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.

Built on a shared autonomy platform, its certified solutions - 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 >3,500 vehicles autonomously every day in productive deployments.

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

Boiler Plate

Embotech is a global leader in safety-certified Level 4 autonomous driving solutions for industrial logistics and the first company worldwide to hold multiple TÜV-certified Level 4 solutions. Built on a shared autonomy platform, its two certified solutions - Automated Vehicle Marshalling (AVM) and Autonomous Tractor Solution (ATS) - are deployed in automotive factories, vehicle distribution centres, ports, and logistics yards, improving safety, productivity, resilience, and sustainability across logistics operations.

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Company Facts

- Founded: 2013 (ETH Zurich spin-off)
- Headquarters: Zurich, Switzerland
- Offices: Munich, Rotterdam, Novi Sad, Wroclaw
- Employees: 140+
- Investors: BMW i Ventures, Emerald, Nabtesco, Yttrium, ZF
- Deployments: Automotive OEMs, ports, and logistics operators
- Scale: >3,500 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 3,500 autonomous vehicle movements per day in customer operations
- Over 1,000,000 autonomous vehicle movements completed to date
- 8 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.”