

NEWS

The Quiet Group

How autonomous robots drive today, what makes them safe, and what rules are coming next.

23 June 2026, Tobias Engl



Shortly after midnight, the departure hall empties out. The last suitcases have been processed, the escalators have stopped, and a machine is making its way across the polished floor, quietly and at a steady pace. It swerves around a forgotten luggage cart without hesitation and resumes its course. No one is guiding it. No one needs to.

What looks so natural is actually a combination of the senses and judgment. A laser scanner maps the space in millimeters, cameras detect depth and obstacles, and an orientation sensor maintains balance. From this data, the machine constructs a picture of its surroundings and decides, step by step, what to do next. Modern robots clearly separate two levels in this process: the upper level, where they accept safe, approved tasks, and the lower level, where motors and joints are controlled. Humans remain the calm reserve in the background, ready but rarely needed.

One floor up, an employee sorts lost and found items and checks the bulletin boards—work that requires sound judgment. He leaves the floor cleaning to the machine. This division of labor is a recent development, and the teams like it. Technology takes care of the monotonous tasks, while the tasks that require thinking remain with people.

To ensure that this trust is well-founded, the technology has long been standardized. For autonomous ground-based machines, IEC 63327 applies, which describes autonomous operation; for robots operating in the vicinity of people, ISO 10218 (2025 edition) and ISO 13482 apply to everyday service operations. In addition, there is the CE mark in accordance with European machinery regulations and, where inspectors confirm it, the GS seal. Only this combination of standards transforms an impressive demonstration into a colleague who is permitted to work alone at night.

The regulatory framework is evolving alongside technology. ISO 25785, the first standard specifically designed to describe humanoid movement, is currently being developed for mobile, self-balancing robots. Starting in 2027, the European Machinery Regulation will replace the old directive and take connected, learning systems into account from the very beginning. The guidelines are being broadened just as these machines are about to make the transition from the hallway to the living room.

This is where ScreenWay comes in. A robot that navigates safely should also be easy to understand: it should show what it's doing, announce its next move, and blend into the home where it's located. ScreenWay openly displays its status and transmits commands only through a verified, secure interface. The display and voice remain local, and the data stays within the home. This way, autonomy doesn't mean a loss of control - it means an extra evening to yourself: ten more peaceful minutes while the machine makes its rounds.

The last train has left the station. The machine is returning to the station and loading up. In the morning, the floor will be gleaming, and hardly anyone will know who did the work. That's fine.

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