Work orders — one maintenance job, from its request to its frozen cost

Menu: CMMS ▸ Work Orders...

Part 1 — What the function does

What it does. A work order (WO) is the record of one maintenance job on one asset: what was asked for, who did it, what it cost and how it ended. CMMS ▸ Work Orders... is where the computerised maintenance management system (CMMS) of ReliaEn keeps these records. In the window you:

Action	What ReliaEn does
Create an order: Asset, Type, Priority, Description, Assignee, Requested at, External cost, then New work order	Gives it the number WO- and six digits, which never changes, and starts it in Draft
Move it with the state buttons Draft ... Closed	Accepts one lawful step at a time and writes each move to the Status log with the user and the time
Add labour and Issue part on the Labour / parts tab	Stores the hours at the person's hourly rate, and the parts at the store's average cost, as they are at that moment
Closed on a corrective (CM) order	Refuses until the failure event is recorded - failure code, mode, cause, mechanism, detection, downtime, repair type - then opens the Failure event form; records the time to failure (TTF)
Closed accepted	Adds labour, parts and external cost and freezes the total: later changes to rates or prices do not change it

From which data. The CMMS file open in the session: its assets, users with their hourly rates, the store's parts and the failure codes. Nothing in the worksheet.

What a closed corrective order feeds. The failure event updates the asset's reliability record, and its time to failure is the life the reliability analyses of ReliaEn read.

When an engineer uses it. For every maintenance job to be counted: corrective repairs after a failure, preventive jobs, predictive (condition) jobs, modifications and safety jobs.

When not to use it.

Situation	Use instead
A preventive maintenance (PM) job should be raised automatically when it falls due	CMMS ▸ PM Calendar... (chapter 6.4) - its Generate due WOs button creates the orders
A plant user reports a problem that is not yet a job	CMMS ▸ Service Requests... (chapter 6.3)
You want to browse the failure codes offered at closure	CMMS ▸ Failure Codes... (chapter 6.6)
You want to receive, count or reorder spare parts	CMMS ▸ Spares... (chapter 6.7)

Part 2 — The example's input data

Setting. The example plant: site PLANT-A, area AREA-1, cooling-water system SYS-CW with three centrifugal pumps; PUMP-101 has criticality A and a run-hours meter RH-101, installed at a reading of 11,200 hours. The technician u-tech costs 350 baht an hour, the engineer u-eng 500. The store MAIN holds 20 mechanical seals P-SEAL-25 at an average cost of 130.0000 baht. The supervisor u-sup makes every move. At 09:00 on 30 August the operator reports a seal leak on PUMP-101; a contractor's call-out of 1,200.00 baht is already known.

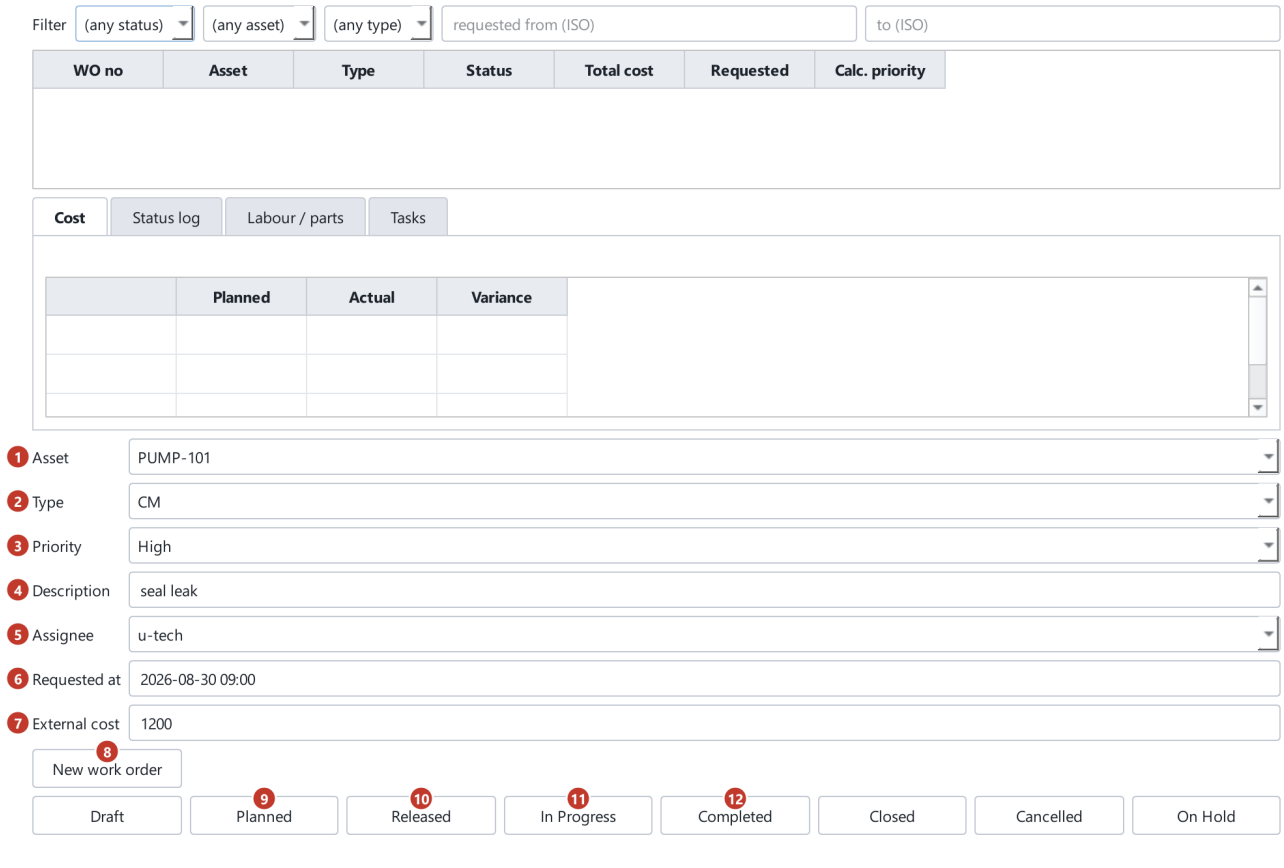
The order	Entry
Asset	PUMP-101
Type	CM
Priority	High
Description	seal leak
Assignee	u-tech
Requested at	2026-08-30 09:00
External cost	1200

The work done	Entry
Labour	u-tech 2.5 hours; u-eng 1.0 hour
Parts	P-SEAL-25, location MAIN, qty 2

The **Failure event** form	Entry
Failure code — class, Failure code — mode	PU, PU-ELP
Failure mode (text)	seal leak
Cause, Mechanism, Detection	wear, wear, operator
Downtime (h)	6.5
Repair type	replace
Failure date	2026-08-31
Meter at failure	12610
Root cause, corrective action	seal wear, replace seal

File in the worked-example zip	**6-Work-Orders/CMMS-Example-Plant.reliaen - the example plant's CMMS file**

The order as Part 3 types it, in the window:

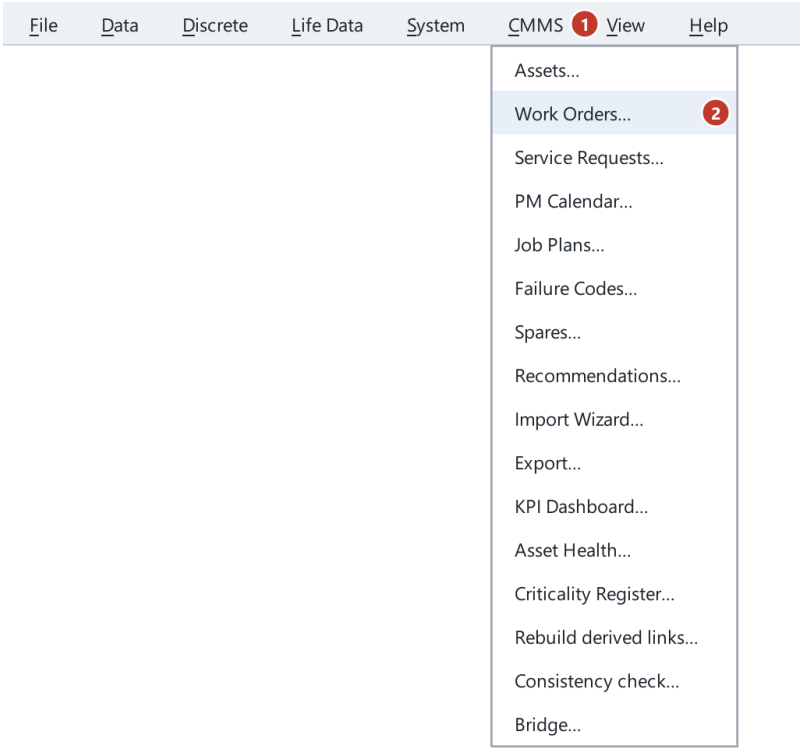


The example's order in the window

- ① to ⑦ Asset PUMP-101, Type CM, Priority High, Description seal leak, Assignee u-tech, Requested at 2026-08-30 09:00, External cost 1200.
- ⑧ New work order; ⑨ to ⑫ the state buttons Planned, Released, In Progress, Completed.

Part 3 — How to use it, step by step

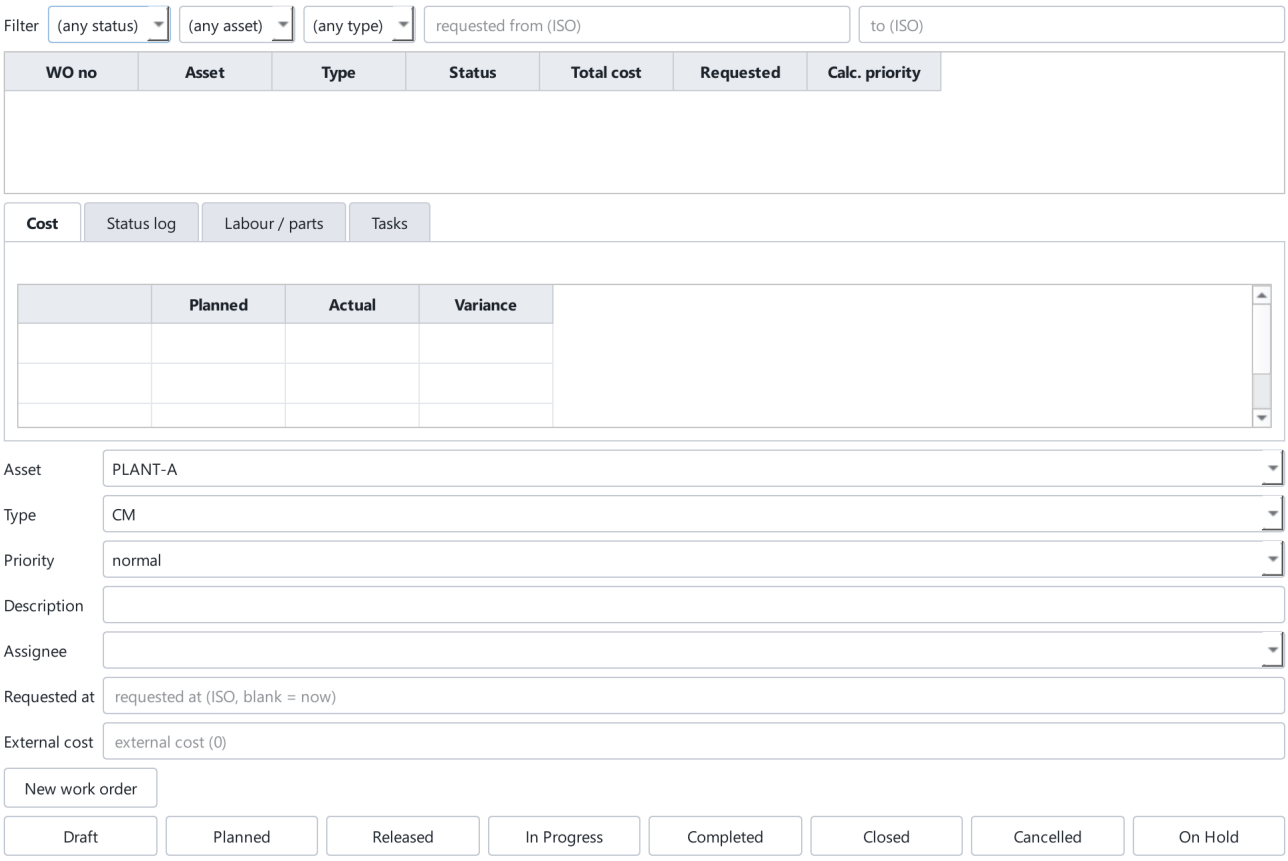
1. **Open the example's CMMS file, then choose CMMS ▸ Work Orders…** in the menu bar. The window CMMS — Work Orders opens.



Step 1 — the menu path

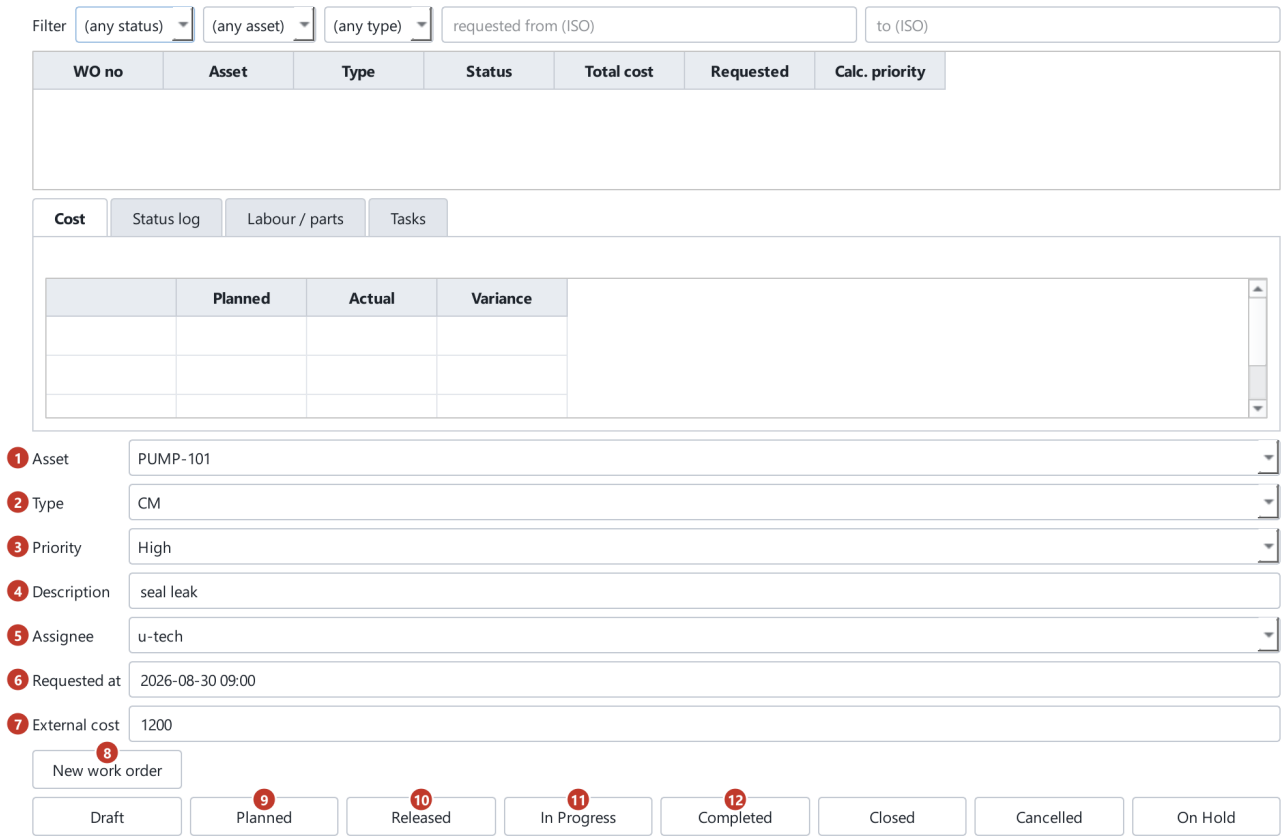
- ① CMMS: the menu.
- ② Work Orders…: the entry to click.

The window as it opens, with no order yet:



Step 1 — the window as it opens

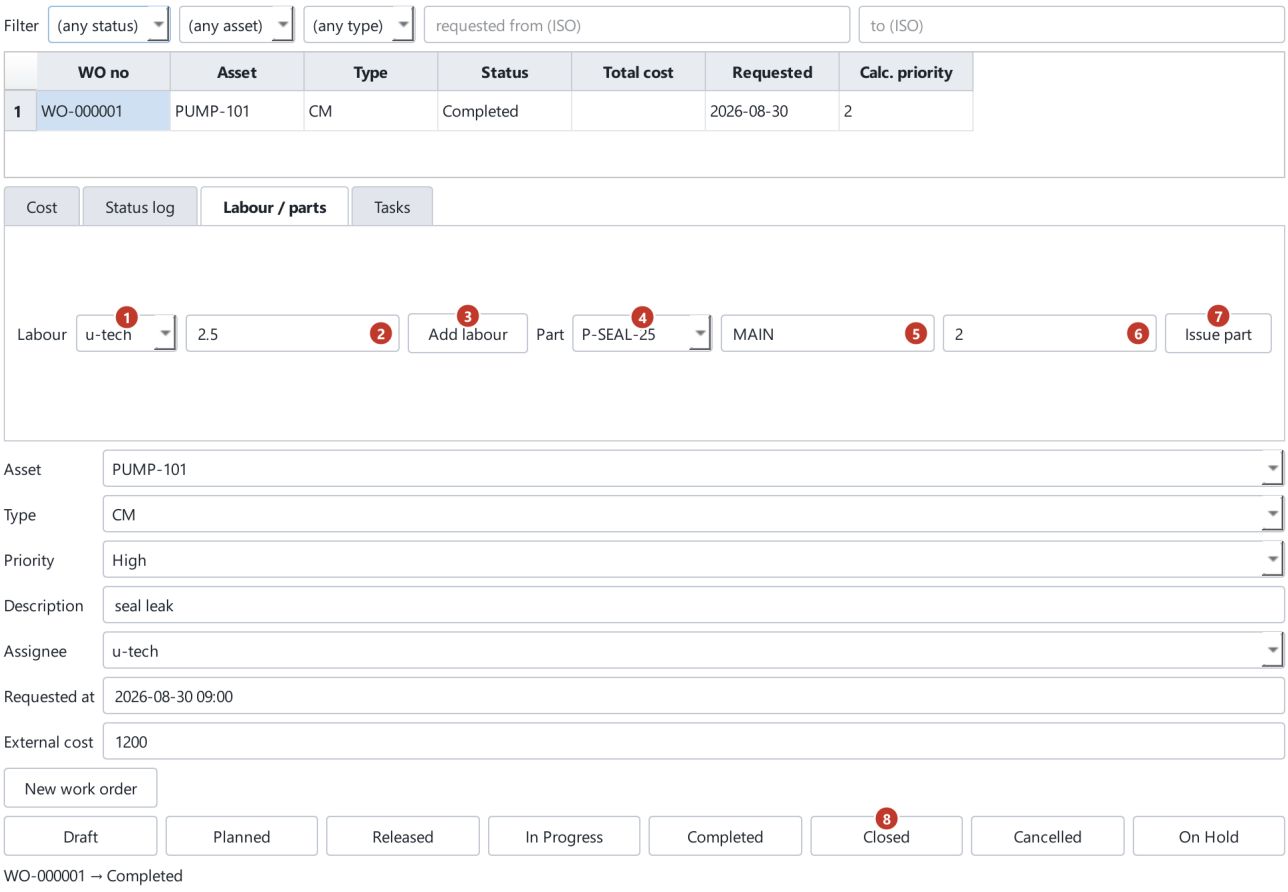
Steps 2 to 13 raise the order and take it to Completed, marked ① to ⑫:



Steps 2 to 13 — the order typed

2. ① **In Asset, choose PUMP-101.**
3. ② **Check that Type reads CM** - corrective maintenance, a repair after a failure.
4. ③ **In Priority, choose High.**
5. ④ **In Description, type seal leak.**
6. ⑤ **In Assignee, choose u-tech.**
7. ⑥ **In Requested at, type 2026-08-30 09:00.** Blank would mean now.
8. ⑦ **In External cost, type 1200** - the contractor's call-out.
9. ⑧ **Click New work order.** The line under the state buttons reads Created WO-000001; the order starts in Draft.
10. ⑨ **Click Planned** (at 10:00 in this example).
11. ⑩ **Click Released** (11:00).
12. ⑪ **Click In Progress** (12:00).
13. ⑫ **Click Completed** (13:00). The work is done; the order is not yet finished.

14. **Open the tab Labour / parts and book the work**, as steps 15 to 22 do:

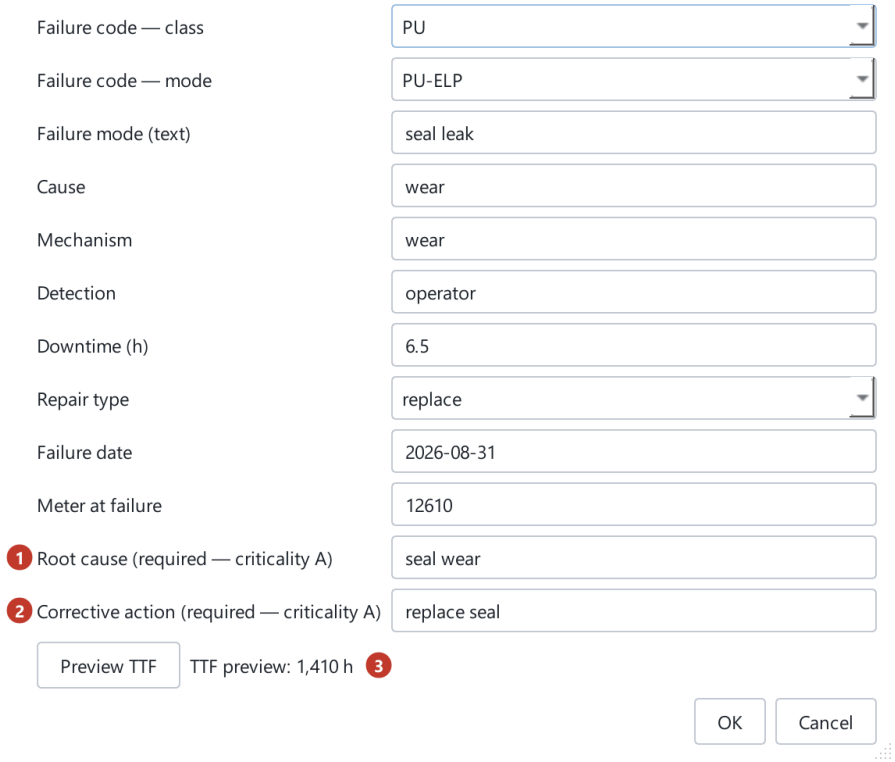


Steps 15 to 22 — the Labour / parts tab

- ① Labour: the person.
- ② The hours box.
- ③ Add labour.
- ④ Part: the spare part.
- ⑤ The store location.
- ⑥ The quantity box qty.
- ⑦ Issue part.
- ⑧ The state button Closed.

15. ① **In Labour, choose u-tech,**
16. ② **type 2.5 in the hours box,**
17. ③ **and click Add labour.** Then choose u-eng, type 1.0 and click Add labour again.
18. ④ **In Part, choose P-SEAL-25.**
19. ⑤ **Check that the location reads MAIN.**
20. ⑥ **In qty, type 2.**
21. ⑦ **Click Issue part.** The cost card now reads Labour 1,375.00, Parts 260.00, External 1,200.00.
22. ⑧ **Click Closed** (14:00). ReliaEn refuses - the order has no failure event yet - and opens the Failure event form (Part 4 shows the refusal).

23. **Fill in the Failure event form** as Part 2's table gives, click Preview TTF, then OK; then **click Closed again.** The order closes.

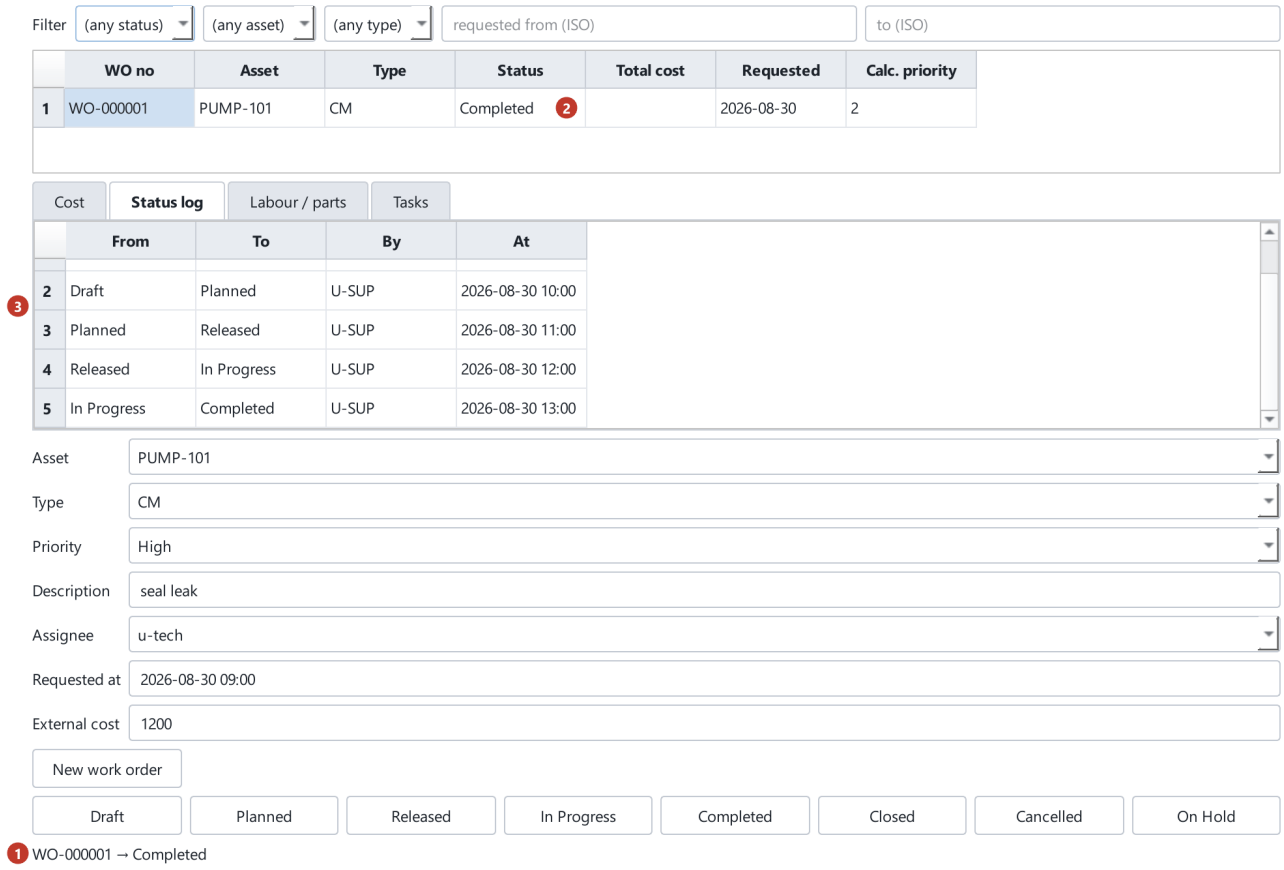


Step 23 — the Failure event form after Preview TTF

- ① Root cause (required — criticality A): PUMP-101 has criticality A, so the root cause is required.
- ② Corrective action (required — criticality A): required for the same reason.
- ③ TTF preview: 1,410 h: the time to failure, from the pump's install meter reading 11,200 h to the meter at failure 12,610 h.

Part 4 — The result, picture by picture

After step 13, on the Status log tab:



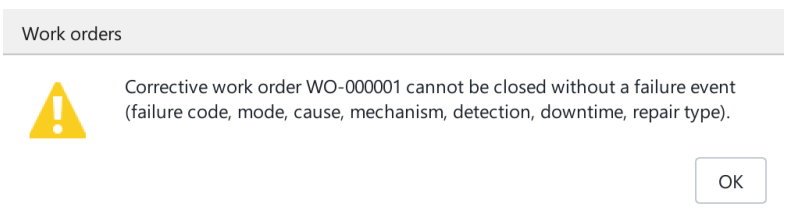
The window after Completed

- ① The line under the state buttons: WO-000001 → Completed. Before it the line read, in turn, Created WO-000001, WO-000001 → Planned, WO-000001 → Released and WO-000001 → In Progress.
- ② The list row's Status: Completed; Total cost is still empty.
- ③ The Status log, scrolled to its end: five rows in all, every one by U-SUP - New → Draft at 09:00 (the first row, above what the picture shows), Draft → Planned at 10:00, Planned → Released at 11:00, Released → In Progress at 12:00, In Progress → Completed at 13:00.

The log writes who pressed and when. The pictures show the example's user U-SUP and its times; on your computer the By column shows your own user (local when the file has no sign-in) and the moment of each press.

What to decide. Completed means the work is done, not that the order is finished: book the labour and the parts and record the failure before Closed.

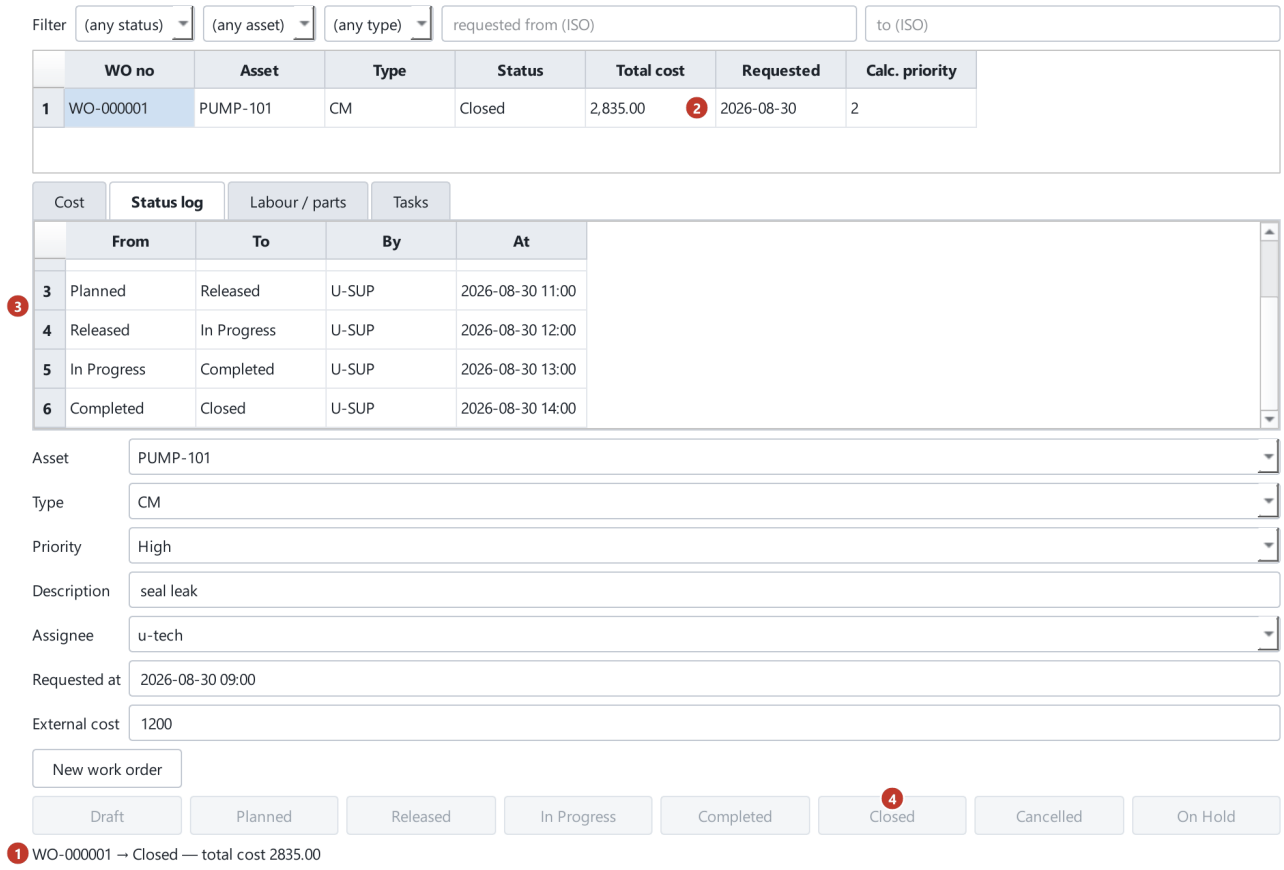
The first Closed of step 22 is refused:



The refusal on the first Closed

The box Work orders reads Corrective work order WO-000001 cannot be closed without a failure event (failure code, mode, cause, mechanism, detection, downtime, repair type). Nothing is closed; when the box is closed, the Failure event form opens.

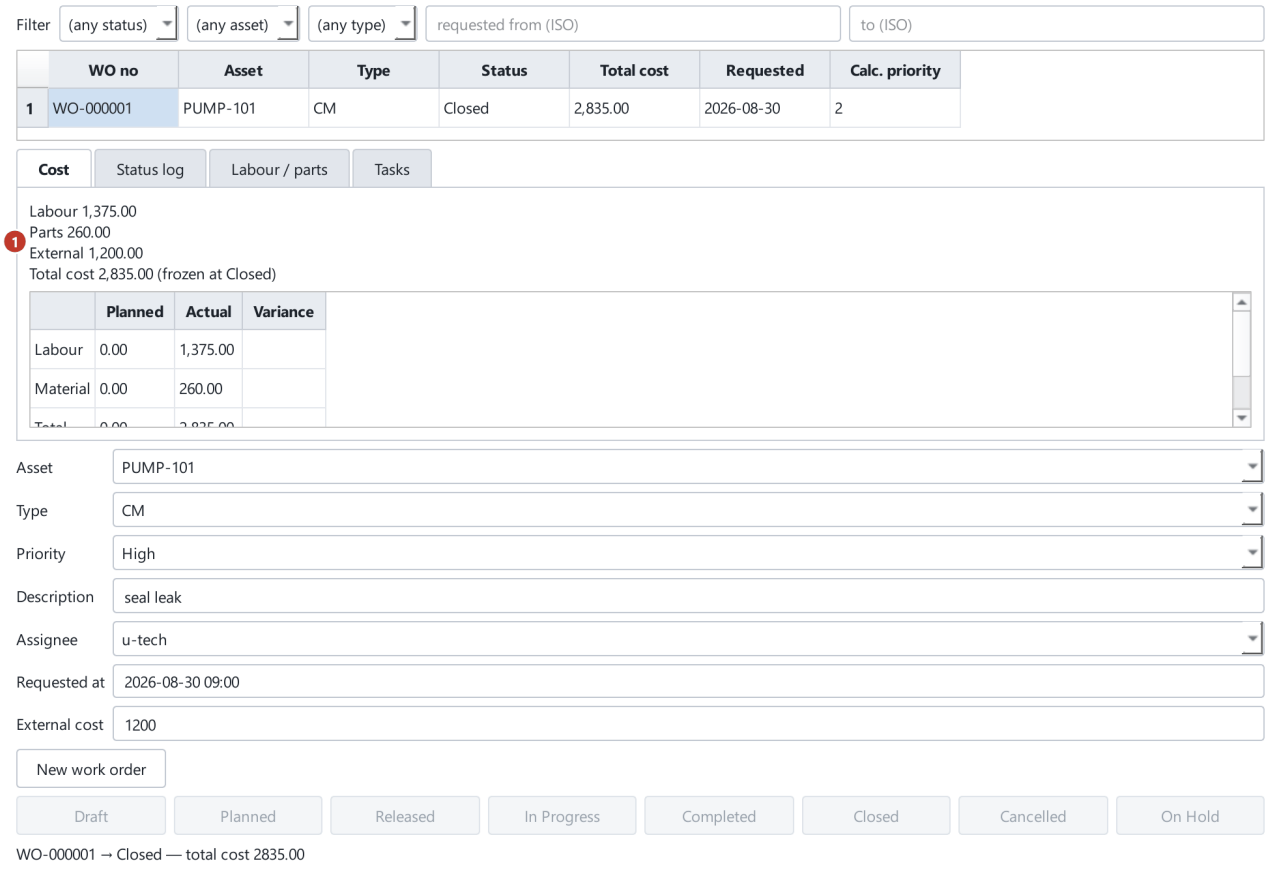
After the second Closed of step 23, on the Status log tab:



The window after the second Closed

- ① The line under the state buttons: WO-000001 → Closed — total cost 2835.00.
- ② The list row's Total cost: 2,835.00.
- ③ The Status log, scrolled to its end: a sixth row, Completed → Closed at 14:00, by U-SUP.
- ④ The state buttons, Closed among them: all disabled. A closed order cannot move again.

The Cost tab after closing:



The Cost tab after closing

- ① The cost card: Labour 1,375.00, Parts 260.00, External 1,200.00, Total cost 2,835.00 (frozen at Closed).

What to decide. 2,835.00 is what this seal leak cost, and the failure is on record with its 1,410 hours. The total is frozen at Closed: check the card before that press, not after.

Part 5 — How to interpret the results

What the job cost. 2,835.00 baht, frozen at Closed: labour 1,375.00 (u-tech 2.5 h × 350 + u-eng 1.0 h × 500), parts 260.00 (2 seals × 130.00) and the contractor's 1,200.00. A later change to a rate or a part price leaves this total as it is.

What the failure adds to the record. A time to failure of 1,410 hours: PUMP-101 ran from 11,200 hours at installation to 12,610 hours at the failure. That life goes to the pump's reliability record. A wrong Meter at failure gives a wrong life, so check the Preview TTF line before OK.

Why the first Closed was refused. A corrective order closes only with its failure event, because the event is what the reliability analyses read. PUMP-101 has criticality A, so the root cause and the corrective action are required as well.

Who did what, and when. The Status log holds six rows, New → Draft to Completed → Closed, each with its user and time. ReliaEn writes them; no one types them, so the log is the order's audit trail.

What Completed is not. Completed means the work is done; the order is finished only at Closed. Book the labour and the parts and record the failure between the two.