

Company Description

Embotech is a global deep-tech company delivering safety-certified autonomous driving solutions for industrial logistics. Founded in 2013 as a spin-off from ETH Zurich, the company develops autonomous systems designed for complex and demanding logistics environments.

Its Automated Vehicle Marshalling (AVM) and Autonomous Tractor Solution (ATS) are deployed in automotive factories, vehicle distribution centers, ports, and logistics yards where they operate 24/7 in mixed traffic conditions.

As the first company worldwide with two TÜV SÜD-certified Level 4 autonomous solutions, Embotech combines AI-powered autonomy with certified safety to help customers improve efficiency, reliability, and resilience in demanding logistics environments.

Its solutions have been proven at scale, moving more than > 2,500 vehicles autonomously every day in productive deployments.

Autonomous Logistics. Built to Deliver. For more info, visit embotech.com

Boiler Plate

Embotech is a global leader in safety-certified Level 4 autonomous driving solutions for industrial logistics and the first company world-wide to hold multiple TÜV-certified Level 4 solutions. Its Automated Vehicle Marshalling (AVM) and Autonomous Tractor Solution (ATS) are deployed in automotive factories, vehicle distribution centers, ports, and logistics yards – improving safety, productivity, resilience, and sustainability across logistics operations. Autonomous Logistics. Built to Deliver. For more info, visit www.embotech.com

Company Facts

- Founded: 2013 (ETH Zurich spin-off)
- Headquarters: Zurich, Switzerland
- Offices: Munich, Rotterdam, Novi Sad
- Employees: 120+
- Investors: BMW i Ventures, Emerald, Nabtesco, Yttrium, ZF
- Deployments: Automotive OEMs, ports, and logistics operators
- Scale: >2,500 autonomous vehicle movements per day

Our Solutions

Automated Vehicle Marshalling (AVM)

CE-marked, TÜV-certified Level 4 solution for autonomous vehicle movement in automotive factories, logistics centers, and vehicle distribution centers. AVM operates without modifications to the vehicles, using

infrastructure-based intelligence to manage vehicle flow from production to dispatch.

Autonomous Tractor Solution (ATS)

CE-marked, TÜV-certified Level 4 solution for ports and logistics yards. ATS enables fully driverless transport of containers, trucks, and materials in mixed-traffic environments without requiring infrastructure changes.

How it works

Embotech's autonomy platform combines real-time perception, prediction, and trajectory planning to control industrial vehicles in complex environments. The system continuously monitors its surroundings, anticipates movements, and adjusts driving behavior accordingly. AI-based models are used for perception, prediction, and motion planning, while safety is enforced independently through system-level constraints, supervision, and deterministic fallback behavior.

This architecture forms the basis for a safety-certified control system, enabling reliable operation under all conditions.

Deployment model differs by application:

- AVM operates with infrastructure-based sensing and offboard orchestration
- ATS runs fully embedded onboard the vehicle with redundant, safety-certified sensors providing 360° perception

Core Capabilities

- Operation in mixed-traffic environments without segregated areas
- Centimeter-level positioning and high-precision maneuvering
- Real-time obstacle avoidance
- Certified safety architecture with deterministic fallback behavior
- Integration into existing operations and IT systems without infrastructure changes

Operational Impact

- Increased throughput through continuous autonomous operation
- Improved safety by reducing human exposure in high-risk areas

- More stable and predictable operations through consistent vehicle behavior
- Scalable deployment across sites and vehicle types
- Lower operating costs through reduced manual handling and improved asset utilization

Proof Points & Deployments

- First company worldwide with two TÜV-certified Level 4 autonomous solutions in commercial operation
- More than 2,500 autonomous vehicle movements per day in customer operations
- Over 800,000 autonomous vehicle movements completed to date
- 5 safety-certified sites
- Deployment across automotive OEM plants, vehicle logistics centers, and container terminals in Europe and the US

Testimonial Voices

OEM

Milan Nedeljkovic, Member of the Board of Management, BMW AG:

“Automated Driving In-Plant optimizes our production process and delivers significant efficiency gains for our logistics.”

Terminal Operator

Harold Kunst CEO APM Terminals MVI:

“This collaboration with Embotech and Terberg marks an important step towards the most efficient, most sustainable and safest automated terminal in Europe. With this innovative autonomous technology, we are setting a new standard in ports.”

Investor

Marcus Behrendt, Managing Partner at BMW i Ventures:

“The technology has the potential to fundamentally change the vehicle production process...as it reshapes the market for autonomous driving solutions in logistics.”