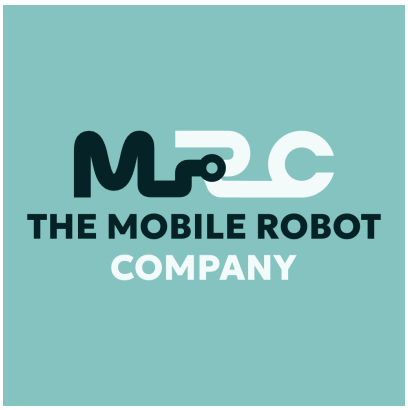

The Mobile Robot Company

Knowledge Center — Application Planning · 2026-08-04

https://info.mobilerobot.com/category/application-planning

Application Planning

How to assess whether the J1600 fits your site, loads, and routes — and how to plan a demonstration, trial, proof of concept, or full deployment.

Is the J1600 Right for My Application?

A fit assessment for the J1600 self-driving pallet jack — which pallet flows, facilities, loads, and team sizes it suits, what stays manual, and which applications are a poor fit.

Application Qualification Checklist

A point-by-point checklist for qualifying a J1600 application — load and carrier limits, floor and environment requirements, route conditions, process fit, and team readiness.

Site Suitability

Facility requirements for the J1600 — temperature, humidity, ingress protection, floor quality, space and clearance dimensions, charging locations, and connectivity.

Pallet and Load Suitability

Which pallets and load carriers the J1600 supports — the open-base requirement, the 1,250 x 1,250 mm size envelope, EPAL and GMA compatibility, fork dimensions, and the role of operato...

Route and Floor Suitability

How to assess J1600 routes and floors — level-floor requirement for autonomous mode, bump and gap limits, floor flatness, clearances, route lengths, and how saved locations recombine…

Trial Planning

How to plan a two-week paid J1600 trial — what the €4,000 trial includes, the feasibility assessment, the on-site deployment day, weekly check-ins, and how to prepare your site and…

Proof-of-Concept Planning

How to plan a J1600 proof of concept — testing at the Copenhagen demo area, bringing machines to your own plant, choosing what to validate, and how a POC differs from a demo or…

Deployment Scope Examples

Three J1600 deployment scopes compared — out-of-the-box single unit, the five-day installation and commissioning package, and scaled deployments with Advanced software,…

Is the J1600 Right for My Application?

The J1600 is a dual-mode self-driving pallet jack (https://info.mobilerobot.com/products/j1600/overview/) for indoor, floor-to-floor pallet transport. This page helps you decide quickly whether it fits your operation before you invest time in a demonstration or trial. For the full specification, see technical specifications (https://info.mobilerobot.com/products/j1600/technical-specifications/).

The application the J1600 is built for

The J1600 automates the repetitive travel portion of pallet transport. The operator picks up the pallet manually (https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery/) — with a tiller that handles like a conventional electric pallet jack — selects a saved destination on the touchscreen, confirms autonomous mode (https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/), and steps away. The robot drives to the destination, drops the pallet at floor level, and then returns, parks, waits, or continues to another point. See dual mode (https://info.mobilerobot.com/products/j1600/dual-mode/) and human-in-the-loop automation (https://info.mobilerobot.com/documentation/concepts/human-in-the-loop-automation/).

The intended balance is roughly 80% automation rather than 100%: judgment stays with the operator, travel goes to the robot, and the entry cost stays far below a full automation project.

Strong fit indicators

The J1600 suits your application if several of these apply:

- **Horizontal, indoor pallet flows** in goods receiving (https://info.mobilerobot.com/applications/industries/goods-receiving/), storage, production supply (https://info.mobilerobot.com/applications/use-cases/production-supply/), staging (https://info.mobilerobot.com/applications/use-cases/buffer-and-staging-management/), cross-docking (https://info.mobilerobot.com/applications/use-cases/cross-docking/), or shipping (https://info.mobilerobot.com/applications/industries/shipping-and-dispatch/).
- **One to five pallet-jack operators** on a single shift — the primary target segment (https://info.mobilerobot.com/company/about/markets-we-serve/). The economics are

designed to work for a single-shift SME running eight hours per day, five days per week.

- **Repetitive point-to-point transport** where operators spend significant time walking (https://info.mobilerobot.com/applications/results/reduction-in-manual-walking/). Routes can be a few meters or more than 100 meters.
- **Local work cells inside a larger site (https://info.mobilerobot.com/applications/use-cases/local-work-cell-automation/)** that are too small or too changeable for a conventional fleet project.
- **Brownfield facilities (https://info.mobilerobot.com/applications/use-cases/brownfield-automation/)** with changing layouts, temporary storage (https://info.mobilerobot.com/applications/use-cases/temporary-storage/), and variable SKU mix. The 3D LiDAR SLAM navigation (https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/) needs no tracks, wires, reflectors, or building modifications.
- **A need for fast deployment (https://info.mobilerobot.com/applications/results/faster-deployment/)** — typical setup takes hours to one day, and operator training (https://info.mobilerobot.com/documentation/getting-started/operator-training/) takes about 30 minutes.
- **No appetite for an IT project** — Wi-Fi is optional for basic use (https://info.mobilerobot.com/documentation/installation/network-and-wi-fi-requirements/), and no warehouse-management-system or fleet integration (https://info.mobilerobot.com/applications/results/lower-integration-complexity/) is required.

Requirements at a glance

Requirement	Limit
Load weight	Up to 1,600 kg (about 3,500 lb)
Load carrier	Open base, no bottom deck board
Pallet/load footprint, including overhang	Up to 1,250 x 1,250 mm (49 x 49 in)
Load height from floor	Up to 1,700 mm (67 in)
Environment	Indoor, 5–40°C (41–104°F), 20–80% relative humidity non-condensing
Floors in autonomous mode	Level (0% gradeability), bumps up to 25 mm, gaps up to 20 mm
Autonomous delivery	Floor level only
Pallet pickup	Always manual

Work through the application qualification checklist (https://info.mobilerobot.com/applications/planning/application-qualification-checklist/) for the complete list, and see site suitability (https://info.mobilerobot.com/applications/planning/site-suitability/), pallet and load suitability (https://info.mobilerobot.com/applications/planning/pallet-and-load-suitability/), and route and floor suitability (https://info.mobilerobot.com/applications/planning/route-and-floor-suitability/) for detail.

What stays manual

Dual mode assumes an operator remains available for the judgment-heavy parts of pallet work (https://info.mobilerobot.com/safety-compliance/safe-deployment/operator-responsibilities/):

- pallet pickup and fork placement;
- lifts and drops above floor level, up to 1,600 mm, in manual mode (https://info.mobilerobot.com/documentation/user-guides/manual-operation/);
- dock plates, ramps, and slopes — automatic-mode gradeability is 0%;

- unstable, damaged, or sensitive loads (https://info.mobilerobot.com/applications/use-cases/sensitive-or-unstable-loads/);
- crowded or cluttered areas (https://info.mobilerobot.com/applications/scenarios/operation-in-crowded-environments/) that call for improvisation;
- urgent reprioritization and exceptions (https://info.mobilerobot.com/applications/scenarios/handling-exceptions-and-irregular-loads/).

If your process requires removing the operator entirely — including automated pickup — the J1600 is not designed for that. It occupies the tier between manual pallet jacks and fully automated systems.

Poor fits

- outdoor transport or unheated areas below 5°C, including cold storage at freezing temperatures;
- closed-deck pallets or carriers the forks cannot enter;
- loads over 1,600 kg or larger than the 1,250 x 1,250 mm envelope;
- autonomous delivery to racking, conveyors, or any height above floor level;
- routes that must cross slopes or dock plates in autonomous mode;
- wet or washdown environments — the ingress protection rating is IP21 (https://info.mobilerobot.com/documentation/installation/operating-environment-requirements/).

Some of these applications can still work in part: the robot handles the level, indoor travel leg while operators handle the rest manually.

Next steps

1. Complete the application qualification checklist (https://info.mobilerobot.com/applications/planning/application-qualification-checklist/).
2. Book a 30–60 minute hands-on demonstration through a partner (https://info.mobilerobot.com/products/buying-and-deployment/find-a-local-partner/).
3. Plan a two-week trial (https://info.mobilerobot.com/applications/planning/trial-planning/) or a proof of concept (https://info.mobilerobot.com/applications/planning/proof-of-concept-planning/) at your own site.

Application Qualification Checklist

Use this checklist to qualify a J1600 application before a demonstration, trial, or purchase. Every item maps to a published limit or requirement. If you can answer yes to each applicable point, the application is a candidate for a two-week trial (https://info.mobilerobot.com/applications/planning/trial-planning/); items you cannot confirm are the first things to validate in a proof of concept (https://info.mobilerobot.com/applications/planning/proof-of-concept-planning/).

Load and carrier

- [ ] Load weight is 1,600 kg (about 3,500 lb) or less.
- [ ] The carrier has an open base with no bottom deck board, so forks can enter.
- [ ] Pallet or load footprint, including overhang, is within 1,250 x 1,250 mm (49 x 49 in).
- [ ] Load height from the floor is 1,700 mm (67 in) or less.
- [ ] The carrier type is supported: EPAL Euro Pallet, EPAL 3, EPAL 6, GMA pallets with an open base, or another forkable open-base carrier within the size limits.
- [ ] Loads are stable enough for transport, or an operator can judge and handle unstable loads (https://info.mobilerobot.com/applications/use-cases/sensitive-or-unstable-loads/) manually.

Details: Pallet and load suitability (https://info.mobilerobot.com/applications/planning/pallet-and-load-suitability/).

Facility and environment

- [ ] All autonomous routes are indoors.
- [ ] Ambient temperature stays within 5–40°C (41–104°F).
- [ ] Relative humidity stays within 20–80%, non-condensing.
- [ ] The environment is compatible with IP21 ingress protection — no washdown, spray, or standing water on the route.
- [ ] There is room for the vehicle: 1,893 mm long, 850 mm wide, 2,060 mm high with forks lowered, with a 1,501 mm turning radius.
- [ ] A charging location is available (https://info.mobilerobot.com/documentation/installation/charger-installation/) — a wall outlet for the manual charger, or floor space for the optional

automatic charging station.

Details: Site suitability (https://info.mobilerobot.com/applications/planning/site-suitability/).

Floors and routes

- [ ] Autonomous routes are level — automatic-mode gradeability is 0%.
- [ ] Bumps along the route are 25 mm (1 in) or lower.
- [ ] Gaps along the route are 20 mm (0.8 in) or narrower.
- [ ] Floor flatness meets TR34 FM3 (FF 25 / FL 20).
- [ ] Dock plates, ramps, and slopes are handled manually — manual-mode gradeability is 5% unloaded and 3% at full load.
- [ ] Transport is floor-to-floor: pickup by the operator, autonomous drop at floor level.

Details: Route and floor suitability (https://info.mobilerobot.com/applications/planning/route-and-floor-suitability/).

Process and tasks

- [ ] The repetitive work is point-to-point travel between locations that can be saved by driving there once.
- [ ] An operator is available to pick up pallets manually and initiate tasks (https://info.mobilerobot.com/safety-compliance/safe-deployment/operator-responsibilities/) — pickup is always manual.
- [ ] The intended task patterns (https://info.mobilerobot.com/documentation/user-guides/task-management/) are covered: deliver and return (https://info.mobilerobot.com/applications/scenarios/deliver-and-return/) (boomerang), deliver then continue to a third point (https://info.mobilerobot.com/applications/scenarios/a-to-b-to-c-transport/), drop and wait (https://info.mobilerobot.com/applications/scenarios/deliver-and-wait/), deliver and park (https://info.mobilerobot.com/applications/scenarios/deliver-and-park/), or multi-point flows (https://info.mobilerobot.com/applications/use-cases/multi-point-pallet-transport/) such as cross-docking (https://info.mobilerobot.com/applications/use-cases/cross-docking/).
- [ ] Floor-level drop-off is acceptable at every autonomous destination.

Connectivity and integration

- [ ] Basic use requires no integration (https://info.mobilerobot.com/applications/results/lower-integration-complexity/) — confirm Wi-Fi is available only if you want connected features (https://info.mobilerobot.com/documentation/installation/network-and-wi-fi-requirements/).
- [ ] If you plan fleet operation, third-party fleet managers, or system integration, note that VDA 5050 (https://info.mobilerobot.com/products/software/vda-5050/), REST API (https://info.mobilerobot.com/documentation/technical-integration/rest-api-documentation/), Fleet Manager (https://info.mobilerobot.com/documentation/technical-integration/fleet-manager-guide/), and advanced mission planning require the Advanced software package (https://info.mobilerobot.com/products/software/advanced-software/). See Deployment scope examples (https://info.mobilerobot.com/applications/planning/deployment-scope-examples/).

Team

- [ ] Operators are familiar with electric pallet jacks — training (https://info.mobilerobot.com/documentation/getting-started/operator-training/) for the J1600 takes about 30 minutes.
- [ ] Someone on the team can add or change destinations by driving to a point (https://info.mobilerobot.com/applications/scenarios/temporary-location-setup/) and tapping **Save location** — no automation expert is needed.

What the checklist does not cover

Hazardous materials and unusual carriers have no blanket approval (https://info.mobilerobot.com/safety-compliance/safe-deployment/approved-loads-and-pallets/); suitability depends on base geometry, size, stability, and operator judgment. Discuss special loads with your partner or the technical team, and validate them during the trial. If you are unsure whether the J1600 fits at all, start with Is the J1600 right for my application? (https://info.mobilerobot.com/applications/planning/is-the-j1600-right-for-my-application/)

Site Suitability

The J1600 is designed for existing indoor facilities and needs no building modifications, tracks, wires, or reflectors. A site still has to meet a set of environmental and physical requirements for autonomous operation. This page lists them so you can assess a facility before a trial or deployment.

PRELIMINARY SPECIFICATIONS

The January 2026 specifications on this page are preliminary and subject to change. Confirm limits against current product documentation before a deployment decision.

Environment

Parameter	Requirement
Location	Indoor
Operating temperature	5–40°C (41–104°F)
Relative humidity	20–80%, non-condensing
Ingress protection	IP21 — protected against objects over 12.5 mm and vertically dripping water

IP21 rules out washdown areas, spray, and standing water on the route. Unheated spaces that drop below 5°C — including frozen storage — are outside the operating range (https://info.mobilerobot.com/documentation/installation/operating-environment-requirements/).

Floors

Parameter	Requirement
Gradeability, automatic mode	0° / 0% — level floors only
Gradeability, manual mode, no load	2.86° / 5%
Gradeability, manual mode, full load	1.72° / 3%
Maximum traversable bump height	25 mm (1 in)
Maximum traversable gap width	20 mm (0.8 in)
Floor flatness/levelness	TR34 FM3 (FF 25 / FL 20)

Autonomous mode is a level-floor application. Dock plates and slopes remain manual tasks. For route-level assessment, see Route and floor suitability (https://info.mobilerobot.com/applications/planning/route-and-floor-suitability/).

Space and clearances

Plan aisles, doorways, and turning areas around the vehicle's dimensions (https://info.mobilerobot.com/documentation/technical-reference/dimensions/):

Parameter	Metric	Imperial
Vehicle length	1,893 mm	75 in
Vehicle width	850 mm	33 in
Vehicle height, forks lowered	2,060 mm	81 in
Vehicle height, forks at maximum height	2,350 mm	93 in
Turning radius	1,501 mm	59 in
Ground clearance	30 mm	1.2 in

The 3D navigation LiDAR scans environmental structures at heights reaching up to 70 m above the vehicle, so the robot localizes from the building itself — including in facilities with high ceilings.

Charging locations

Plan one of two charging arrangements (https://info.mobilerobot.com/documentation/user-guides/charging/):

- **Manual charging:** a charger is plugged in during breaks or idle time, the same way an electric pallet jack is charged. Reserve a parking spot (https://info.mobilerobot.com/applications/scenarios/deliver-and-park/) near an outlet.
- **Automatic charging (https://info.mobilerobot.com/applications/scenarios/automatic-charging/):** with the optional automatic charger, the robot drives to the station and docks itself for opportunity charging. Reserve floor space for the station (https://info.mobilerobot.com/documentation/installation/charger-installation/); setup is part of installation Day 1 when the automatic charger is purchased.

The battery is a 24 V, 200 Ah lithium iron phosphate (LiFePO4) unit (https://info.mobilerobot.com/documentation/technical-reference/battery-specifications/) that charges at approximately 47 percentage points per hour. Runtime exceeds eight hours in a typical duty cycle. See Charging details (https://info.mobilerobot.com/products/j1600/technical-specifications/).

Connectivity

Wi-Fi is optional for basic use (https://info.mobilerobot.com/documentation/installation/network-and-wi-fi-requirements/), and no warehouse-management-system, fleet manager, or IT integration (https://info.mobilerobot.com/applications/results/lower-integration-complexity/) is mandatory. Sites planning fleet operation or software integration need network coverage for the Advanced software (https://info.mobilerobot.com/products/software/advanced-software/) features; see Deployment scope examples (https://info.mobilerobot.com/applications/planning/deployment-scope-examples/).

Real-world site conditions

The J1600 is validated at the company's Copenhagen test facility (https://info.mobilerobot.com/company/locations/test-and-demonstration-facility/) under intentionally imperfect conditions, including uneven flooring and water-filled test loads. Dynamic obstacles, people, and changing layouts are handled by 3D LiDAR SLAM navigation with obstacle avoidance (https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/) — but the limits above still apply. If your site is near a limit, validate it in a trial (https://info.

mobilerobot.com/applications/planning/trial-planning/) or proof of concept (https://info.mobilerobot.com/applications/planning/proof-of-concept-planning/).

Pallet and Load Suitability

The J1600 carries up to 1,600 kg on any forkable carrier with an open base. This page defines the load envelope, the supported pallet types, and the fork geometry you need to verify your own carriers against.

> **PRELIMINARY SPECIFICATIONS**
>
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The one hard requirement: an open base

The carrier must have an **open base with no bottom deck board** so the forks can enter. Closed-deck pallets are not supported. Beyond that, the carrier must fit the envelope below.

Load envelope

Parameter	Limit
Maximum load weight	1,600 kg (about 3,500 lb)
Maximum pallet/load length, including overhang	1,250 mm (49 in)
Maximum pallet/load width, including overhang	1,250 mm (49 in)
Maximum load height from floor	1,700 mm (67 in)

Overhang counts: measure the load, not just the pallet. The exact envelope is 1,250 mm; some overview material rounds it to 1.2 m.

Supported carrier types

Carrier	Support
EPAL Euro Pallet	Supported
EPAL 3	Supported
EPAL 6	Supported
GMA pallets	All GMA pallets with an open base
Custom carriers	Any forkable open-base carrier within the size limits

Custom carriers include open cages, barrels on open-base carriers, and other load carriers beyond Euro pallets (https://info.mobilerobot.com/applications/use-cases/open-cages-and-alternative-load-carriers/). Compatibility depends on base geometry, size, stability, and operator judgment. No blanket approval (https://info.mobilerobot.com/safety-compliance/safe-deployment/approved-loads-and-pallets/) exists for every carrier or for hazardous materials — validate special loads with your partner, ideally during a trial (https://info.mobilerobot.com/applications/planning/trial-planning/).

Fork geometry

Check your carriers against the fork dimensions:

Parameter	Metric	Imperial
Fork length	1,150 mm	45 in
Fork width	180 mm	7 in
Fork thickness	60 mm	2.4 in
Fork outer distance	680 mm	27 in
Fork inner distance	320 mm	13 in
Fork height, lowest position	90 mm	3.5 in
Fork height, highest position	1,600 mm	63 in

Heights: manual versus autonomous

Manual mode (https://info.mobilerobot.com/documentation/user-guides/manual-operation/) picks and drops at up to 1,600 mm (63 in). Autonomous delivery is always at floor level. Plan flows so every autonomous destination accepts a floor-level drop; any higher placement is an operator task. See dual mode (https://info.mobilerobot.com/products/j1600/dual-mode/).

Sensitive and unstable loads

Loads that need judgment (https://info.mobilerobot.com/applications/use-cases/sensitive-or-unstable-loads/) — top-heavy stacks, leaning loads, damaged pallets, liquids, or barrels — are exactly what the dual-mode split is for. The operator handles pickup and close maneuvering manually, then hands the repetitive travel to autonomous mode. Load stability remains an operator judgment; a load-detection sensor (https://info.mobilerobot.com/safety-compliance/safety-functions/load-detection/) (Performance Level b) confirms the presence of a load. For the reasoning behind this division of work, see human-in-the-loop automation (https://info.mobilerobot.com/documentation/concepts/human-in-the-loop-automation/).

Next step

Work the numbers above into the application qualification checklist (https://info.mobilerobot.com/applications/planning/application-qualification-checklist/), and check the rest of your facility with Site suitability (https://info.mobilerobot.com/applications/planning/site-suitability/).

Route and Floor Suitability

Autonomous J1600 operation is a level-floor, indoor application. This page covers what a route must look like physically and how routes are created, so you can walk your facility and qualify every intended path.

> **PRELIMINARY SPECIFICATIONS**
>
> The January 2026 specifications on this page are preliminary and subject to change. Confirm limits against current product documentation before a deployment decision.

Floor requirements along the route

Parameter	Requirement
Gradeability, automatic mode	0° / 0% — level floors only
Gradeability, manual mode, no load	2.86° / 5%
Gradeability, manual mode, full load	1.72° / 3%
Maximum traversable bump height	25 mm (1 in)
Maximum traversable gap width	20 mm (0.8 in)
Floor flatness/levelness	TR34 FM3 (FF 25 / FL 20)

Expansion joints, drain covers, and thresholds count against the bump and gap limits. Dock plates, ramps, and slopes are manual territory (https://info.mobilerobot.com/documentation/user-guides/manual-operation/): an operator can take the vehicle up a 5% grade unloaded or 3% at full load, but no autonomous route may include a slope.

Clearances

Plan aisle widths, doorways, and turning areas around these dimensions (https://info.mobilerobot.com/documentation/technical-reference/dimensions/):

Parameter	Metric	Imperial
Vehicle length	1,893 mm	75 in
Vehicle width	850 mm	33 in
Turning radius	1,501 mm	59 in
Vehicle height, forks lowered	2,060 mm	81 in

Top speed (https://info.mobilerobot.com/products/j1600/dimensions-and-performance/) is 5.4 km/h (1.5 m/s). The 360-degree safety field is speed-dependent and expands at higher speeds, and blue floor lights show the protected area around the vehicle. See how J1600 safety works (https://info.mobilerobot.com/safety-compliance/safety-overview/how-j1600-safety-works/).

How routes are created

There is no route programming. The J1600 maps the facility with 3D LiDAR SLAM (https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/) while an operator drives it manually, then plans its own paths:

1. Drive the vehicle through the facility with the tiller. It continuously learns and updates its 3D environment model.
2. Drive to each intended drop point (https://info.mobilerobot.com/documentation/installation/mapping-and-drop-point-setup/) and tap **Save location**. There is no software limit to the number of saved locations.
3. Combine saved locations (https://info.mobilerobot.com/documentation/user-guides/location-management/) freely into tasks. The robot navigates to any saved point without teaching every possible origin-destination pair.

Because navigation needs no fixed tracks, wires, reflectors, or building changes, routes survive layout changes (https://info.mobilerobot.com/applications/scenarios/dynamic-route-changes/): the robot maps and avoids obstacles in dynamic environments, and preferred travel zones can be defined for safer routing through production areas.

Route length and traffic

A route can be a few meters or more than 100 meters — the working concept is the same. Along the route the robot detects and avoids obstacles and people; in a public

first-use demonstration it routed around bystanders on its own. Persistently crowded or cluttered areas (https://info.mobilerobot.com/applications/scenarios/operation-in-crowded-environments/) are still better handled manually: the operator improvises a path, then hands over to autonomous mode where the route is predictable. For the reasoning behind this split, see human-in-the-loop automation (https://info.mobilerobot.com/documentation/concepts/human-in-the-loop-automation/).

Walking your facility: a route checklist

- [ ] The route is entirely indoors and level.
- [ ] No bump over 25 mm, no gap over 20 mm anywhere on the path.
- [ ] No dock plate, ramp, or slope on any autonomous segment.
- [ ] Doorways and aisles clear the 850 mm width with working margin, and turning points accommodate the 1,501 mm turning radius.
- [ ] Every autonomous destination accepts a floor-level pallet drop.
- [ ] Floor quality meets TR34 FM3 (FF 25 / FL 20), or the route will be validated during a trial.

Confirm the rest of the facility with Site suitability (https://info.mobilerobot.com/applications/planning/site-suitability/), then plan a trial (https://info.mobilerobot.com/applications/planning/trial-planning/) on your own floors.

Trial Planning

A two-week paid trial puts a J1600 in your own facility, on your own pallets and routes, with setup and support included. The trial is the standard second step of the evaluation journey, after a hands-on demonstration and before a purchase decision. The customer can return the robot at any time, free, no questions asked.

Trial at a glance

Item	Detail
Duration	14 calendar days
Price	€4,000 end-user list, including setup and support
Deployment	One full day of on-site deployment and training support
Support	Unlimited remote support during the trial
Follow-up	Weekly online or face-to-face check-in by the partner
Exit	Free return at any time, no questions asked

What the trial includes

1. **Pre-trial feasibility assessment.** Before the robot arrives (https://info.mobilerobot.com/documentation/getting-started/delivery-and-unpacking/), the selected tasks are assessed for feasibility through a company-provided online tool, and the trial tasks are agreed.
2. **Robot loan for 14 calendar days.**
3. **One full day of on-site deployment and training.** The robot is set up, locations are saved, and operators are trained. Training (https://info.mobilerobot.com/documentation/getting-started/operator-training/) an existing electric-pallet-jack operator takes about 30 minutes.
4. **Unlimited remote support** from The Mobile Robot Company for the duration of the trial.

5. **Weekly check-ins** with your partner to assess trial progress against the agreed success criteria.

Before the trial: qualify and prepare

Get the most out of the 14 days by preparing before day one:

- Work through the application qualification checklist (https://info.mobilerobot.com/applications/planning/application-qualification-checklist/) and resolve open items.
- Walk the intended routes using the route and floor checklist (https://info.mobilerobot.com/applications/planning/route-and-floor-suitability/).
- Verify your pallets and carriers against pallet and load suitability (https://info.mobilerobot.com/applications/planning/pallet-and-load-suitability/) — an open base within 1,250 x 1,250 mm, up to 1,600 kg.
- Choose the transport tasks to automate. Good first candidates are repetitive point-to-point flows: deliver-and-return (https://info.mobilerobot.com/applications/scenarios/deliver-and-return/), drop-and-wait (https://info.mobilerobot.com/applications/scenarios/deliver-and-wait/), or a receiving-to-storage leg (https://info.mobilerobot.com/applications/use-cases/inbound-receiving/).
- Decide who operates the robot. Any electric-pallet-jack operator is a candidate; no automation background is needed.
- Reserve a charging spot near an outlet (https://info.mobilerobot.com/documentation/installation/charger-installation/) for manual charging during breaks.

During the trial

The basic workflow is teach and repeat (https://info.mobilerobot.com/documentation/concepts/teach-and-repeat/): drive manually, save locations, pick pallets manually, and send the robot on autonomous deliveries (https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery/) from the touchscreen. Measure what matters to your business case — operator time reclaimed on the automated legs, task consistency, and how easily your team adds or changes locations without outside help (https://info.mobilerobot.com/applications/scenarios/temporary-location-setup/). The headline figure to test against is up to 80% reduction in operator time on repetitive transport (https://info.mobilerobot.com/applications/results/productivity-improvements/).

Start with a demonstration

Before committing to a trial, take a 30–60 minute hands-on demonstration at a partner experience center or your own site. First-time visitors typically create and launch an autonomous task within about 15 minutes. A public video shows a first-time user doing exactly that; see video case stories (https://info.mobilerobot.com/applications/customer-stories/video-case-stories/).

After the trial

If the trial succeeds, the path continues to purchase — optionally with the five-day installation and commissioning package (https://info.mobilerobot.com/applications/planning/deployment-scope-examples/) for a structured go-live — and an after-sales service plan (https://info.mobilerobot.com/support/faq/service-and-warranty/). If the application needs deeper validation first, plan a proof of concept (https://info.mobilerobot.com/applications/planning/proof-of-concept-planning/). Trials are arranged through the partner network; inquiries via mobilerobot.com (https://www.mobilerobot.com) are routed to a local partner (https://info.mobilerobot.com/products/buying-and-deployment/find-a-local-partner/).

Proof-of-Concept Planning

A proof of concept (POC) validates the J1600 against your specific application before a wider purchase or deployment. It sits alongside two other evaluation routes — the hands-on demonstration and the two-week paid trial — and is the right choice when an application needs deeper or more controlled validation than a standard trial provides.

Choosing the right evaluation route

Route	What it is	Where
Demonstration	30–60 minutes hands-on; first autonomous task typically within about 15 minutes	Partner experience center or customer site
Paid trial	14 calendar days on your own tasks, with deployment day and support included	Your facility
Proof of concept	Validation scoped to your application, agreed individually	Copenhagen demo area, or your plant

Demonstrations prove ease of use. Trials prove the robot in your daily operation. A POC proves a specific application question — for example an unusual load carrier, a demanding route, or a throughput target — before you commit further. See Trial planning (https://info.mobilerobot.com/applications/planning/trial-planning/).

Two places to run a POC

The Copenhagen demo and test area

Prospects can run tests at the company's Copenhagen demo and test area (https://info.mobilerobot.com/company/locations/test-and-demonstration-facility/). The facility is built for validation under intentionally real-world conditions: deliberately uneven flooring, water-filled test loads, and multiple test setups. Testing there is useful when you want to see your load types handled before moving anything into your own operation.

Your own plant

For a POC in your production environment, machines can be transported to your plant. The EMEA distributor and integrator network is experienced in running plant trials and POCs, and the sales and technical team scopes the test with you. POC scope, duration, and success criteria are agreed individually for each case.

What to validate in a POC

Focus the POC on the questions a demonstration cannot answer:

- **Loads:** your actual carriers against the open-base requirement and the 1,250 x 1,250 mm envelope — especially open cages, barrels, or custom carriers (https://info.mobilerobot.com/applications/use-cases/open-cages-and-alternative-load-carriers/). See Pallet and load suitability (https://info.mobilerobot.com/applications/planning/pallet-and-load-suitability/).
- **Floors and routes:** real bumps, gaps, flatness, and clearances on the intended paths. See Route and floor suitability (https://info.mobilerobot.com/applications/planning/route-and-floor-suitability/).
- **Environment:** temperature, humidity, and traffic conditions at the actual workstations. See Site suitability (https://info.mobilerobot.com/applications/planning/site-suitability/).
- **Tasks:** the exact task patterns (https://info.mobilerobot.com/documentation/user-guides/task-management/) you plan to run — deliver-and-return (https://info.mobilerobot.com/applications/scenarios/deliver-and-return/), drop-and-wait (https://info.mobilerobot.com/applications/scenarios/deliver-and-wait/), multi-point flows (https://info.mobilerobot.com/applications/use-cases/multi-point-pallet-transport/) — and the post-delivery behaviors.
- **People:** how quickly your operators reach independent use. Training (https://info.mobilerobot.com/documentation/getting-started/operator-training/) takes about 30 minutes for an existing electric-pallet-jack operator.
- **Throughput:** whether the automated legs reclaim the operator time your business case assumes, against the up-to-80% claim for repetitive transport.

Setting success criteria

Define pass criteria before the POC starts: which tasks must run, at what consistency, handled by whom, and what evidence the decision needs. The weekly-check-in

structure of the paid trial is a good template. Agree the criteria with your partner and the technical team when scoping the POC.

Arranging a POC

Contact the sales and technical team (https://info.mobilerobot.com/company/locations/contact-information/) or your local partner (https://info.mobilerobot.com/products/buying-and-deployment/find-a-local-partner/). Inquiries via mobilerobot.com (https://www.mobilerobot.com) are routed to the partner network. If the POC succeeds, the next step is purchase — with the optional structured go-live described in Deployment scope examples (https://info.mobilerobot.com/applications/planning/deployment-scope-examples/).

Deployment Scope Examples

J1600 deployments range from a single robot unboxed and working the same day to commissioned, multi-robot, fleet-integrated installations. This page describes three representative scopes so you can match the deployment effort to your application.

Scope 1: out of the box, single unit

The standard J1600 is ready to use on delivery (https://info.mobilerobot.com/documentation/getting-started/delivery-and-unpacking/). A typical setup takes hours to one day (https://info.mobilerobot.com/applications/results/faster-deployment/), depending on scope:

- no building modifications, tracks, wires, or reflectors;
- Wi-Fi optional; no mandatory WMS, fleet-manager, or IT integration (https://info.mobilerobot.com/applications/results/lower-integration-complexity/);
- operator tutorial on the device or online;
- about 30 minutes of training (https://info.mobilerobot.com/documentation/getting-started/operator-training/) for an existing electric-pallet-jack operator;
- locations added by driving to a point (https://info.mobilerobot.com/applications/scenarios/temporary-location-setup/) and tapping **Save location**;
- manual charging (https://info.mobilerobot.com/documentation/user-guides/charging/) with a wall charger during breaks.

This scope fits a single work cell (https://info.mobilerobot.com/applications/use-cases/local-work-cell-automation/) or one repetitive flow — for example production supply (https://info.mobilerobot.com/applications/use-cases/production-supply/) from a staging area, or a receiving-to-storage leg (https://info.mobilerobot.com/applications/use-cases/inbound-receiving/). It is the standard scope for SMEs with one to five pallet-jack operators on a single shift.

Scope 2: commissioned deployment

The installation and commissioning package (https://info.mobilerobot.com/products/buying-and-deployment/installation-and-commissioning/) (€10,000 end-user list) is an optional five-day service that reduces go-live risk through structured preparation, validation, and handover:

Phase	Content
Pre-installation	Feasibility check for all selected tasks and loads; risk assessment; project plan
Day 1	Unboxing; Wi-Fi connection if desired; automatic-charging setup if purchased; creation of up to 25 drop points; task validation; safety validation
Day 2	Group training for all operators; individual hands-on practice for up to six operators
Days 3–4	Performance monitoring; on-site troubleshooting and support; additional operator training as needed
Day 5	Acceptance test; handover

Available add-ons: integration with other software or equipment, additional validated drop points, and Fleet Management System setup. The package should not be confused with the machine's basic out-of-box usability — it is a commercial deployment service for sites that want a validated, accepted go-live.

This scope fits deployments with many drop points, multiple operators and shifts of training needs, formal risk-assessment requirements (https://info.mobilerobot.com/safety-compliance/safe-deployment/site-risk-assessment/), or automatic charging.

Scope 3: scaled and integrated

When the application grows, the same hardware platform scales through software and infrastructure options (https://info.mobilerobot.com/documentation/technical-integration/integration-overview/):

- **Advanced software upgrade (https://info.mobilerobot.com/products/software/advanced-software/)** (€14,500 list): VDA 5050 interoperability, REST API (https://info.mobilerobot.com/documentation/technical-integration/rest-api-documentation/), Fleet Manager compatibility, advanced mission planning, and advanced system integration. The upgrade is easiest to install at the factory when the robot is ordered; a partner can perform it later, but a customer cannot.
- **Fleet Manager (https://info.mobilerobot.com/products/software/fleet-manager/)** (€6,500 per robot, list): orchestrated multi-robot deployments.
- **VDA 5050 (https://info.mobilerobot.com/products/software/vda-5050/):** full support, letting robots from different vendors work together under a compatible fleet layer.

The company works with established VDA 5050 fleet-management providers.

- **Automatic charging (https://info.mobilerobot.com/applications/scenarios/automatic-charging/)** (automatic charger €8,400 list; manual charger €3,600): the robot docks itself for opportunity charging, set up on installation Day 1 when purchased.
- **Come-to-me (https://info.mobilerobot.com/applications/scenarios/come-to-me/):** calling the robot via a mobile app or web interface, an advanced automation function.

This scope fits multi-robot flows, sites with existing mixed-vendor fleets, and applications that need WMS or equipment integration (https://info.mobilerobot.com/documentation/technical-integration/external-system-integration/). See software details (https://info.mobilerobot.com/products/j1600/technical-specifications/).

Matching scope to application

Application	Typical scope
One repetitive flow, one work cell, single shift	Out of the box
Cross-docking with many drop points	Commissioned
Formal acceptance and risk-assessment requirements	Commissioned
Multiple robots or mixed-vendor fleet	Scaled and integrated
High-utilization flows needing opportunity charging	Commissioned or scaled, with automatic charging

Deployment (https://info.mobilerobot.com/documentation/installation/deployment-checklist/) starts with qualification: run the application qualification checklist (https://info.mobilerobot.com/applications/planning/application-qualification-checklist/), then validate with a trial (https://info.mobilerobot.com/applications/planning/trial-planning/) or proof of concept (https://info.mobilerobot.com/applications/planning/proof-of-concept-planning/). Prices above are 2026 end-user list prices; a robot purchase itself starts at €65,000 (https://info.mobilerobot.com/products/j1600/pricing-and-roi/).