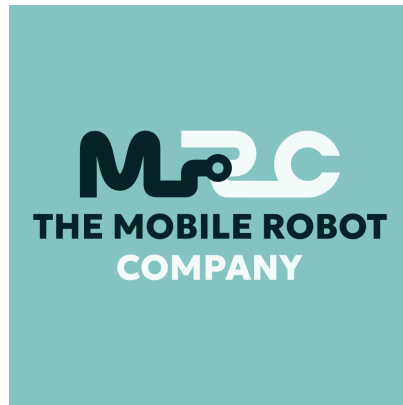




The Mobile Robot Company

Knowledge Center — Local Work-Cell Automation · 2026-08-04

<https://info.mobilerobot.com/applications/use-cases/local-work-cell-automation>

Local Work-Cell Automation

Large facilities contain many small material flows: a cell that feeds one line, a packing station with its own loop, a subassembly area with a dedicated shuttle run. Each is too small — or changes too often — to justify a conventional fleet project. The J1600 serves these stand-alone flows one cell at a time.

The local-flow problem

A full automation project prices and plans for the whole site: fleet management, systems integration, infrastructure, and expert configuration. A local flow of a few pallet moves per hour cannot carry that overhead, so it stays manual by default. The J1600 inverts the economics:

- one vehicle, [deployed in hours or a day](https://info.mobilerobot.com/applications/results/faster-deployment/) (<https://info.mobilerobot.com/applications/results/faster-deployment/>) [depending on scope](https://info.mobilerobot.com/applications/planning/deployment-scope-examples/) (<https://info.mobilerobot.com/applications/planning/deployment-scope-examples/>);
- [no mandatory warehouse-management-system, fleet-manager, or IT integration](https://info.mobilerobot.com/applications/results/lower-integration-complexity/) (<https://info.mobilerobot.com/applications/results/lower-integration-complexity/>);
- [Wi-Fi optional for basic use](https://info.mobilerobot.com/documentation/installation/network-and-wi-fi-requirements/) (<https://info.mobilerobot.com/documentation/installation/network-and-wi-fi-requirements/>);
- no tracks, wires, reflectors, or building modifications;
- about 30 minutes of [training](https://info.mobilerobot.com/documentation/getting-started/operator-training/) (<https://info.mobilerobot.com/documentation/getting-started/operator-training/>) for an operator who already uses an electric pallet jack.

The cell's own operator runs it: pick manually, send autonomously, take over any time. See [Manual Pickup and Autonomous Delivery](https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery/) (<https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery/>) and [Mixed Manual and Autonomous Work](https://info.mobilerobot.com/applications/scenarios/mixed-manual-and-autonomous-work/) (<https://info.mobilerobot.com/applications/scenarios/mixed-manual-and-autonomous-work/>).

Typical cell patterns

- A loop between the cell and its supermarket or storage zone — [Deliver and Return](https://info.mobilerobot.com/applications/scenarios/deliver-and-return/) (<https://info.mobilerobot.com/applications/scenarios/deliver-and-return/>).
- Feeding the cell on demand from a mobile or web call — [Come-to-Me](https://info.mobilerobot.com/applications/scenarios/come-to-me/) (<https://info.mobilerobot.com/applications/scenarios/come-to-me/>).

- Clearing finished work to the next stage — [A-to-B-to-C Transport](https://info.mobilerobot.com/applications/scenarios/a-to-b-to-c-transport/) (<https://info.mobilerobot.com/applications/scenarios/a-to-b-to-c-transport/>)
- Cell-adjacent buffers — [Buffer and Staging Management](https://info.mobilerobot.com/applications/use-cases/buffer-and-staging-management/) (<https://info.mobilerobot.com/applications/use-cases/buffer-and-staging-management/>)

When the cell moves or the [layout changes](https://info.mobilerobot.com/applications/scenarios/dynamic-route-changes/) (<https://info.mobilerobot.com/applications/scenarios/dynamic-route-changes/>), the operator re-teaches the points by driving and saving — no automation expert required. See [Temporary Location Setup](https://info.mobilerobot.com/applications/scenarios/temporary-location-setup/) (<https://info.mobilerobot.com/applications/scenarios/temporary-location-setup/>).

Growing beyond one cell

Local automation does not box the site in. When more cells adopt the J1600, advanced automation adds automatic charging, come-to-me, [VDA 5050](https://info.mobilerobot.com/products/software/vda-5050/) (<https://info.mobilerobot.com/products/software/vda-5050/>), fleet management, and [API integrations](https://info.mobilerobot.com/documentation/technical-integration/rest-api-documentation/) (<https://info.mobilerobot.com/documentation/technical-integration/rest-api-documentation/>), so single-cell deployments can later join a coordinated multi-vendor fleet. See [Automatic Charging](https://info.mobilerobot.com/applications/scenarios/automatic-charging/) (<https://info.mobilerobot.com/applications/scenarios/automatic-charging/>) and the [J1600 overview](https://info.mobilerobot.com/products/j1600/overview/) (<https://info.mobilerobot.com/products/j1600/overview/>).

Who this fits

Both larger sites with many small local flows and smaller operations running one to five pallet-jack operators on a single shift — [the segments the J1600 is primarily designed for](https://info.mobilerobot.com/company/about/markets-we-serve/) (<https://info.mobilerobot.com/company/about/markets-we-serve/>). For sites where the whole facility is the changing variable, see [Brownfield Automation](https://info.mobilerobot.com/applications/use-cases/brownfield-automation/) (<https://info.mobilerobot.com/applications/use-cases/brownfield-automation/>).