



The Mobile Robot Company

Knowledge Center — IFOY Innovation Check · 2026-08-04

<https://info.mobilerobot.com/newsroom/awards/ifoy-innovation-check>

IFOY Innovation Check

The IFOY Innovation Check is the scientific stage of the IFOY Audit. It assesses each finalist on functionality and implementation, novelty, customer benefit, and market relevance. Participating institutions include Fraunhofer IML, Fraunhofer IPA, the Technical University of Munich, and TU Dresden. This page summarizes the check's assessment of the [J1600](https://info.mobilerobot.com/products/j1600/overview/) in the 2026 competition.

Functionality and implementation

The check described the J1600 as a pioneering dual-mode vehicle that blurs the boundary between manual pallet handling and autonomous robotics. It can begin work without complex IT integration: an operator manually guides it, saves destinations, and the vehicle returns autonomously while avoiding obstacles. Preferred travel zones can be defined for safer routing in production areas.

Novelty

The assessment places the J1600 between classic [automated guided vehicles \(AGVs\)](https://info.mobilerobot.com/documentation/concepts/mobile-robot-terminology/) and manual pallet jacks. It highlights 3D mapping combined with 2D safety sensors, producing a surrounding protective field and certified safe reversing without specially marked target zones. Lithium iron phosphate (LiFePO₄) batteries, [VDA 5050](https://info.mobilerobot.com/documentation/concepts/vda-5050-explained/) support, and immediate tiller takeover support industrial use.

Customer benefit

- manual-effort reduction of up to 80% for repetitive transport;
- human control retained for difficult load handling;
- lower risk and faster return on investment without a complex IT project or permanent Wi-Fi;
- applicability even to smaller, single-shift businesses.

Market relevance

The check rates market relevance highly because manual pallet handling dominates a market of more than one million pallet-jack sales per year. Small and medium businesses can automate initial processes without redesigning their workflows.

Ratings

Criterion	Rating
Functionality / type of implementation	++ (very good)
Novelty / innovation	+ (good)
Customer benefits	+ (good)
Market relevance	+ (good)

Verdict

The check considers the J1600 a significant step toward accessible, low-threshold intralogistics automation, combining industrial AI capability with intuitive use and broad applicability — a "game changer" for low-threshold intralogistics automation.

The Innovation Check was one of three stages that led to the [Best in Intralogistics Certificate](https://info.mobilerobot.com/newsroom/awards/best-in-intralogistics/) and the [IFOY Award 2026](https://info.mobilerobot.com/newsroom/awards/ifo-award-2026/) win. The dual-mode concept it evaluated is explained in [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/).