

# S02 — Tasks & Work Orders (T&WO;) — Screen Spec (MVP)

Status: Draft (locked decisions captured; refine during build)

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Related screens: S01 Faults & Defects (F&D;), S03 WO Reports, Inventory & Requisitions, E&M; (Equipment & Machinery), Daily Log, VOS

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## 1) Purpose

Provide the engineer a single place to **review**, **open**, **execute**, and **track**:

- **Work Orders (WO):** meaningful work (repair/replace/service/upgrade/modification; planned or unplanned).
- **Tasks:** lightweight checks/inspections/exercising equipment/compliance actions.

Engineer-first intent:

- **Fast triage** (convert requests into the right thing).
- **Execution-first** (do the work without admin friction).
- **Fail-safe reporting** (work can be “Closed” but cannot leave the active list until the report is submitted).

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## 2) Inputs (what the user captures here)

### A) Work Order (WO) — minimum fields (MVP required)

- Title
- Source (Manual / From F&D; / From PM)
- Linked defect (optional) and/or linked equipment (optional but strongly prompted)
- Location
- Priority (Critical / High / Medium / Low)
- Planned vs Unplanned
- Nature of work (Repair / Replace / Service / Upgrade / Remove / Modify / Investigate)
- Primary WO status (see Rules)
- Secondary operational state (optional) (In progress / Waiting parts / Waiting technician / Delayed)

## B) WO Review fields (MVP required when converting request → open)

- Work summary / scope (short)
- Assigned-to (free text for MVP; role-based assignments later)
- Risks + mitigation (short, optional unless Critical)
- Tag-out required? (toggle)
- Permit required? (toggle)

## C) WO Execution capture (MVP)

- Work notes (running log)
- Photos/attachments (optional)
- Parts consumed (optional integration to Inventory)
- Time: start/stop or manual hours entry (simple)
- Close work: “Work complete” action

## D) Tasks (MVP)

- Title
- Linked equipment (optional)
- Frequency / due date (if from PM) or ad-hoc completion
- Completion notes + optional photo
- Completed by + timestamp

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## 3) Outputs (what it creates/updates elsewhere)

- PM Matrix can generate a **PM maintenance item** that appears in S02 and is classified at review time (WO vs Task).

## E) VOS counters (MVP)

- When a WO is **opened**, increment the **VOS “Open WOs”** counter.
- When a WO is moved to **Closed (Report Pending)**, decrement **Open WOs** and increment **VOS “Closed — Report Pending”**.
- When the WO report is submitted in S03 and the WO moves to **Reports & History**, decrement **Closed — Report Pending**.

## A) From WO Requests → WO Open

- Converts a **WO Requested** item into a **WO Open** record.

- Keeps source trace:
  - F&D-origin; keeps the same source ID (e.g., FD-000123 → WO created from that request).
  - PM-origin keeps PM reference.
  - Manual creates WO-xxxxxx.

## B) Safety / tag-out / permit outputs

- Tag-out toggle creates a **Tag-out entry** that:
  - Appears in Notifications + VOS indicators
  - Links back to this WO
- Permit toggle creates a **Permit stub** (share/print/sign later)

## C) Inventory outputs (MVP-light)

- Parts listed/used can:
    - Create a **Requisition draft suggestion** if missing/low stock
    - Record **consumption** when parts are used (inventory deduction)
- \*(Full “reserve parts” behavior can be added later; MVP focuses on “parts required” + “parts consumed”).\*

## D) Reporting flow outputs

- When WO is marked **Closed (Report Pending)**:
  - It remains visible in S02 list until S03 report submitted.
- After S03 report submission:
  - WO moves to **Reports & History** (long-term storage)
  - Removed from active S02 list

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# 4) Tabs / sections / subviews (layout)

## A) Top-level tabs

- **WO Requests** (inbox)
- **Open WOs**
- **Closed — Report Pending**

- **Deferred**
- **Tasks**

## **B) List view (all tabs)**

Columns / row chips:

- Priority
- Title
- Equipment / location
- Age / due (if applicable)
- Source (F&D; / PM / Manual)
- Secondary operational state (if set)
- Quick actions (Open, Start, Close, Defer, Request parts)

Filters:

- Department (optional for MVP), Priority, Source, Equipment, Status, “My items”

## **C) WO Detail view**

Sections:

1. Snapshot (title, priority, source, linked defect/equipment, location)
2. Review panel (scope, assigned-to, risk/permit/tag-out, parts required)
3. Execution panel (notes, photos, time, parts consumed)
4. Links (F&D; record, E&M;, Inventory, Contractors/Suppliers, S03 report)

## **D) Task Detail view**

Minimal:

- Task info (title, link, due)
- Completion capture (checkbox + note + optional photo)

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# **5) Rules & behaviors (automations + triggers)**

## **H) PM-generated items: classification prompt + learning**

- Any PM-generated maintenance item (even if unclassified) lands in **WO Requests** by default.
- On first review, S02 must **prompt the engineer** to classify the item as **WO** or **Task**.

- When the engineer reclassifies, prompt: “**Apply this classification to future occurrences?**”
- **Yes:** update the PM Matrix template classification for future generations.
- **No:** change applies only to this instance.
- Reclassification must not create duplicates; it should re-render the same PM instance in the correct tab.

## A) Core policy: request vs open

- **S01 F&D;** can only create “**WO Requested**”.
- **Only S02** can convert a request into **WO Open**.

## B) Primary WO status model (MVP)

- **WO Requested** (inbox; not open yet)
- **WO Open** (accepted and active)
- **WO Closed (Report Pending)** (work complete, report not submitted)
- **WO Deferred** (with reason + review date)

## C) Secondary operational state (optional but recommended)

Selectable states for clarity:

- In progress
- Waiting parts
- Waiting technician/contractor
- Delayed/paused

Secondary state never replaces the primary status; it adds “why it’s stuck”.

## D) Close-out fail-safe (engineer-first)

- Engineer can close the work immediately after completion:
  - Sets to **Closed (Report Pending)**
- WO cannot “leave S02” until report is submitted in S03.

## E) Converting / rejecting WO Requests (triage)

From **WO Requests**, engineer can:

- Convert to **WO Open**
- Convert to **Task** (if it’s actually a check/compliance item)

- Mark **No WO required** (links back to defect as “Resolved” if sourced from F&D; requires a short note)

## F) Tag-outs & permits

- If **Tag-out required = Yes**, system requires:
  - Tag-out note
  - Tag-out visibility on Notifications + VOS
- If **Permit required = Yes**, generate a permit stub for export/print (no complex library in MVP)

## G) IDs / traceability

- F&D-sourced;: keeps FD reference on the WO (e.g., “From FD-000123”)
- PM-sourced: keeps PM reference
- Manual: WO-xxxxx

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## 6) Links to other screens (drill-down + create-from-here actions)

From S02 you can jump to:

- **S01 F&D;** (source defect record)
- **E&M;** (Equipment & Machinery detail)
- **Inventory & Requisitions** (parts required, consumption, requisition draft)
- **Contractors/Suppliers** (later: assign + contact)
- **S03 WO Reports** (write report, submit)
- **Reports & History** (after submission)
- **VOS / Notifications** (status indicators link back to WO detail)

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## MVP notes (engineer-first scope control)

- Keep review fast: the “review panel” should not block execution unless the WO is Critical.
- Inventory “reserve” is optional for MVP; prioritize consumption logging and requisition suggestions.
- Assignment/supervisor workflows can be expanded after MVP (roles + approvals).