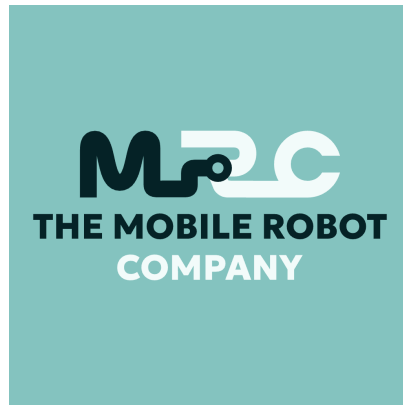




The Mobile Robot Company

Knowledge Center — Shipping and Dispatch · 2026-08-04

<https://info.mobilerobot.com/applications/industries/shipping-and-dispatch>

Shipping and Dispatch

Shipping is a named target environment for the [J1600](https://info.mobilerobot.com/products/j1600/overview/) (<https://info.mobilerobot.com/products/j1600/overview/>): the outbound end of the warehouse or factory, where pallets travel from storage, [production](https://info.mobilerobot.com/applications/use-cases/production-to-shipping-transport/) (<https://info.mobilerobot.com/applications/use-cases/production-to-shipping-transport/>), or staging toward the dock. As in [goods receiving](https://info.mobilerobot.com/applications/industries/goods-receiving/) (<https://info.mobilerobot.com/applications/industries/goods-receiving/>), the J1600 automates the long travel segments and leaves the dock work to the operator.

The outbound workflow

1. An operator [picks the outbound pallet manually](https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery/) (<https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery/>) — from storage, a production line, or a staging lane.
2. On the touchscreen, the operator selects the saved destination in the shipping area and what the robot should do afterward.
3. After confirmation with the physical start button, the J1600 drives autonomously, avoids obstacles, and drops the pallet at floor level in the outbound zone.
4. The final movement into the truck or trailer is manual: dock plates and slopes are outside autonomous mode's 0% gradeability, and [loading judgment stays with the operator](https://info.mobilerobot.com/safety-compliance/safe-deployment/operator-responsibilities/) (<https://info.mobilerobot.com/safety-compliance/safe-deployment/operator-responsibilities/>).

Useful [post-delivery behaviors](https://info.mobilerobot.com/documentation/user-guides/task-management/) (<https://info.mobilerobot.com/documentation/user-guides/task-management/>) for dispatch flows:

- **[Drop and wait](https://info.mobilerobot.com/applications/scenarios/deliver-and-wait/)** (<https://info.mobilerobot.com/applications/scenarios/deliver-and-wait/>) — deliver to the staging lane and remain there until the operator arrives.
- **[Deliver and park](https://info.mobilerobot.com/applications/scenarios/deliver-and-park/)** (<https://info.mobilerobot.com/applications/scenarios/deliver-and-park/>) — complete the drop and proceed to a defined parking location out of the way of dock traffic.
- **[Boomerang](https://info.mobilerobot.com/applications/scenarios/deliver-and-return/)** (<https://info.mobilerobot.com/applications/scenarios/deliver-and-return/>) — return to the origin or operator for the next pallet.
- **[Simple ABC](https://info.mobilerobot.com/applications/scenarios/a-to-b-to-c-transport/)** (<https://info.mobilerobot.com/applications/scenarios/a-to-b-to-c-transport/>) — deliver from A to B, then continue to C, chaining staging moves.

Staging that follows the schedule

[Outbound staging](https://info.mobilerobot.com/applications/use-cases/buffer-and-staging-management/) (<https://info.mobilerobot.com/applications/use-cases/buffer-and-staging-management/>) is temporary by nature: lanes fill and empty with each departure, and peak days need extra buffer space. [New staging points are saved by driving to them once](https://info.mobilerobot.com/applications/scenarios/temporary-location-setup/) (<https://info.mobilerobot.com/applications/scenarios/temporary-location-setup/>) and tapping **Save location**, with no software limit on the number of locations. [Multi-point-to-multi-point combinations](https://info.mobilerobot.com/applications/use-cases/multi-point-pallet-transport/) (<https://info.mobilerobot.com/applications/use-cases/multi-point-pallet-transport/>) support [cross-docking-style flows](https://info.mobilerobot.com/applications/use-cases/cross-docking/) (<https://info.mobilerobot.com/applications/use-cases/cross-docking/>), where inbound pallets move directly toward outbound lanes.

Keeping the dock moving

While the J1600 shuttles pallets to the staging area, the operator stays at the dock loading, checking, and sequencing. Congested dock floors, last-minute order changes, and urgent reprioritization remain human decisions with immediate manual takeover via the tiller — the [human-in-the-loop](https://info.mobilerobot.com/documentation/concepts/human-in-the-loop-automation/) (<https://info.mobilerobot.com/documentation/concepts/human-in-the-loop-automation/>), split applied to outbound flow. Routes of a few meters or well over 100 meters follow the same workflow.

Practical limits

Autonomous operation is [indoor and level-floor](https://info.mobilerobot.com/applications/planning/route-and-floor-suitability/) (<https://info.mobilerobot.com/applications/planning/route-and-floor-suitability/>); automatic delivery is at floor level; payload is up to 1,600 kg on [open-base carriers](https://info.mobilerobot.com/applications/planning/pallet-and-load-suitability/) (<https://info.mobilerobot.com/applications/planning/pallet-and-load-suitability/>) within a 1,250 × 1,250 mm envelope. Full data in the [technical specifications](https://info.mobilerobot.com/products/j1600/technical-specifications/) (<https://info.mobilerobot.com/products/j1600/technical-specifications/>).

Related pages

- [Warehousing](https://info.mobilerobot.com/applications/industries/warehousing/) (<https://info.mobilerobot.com/applications/industries/warehousing/>) — the zone-to-zone flows feeding dispatch
- [Goods receiving](https://info.mobilerobot.com/applications/industries/goods-receiving/) (<https://info.mobilerobot.com/applications/industries/goods-receiving/>) — the inbound mirror image
- [Productivity improvements](https://info.mobilerobot.com/applications/results/productivity-improvements/) (<https://info.mobilerobot.com/applications/results/productivity-improvements/>) — the throughput case for automating outbound travel

