

Tyre Management System

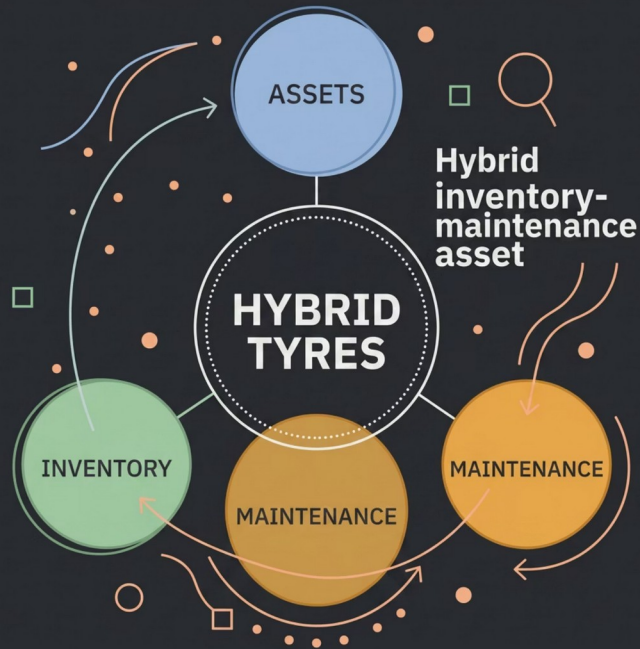
RFID-Powered Tyre Lifecycle Tracking

BANDAM



Tyre Management WorkFlow

Tyres are a specialized **Asset Category** inside your existing AMS. No extra login. No parallel platform. When Category = "Tyres," the system activates a dedicated Tyre Management workflow — procurement, RFID tagging, stock, and permissions reuse existing AMS infrastructure.



Assets

Tyre registry, IDs, specs

Inventory

Stock levels, warehouse, GRN

Maintenance

Repairs, retreats, disposals

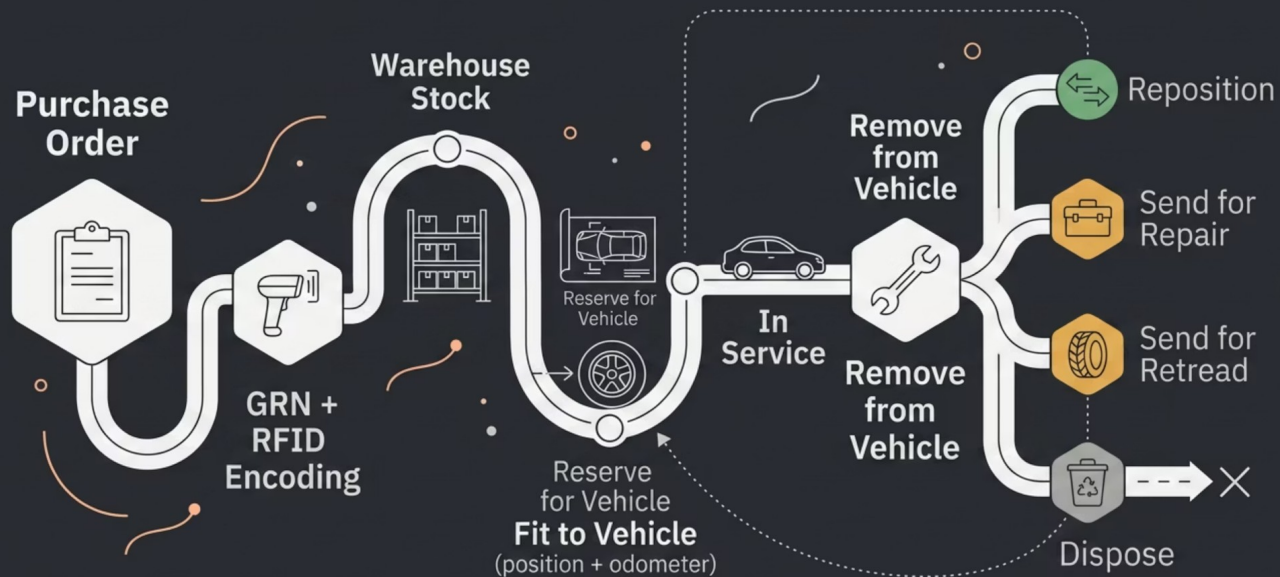
The Hardware Behind Every Scan

Scan at procurement → encode EPC to tyre patch → tyre is tracked for its entire life.

Device	Role	Use Case
ST-E7100	Handheld	Field scanning — fitment, inspection, inventory
ST-8504	Fixed Reader	Gate detection — reads windshield tags at 0–10m
ST-Tire01	Patch Tag	Attached to each tyre at procurement
Windshield Tag	UHF Tag	On each vehicle — auto-identified at gates
ST-M01	Anti-Metal Tag	Rim and metal surface mounting

Every Tyre Tracked From Procurement to Disposal

Each tyre carries a live status — **In Stock** → **Reserved** → **In Use** → **Under Repair** → **Under Retreat** → **Disposed** — with every transition logged to the audit trail.



Android App — ST-E7100 Handheld, 5 Dedicated Screens



Scan & Identify

Scan EPC → tyre name, status, vehicle + position



Mount Tyre

Select in-stock tyre → vehicle + axle → odometer + tread → confirm



Remove Tyre

Scan mounted tyre → guided decision tree: Reposition / Repair / Retreat / Dispose



Inspection

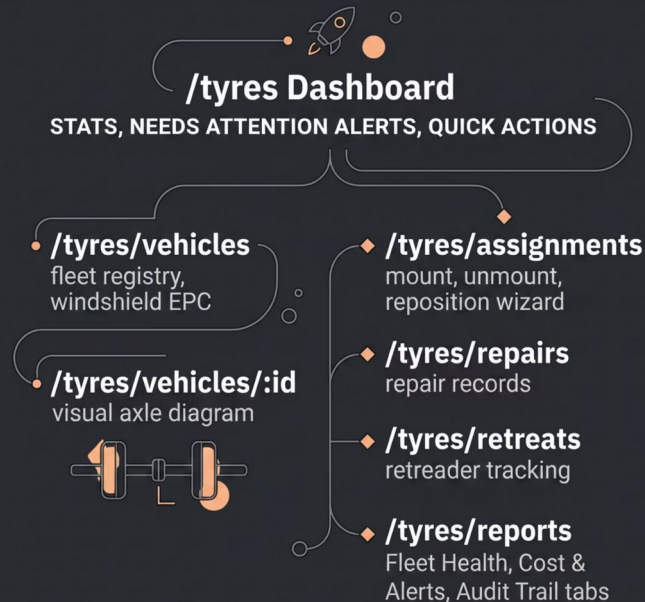
Enter tread depth → live indicator: Good / Monitor / Replace



Inventory

Bulk scan warehouse → progress bar + checkmarks → reconcile against stock

Web Portal — 7 Pages, Full Fleet Control



Dashboard at a Glance

Four KPI cards — Total Tyres, In Stock, Mounted, Under Repair — with a **Needs Attention** section surfacing low-tread and near-expiry tyres. One-click access to every fleet action.

Fleet Health

Per-vehicle tread, alerts, counts

Cost & Alerts

Repair totals, retreat costs, near-expiry

Audit Trail

Full TyreMovement event log

Every Vehicle — Visual Axle Diagram

Each registered vehicle shows a top-down silhouette with all 5 tyre positions — FL, FR, RL, RR, Spare — displaying Tyre ID, Brand, Size, Tread Depth, and live Status. One click opens full tyre history. Odometer at last fitment visible per position.



● Good

Within spec — no action needed

● Monitor

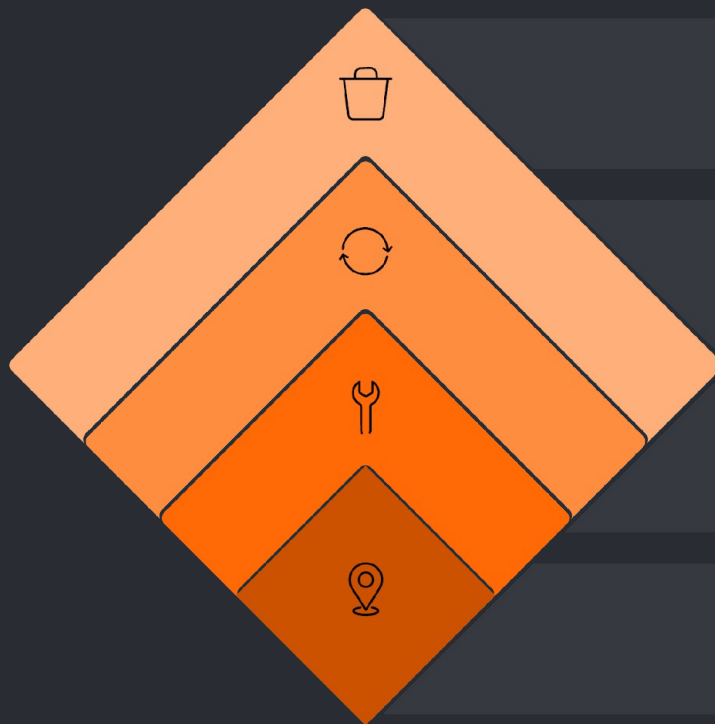
Approaching threshold — schedule inspection

● Replace

Below minimum — remove immediately

No Guesswork on Removal — Step-by-Step Wizard

The Android app and web portal guide technicians through every removal decision. Each step is written to the **TyreMovement** audit trail.



Fleet Health Reports + Role-Based Access

Three Report Tabs

Fleet Health

Mounted tyre count, avg tread depth, low-tread alerts per vehicle

Cost & Alerts

Repair totals, retreat costs, near-expiry tyres, cost per vehicle

Audit Trail

Full TyreMovement log — every MOUNTED, UNMOUNTED, REPAIRED, RETREATED, DISPOSED event

Permission Roles

Role	Access
TYRE_VIEW	View registry and history
TYRE_MANAGE	Mount, unmount, reposition
TYRE_MAINTENANCE	Log repairs and retreats
TYRE_DISPOSE	Record disposals
TYRE_REPORT	Access fleet health reports
VEHICLE_MANAGE	Add and edit vehicles

Every Tyre in Your Fleet — Tracked from Tag to Disposal

Built on the same RFID platform as your AMS. **No new infrastructure. No parallel system. One login.**

01

Live Demo

Handheld scan + web vehicle axle map walkthrough

02

Fleet Assessment

Vehicle count + tyre tagging plan

03

Hardware Quote

ST-E7100 handhelds + ST-Tire01 patch tags

04

Commercial Proposal

Delivered within 48 hours

