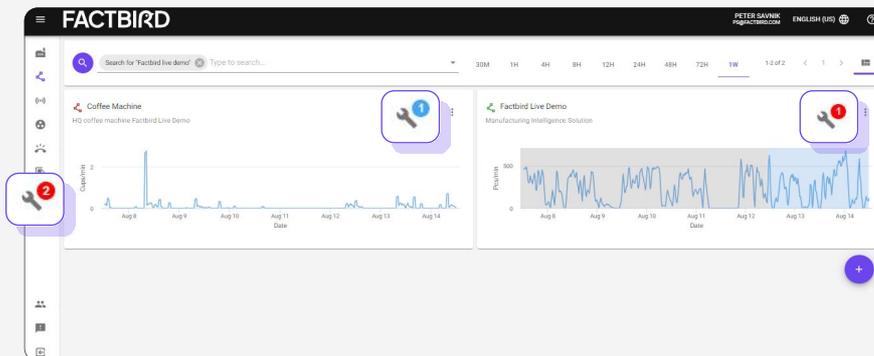
1. Click on one of the work orders to view the instructions on how to perform the maintenance if the maintenance plans include them.
2. Once the work order is completed, fill out the "Initials" and "Comment" fields, then click "COMPLETE WORK ORDER". The work order will then move to the "MAINTENANCE LOGS" tab.



3

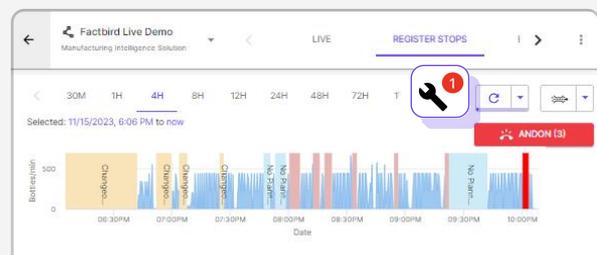
Prompt technicians and operators to perform the required work orders

Work orders that are due or overdue will be shown with a wrench icon.



The above shows that there is 1 work order in To-do status and 1 work order in Overdue status, for a total of 2 work orders that need to be performed.

Work orders for operators appear on the "REGISTER STOPS" page.

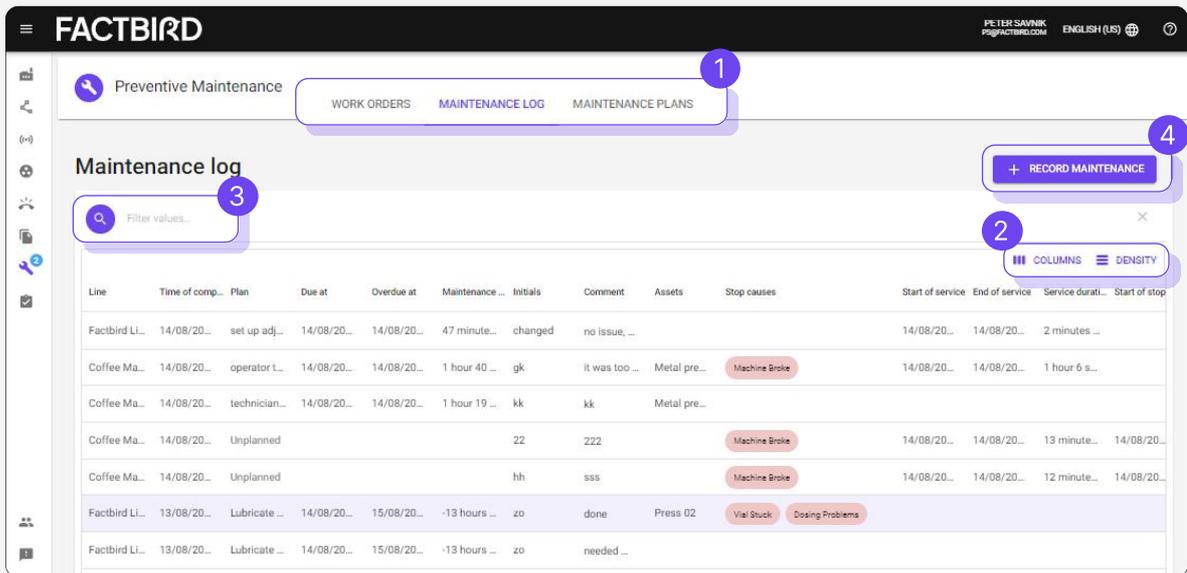


Maintenance log

1

View maintenance log

1. Click on the "**MAINTENANCE LOG**" tab to view the work orders that have been completed.
2. By using "**COLUMNS**" and "**DENSITY**," you can adjust the list view.
3. Selecting a line or lines in "**Filter**" will display the work orders for those lines.



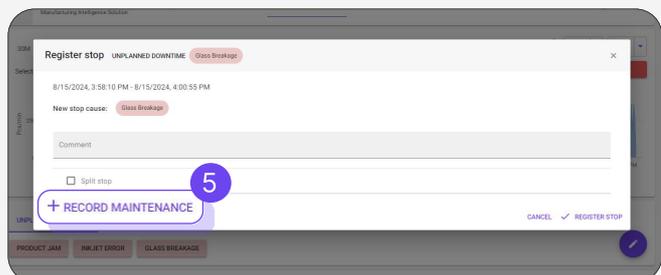
Unplanned maintenance tasks

Create and log spontaneous maintenance tasks

4. Spontaneous work orders (e.g., reactive maintenance work orders) can be created and logged by clicking "**+ RECORD MAINTENANCE**", while preventive maintenance work orders are issued automatically based on the maintenance plans.

Create and log spontaneous maintenance tasks when registering stop causes

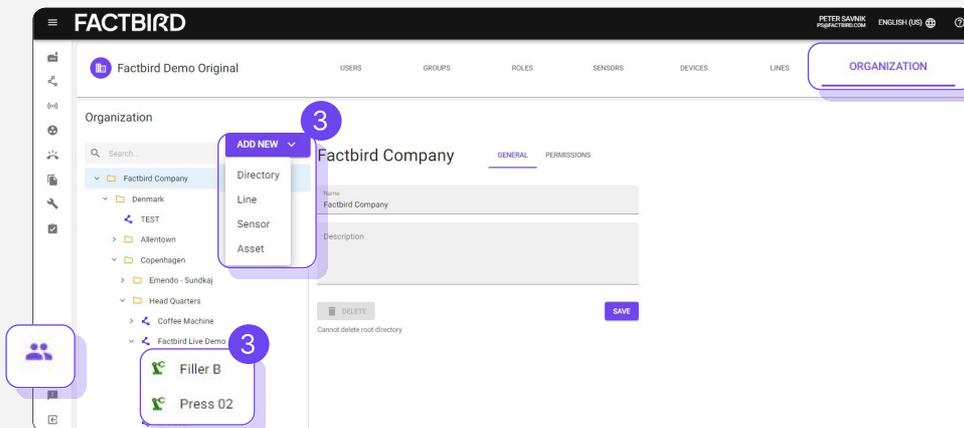
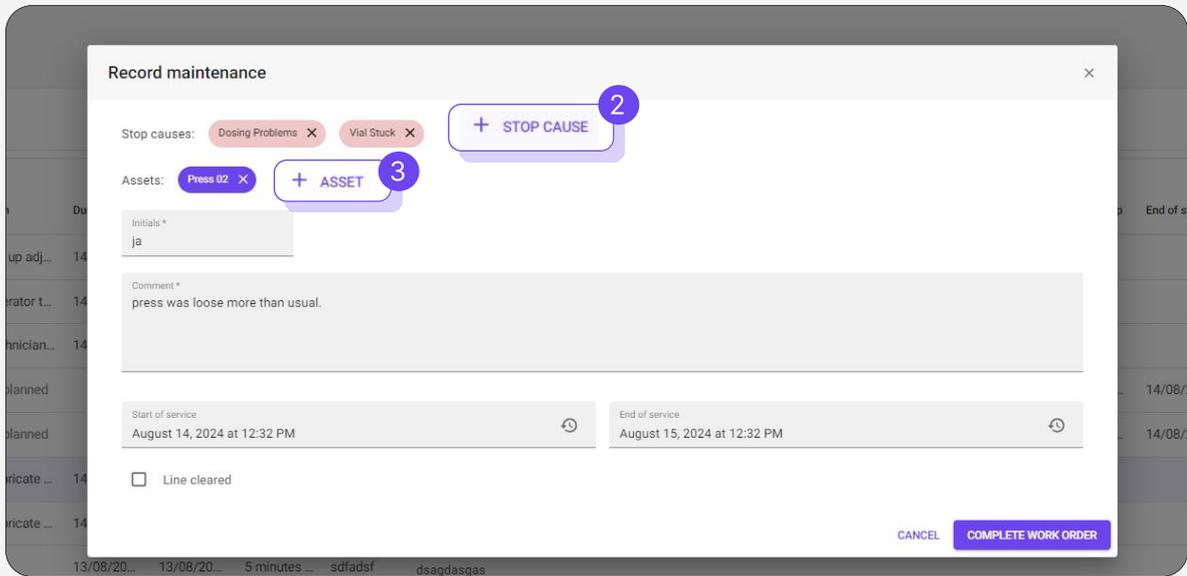
5. When you register a stop cause, you can simultaneously log a maintenance task required for the stop. Clicking "**+ RECORD MAINTENANCE**" on the "Register Stop" screen allows you to record the maintenance task, which will then be logged in the "**MAINTENANCE LOG**".



2

Record the details in the maintenance log, e.g., assets and stop causes

1. Click on a work order in the list to record the details.
2. Click "+ STOP CAUSE" to associate the work order with stop causes.
 - Stop causes need to be created in advance to be displayed.
3. Click "+ ASSET" to associate the work order with assets.
 - Assets need to be created in advance on the "**Organization**" page to be displayed



Assets can be created on the "**ORGANIZATION**" page.

Maintenance history by plans

1

View maintenance history by plan

1. Click on **“MAINTENANCE PLANS”** tab.
2. Click on the right-most icon to view the maintenance history by plan.

