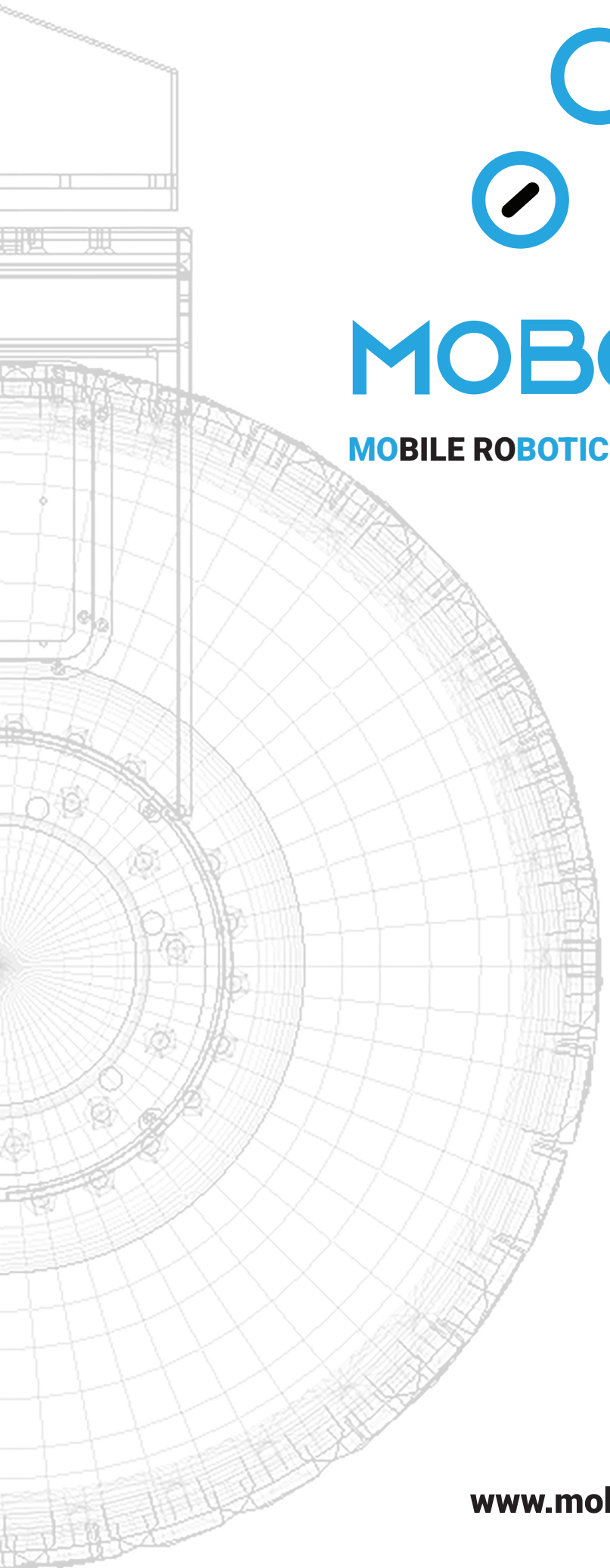


MOBOTIC

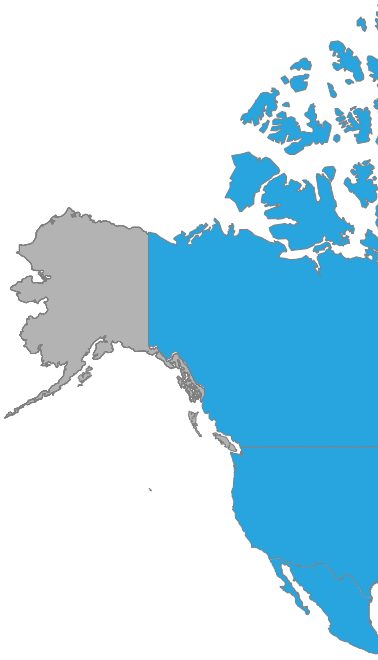
MOBILE ROBOTIC TECHNOLOGIES

www.mobotic.de

Driving Mobile Robotics

Mobotic GmbH is a technology-driven company specializing in advanced solutions for mobile robotics and electric machinery. We develop next-generation drive systems and integrated subsystems that power the transition to autonomous movement. By combining technical precision with experienced in-house engineering, we transform complex innovations into robust, application-ready solutions.

Core Application Fields



Warehousing & Intralogistics

Automated pallet transport and smart picking using AMRs and tugger trains. Optimized for swarm intelligence, wheeled parcel sorting robots, and autonomous material transport for warehouses and construction sites.

Smart Manufacturing & Automation

High-precision mobile platforms and wheeled Mobile Manipulators (MoMa) for 24/7 assembly line feeding. Designed for industrial kitting robots, machine tending, and robotic platforms for modular equipment.

Agriculture & Engvironment

Robust drive systems for self-driving tractors, fruit harvesters (apples, strawberries, vineyards), and AI-based weeding robots. Includes field scouting robots for crop monitoring and autonomous harvesters for mining and farming.

Healthcare

Hygienic motion solutions for wheeled UV-C disinfection robots, meal delivery bots, and patient transport units. Built for hospital service robots, laundry transport, and safe human-robot interaction in medical facilities.

Urban & Last-Mile Logistics

Next-gen propulsion for sidewalk delivery robots (food, parcels), grocery pods, and campus delivery robots. Focus on zero-emission last-mile delivery, robotaxis, and autonomous outdoor e-commerce logistics.

Pharma

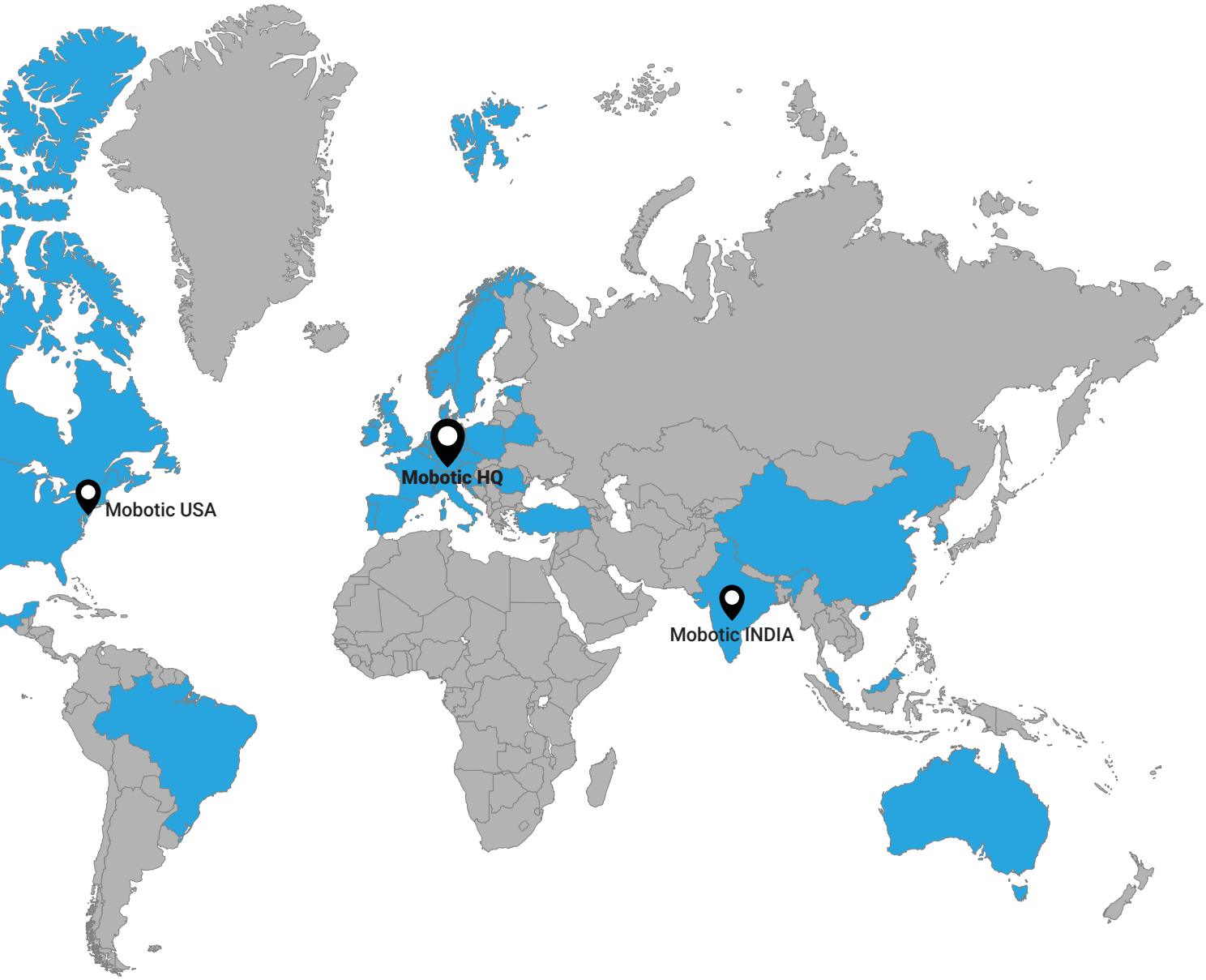
Ultra-clean drive systems for laboratory sample movers, medicine delivery robots, and cleanroom-certified AMRs. Meets ISO compliance for sterile production and automated pharmacy logistics in labs and hospitals.

Heavy Load & Specialized Transport

High-payload AMRs (up to 50t) for automotive chassis, wind turbine transporters, and heavy machinery carriers. Powered by high-torque drives for demolition robots and autonomous construction site logistics.

Security, Surveillance & Defence

High-performance dual-use technology for tactical wheeled UGVs, perimeter patrol rovers, and infrastructure inspection robots. Engineered for mission-critical reliability in airports, seaports, and industrial energy sites.



Your unique challenge is our next innovation. We specialize in developing custom-engineered solutions perfectly tailored to your specific technical requirements.

"At Mobotic, our vision is rooted in responsibility toward our customers, society, and the environment. By developing intelligent, reliable, and sustainable technologies, we aim to shape a future where robotics and mobility create meaningful value for people and industry alike."

Gregor Modrijan, CEO

From vision to Mobile Robotics solutions

At Mobotic, we don't just deliver technology — we engineer success. Our in-house team ofcomplete deployment of mobile robotic systems.With deep know-how and a hands-on approach, we ensure projects run smoothly, free ofunnecessary complications. Every solution is tailored to specific needs, combining provenengineering expertise with flexible customization.Our engineering team can be contracted to consult, design, integrate, or lead the development ofmobile robotic systems according to each project's technical requirements.

Our scope of services

We support every stage of the engineering process — transforming abstract concepts into validated, deployable systems.

Application Consulting

Analysis of target use cases, technical requirements, and feasibility. Establishes a solid basis for system development.

Concept & System Architecture

Definition of overall concept, system architecture, and key subsystem interfaces ensuring scalability and integration.

Engineering & Detailed Design

Mechanical, electrical, and control system design with complete component selection, integration, and documentation.

Prototyping & Validation

Development of functional prototypes followed by testing, verification, and compliance evaluation.

Commissioning & Calibration

On-site deployment, configuration, and tuning of systems to achieve reliable operational performance.

Service & Lifecycle Support

Long-term maintenance, updates, and optimization to ensure continued reliability and system longevity.

Smart Manufacturing & Automation

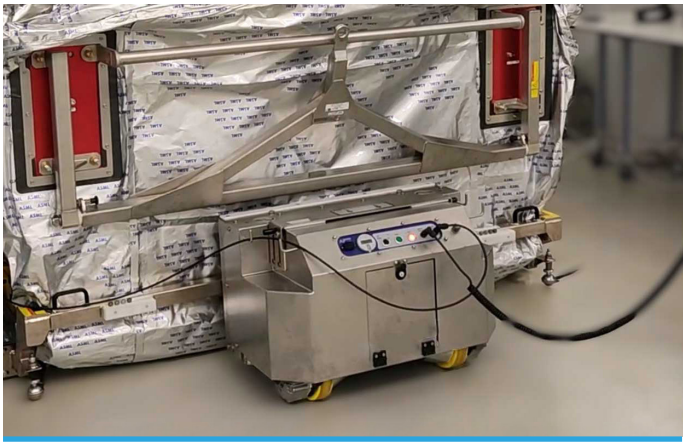
Warehousing & Intralogistics

Agriculture & Environment

Security, Surveillance & Defence

Personal Mobility

Healthcare



CleanRoom, Semiconductor industry

Outdoor Mobile Robots

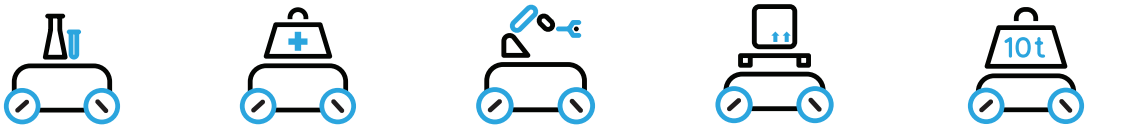
MoboDrive ST

Integrated STEERED-TRACTION UNITS for indoor mobile robots and machinery

MoboDrive ST is a family of compact and highly integrated Steered-Traction units designed for highly maneuverable AMRs and AGVs. MoboDrive ST is available in several standard versions, while also offering full flexibility through configured-to-order solutions tailored to specific application requirements. This modular approach allows customers to precisely match performance, safety, and integration needs without compromising the reliability and delivery lead times.

For the most demanding and forward-looking customers, we also offer fully customized solutions, developed to meet unique operational, environmental, or technical challenges.

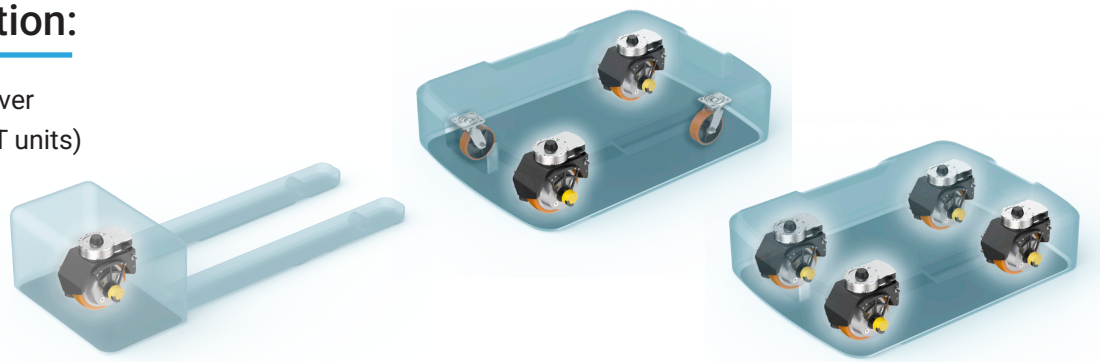
Key areas of application:



Pharma | Health | Smart Factory | Intralogistics | Heavy Transport

Drive configuration:

- Single-wheel pallet mover
- Omni platforms (2-4 ST units)
- Multi-wheel variants



Key benefits:

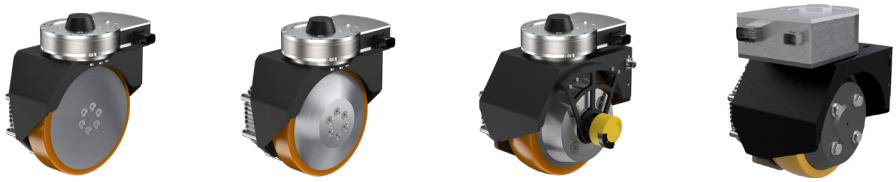
Quick setup – By integrating all drive components into a single unit, the time required for integration into a mobile robot is reduced by nearly 80 %. Plug and play!

Comapct design – It combines a steering actuator with endless rotation, a high-torque traction motor, redundant encoder systems, and robust motor control electronics in a single module.

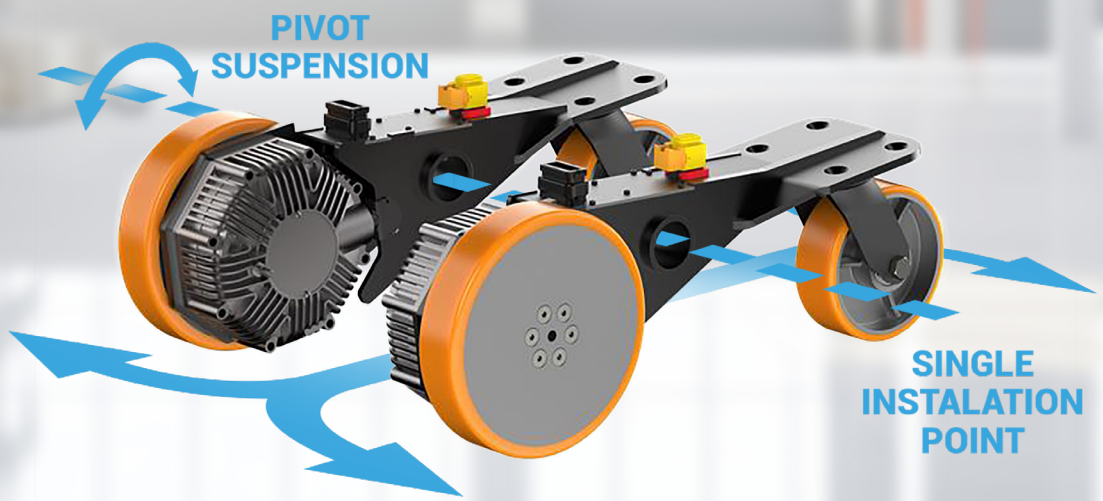
New AGV/AMR Design Possibilitys – Extremely small, optimized training radius (of only 268 mm), makes significantly smaller, space-saving solutions achievable—configurations that were previously not possible.

Use in sensitive environments – Fully enclosed design eliminates cleanliness and contamination challenges (innovative, hygienic drive solution for clean-room applications).

Radial Laod Capacity – The system supports radial loads ranging from light weights to up to 2500 kg, offering a broad application spectrum for mobile robots across diverse industries.



	Size M			Size L
Technical Specification	ST-500-225	ST-1000-225	ST-1200-225	ST-2000-300
Maximum load capacity	500 kg	1000 kg	1200 kg	2000 kg
Wheel size	225 x 50 mm	225 x 50 mm	225 x 70 mm	300 x 90 mm
Traction torque	Up to 120 Nm	Up to 120 Nm	Up to 500 Nm	Up to 1200 Nm
Traction speed	Up to 2,3 m/s	Up to 2,3 m/s	Up to 2,0 m/s	Up to 1,5 m/s
Maximum steering torque	250 Nm	250 Nm	250 Nm	500 Nm
Supply voltage	24-60 V	24-60 V	24-60 V	24-60 V



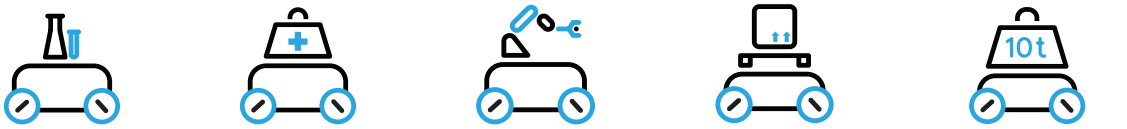
MoboDrive DD

Compact, integrated DIFFERNTIAL DRIVE SYSTEMS for AGVs & AMRS

MoboDrive DD combines power and efficiency with smart design that saves time during installation, commissioning and maintenance.

Integrated traction motor and control electronics ensure optimal torque and stability, whiles mart metal components provide space-saving, heat dissipation, and suspension, maximizing performance and durability.

Key areas of application:



Pharma | Health | Smart Factory | Intralogistics | Heavy Transport

Highlights:

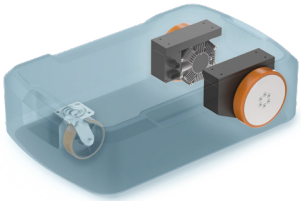
- Compact Plug & Play Drive System: Traction units with a tuned motor controller smartly integrated
- Simple assembly and maintenance with single power and communication connectors
- Optimized thermal design with heat-generating components removed from the central compartment of the robot
- Easily customizable to fit various vehicle chassis
- Supports all differential drive vehicle architectures
- Additional features: Brake control, state-of-health monitoring, dynamic PID tuning, and more

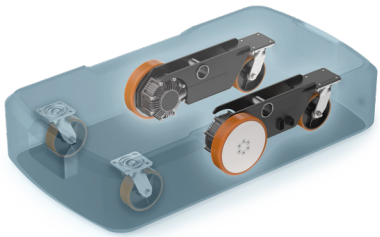
Safety & Communication:

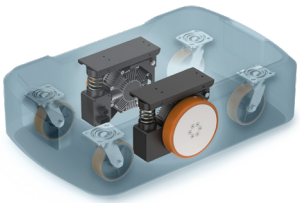
- CanOPEN, EtherCAT, ProfiNET
- Safety supervision encoder: SSI, BiSS-C, Sin/Cos

Applications:

- Dynamic intralogistics use cases up to 1,5T payload
- Automation & Manufacturing slow-speed & high precision with payloads up to 4T







Ordering infomation:

MoboDrive DD – RR – 500 – 225 – 54 – 48 – C – 00

DD - Differential Drive

Unit Type
R - Rocker bogie
S - Spring
H - Hard

Unit Position
R - Right
L - Left

Max wheel Load
500 kg
1.000 kg
1.200 kg

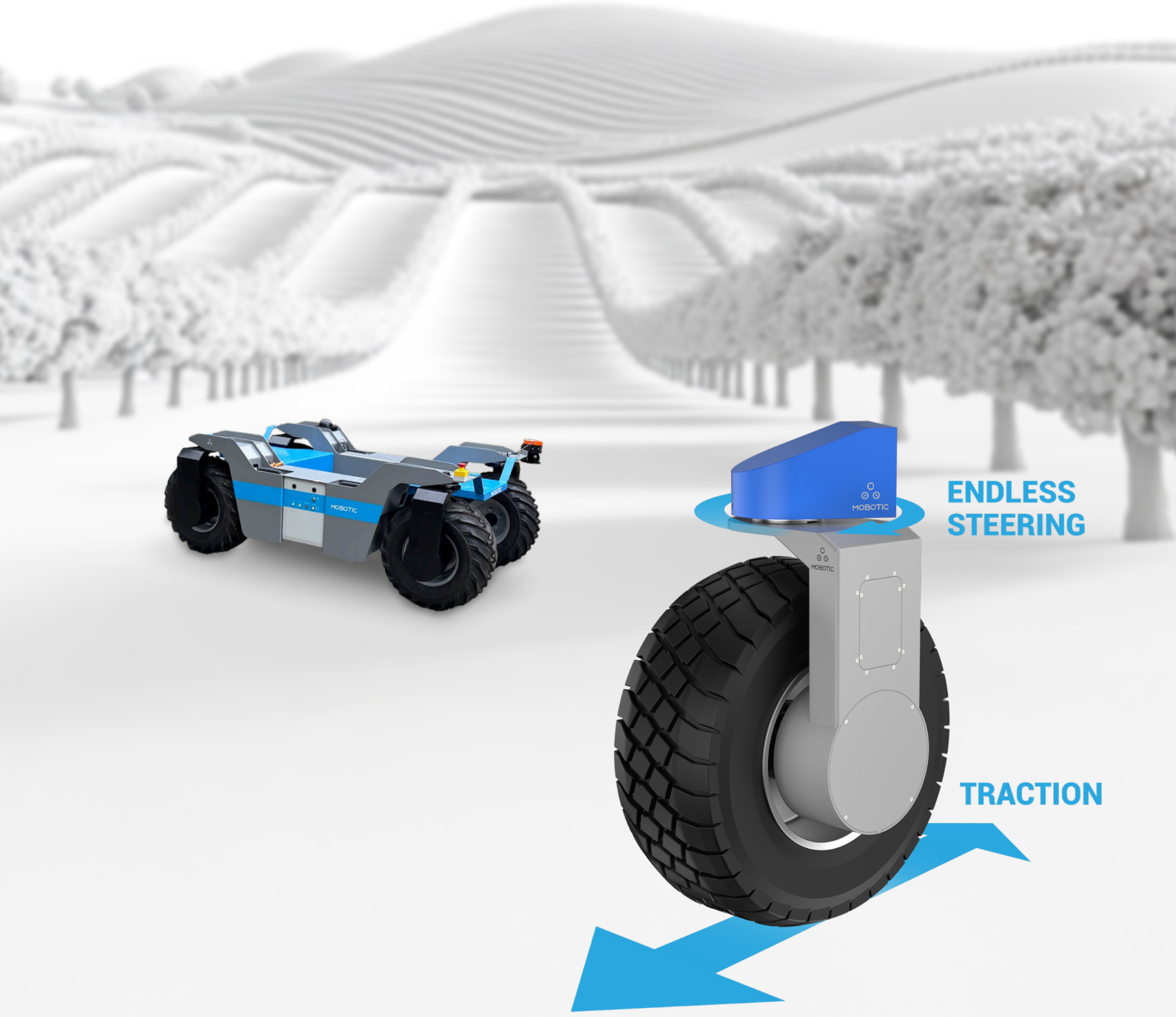
Wheel diameter
180 mm
190 mm
200 mm
210 mm
225 mm
250 mm

Nominal Wheel Torque
35 Nm
40 Nm
50 Nm
54 Nm
80 Nm
100 Nm

Nominal Voltage
48 V
24 V

Communication
C - CAN
EC - EtherCat
PN - Profinet

Customer specific



MoboDrive STO

Integrated STEERED-TRACTION UNITS for outdoor mobile robots and machinery

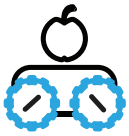
Our unique drive solutions enable you to build compact, reliable, and safe Agricultural Mobile Robots and mobile machinery.

With our extensive expertise in conventional AGV & AMR for intralogistics and automation, we offer the finest standard drive system options for your mobile robotic application. In the most demanding and critical environments, we offer high-performance solutions tailored to your needs.

Whether customization or new development is needed, we support your project from concept through development and testing to serial production.

Key areas of application:

Security & Defence



Agri-Environment

Last-Mile Delivery

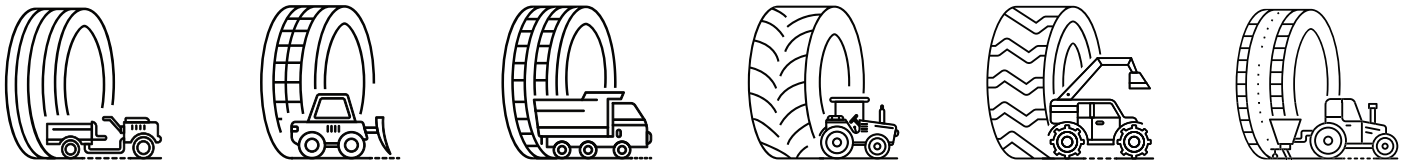
Highlights:

- Compact and highly integrated design
- Plug & Play (Power + Communication + Safety)
- Compliant with safety standards for mobile machinery
- Protected and robust design for outdoor use
- Integrated control electronics and encoder systems
- Compatible with standard rims/tires

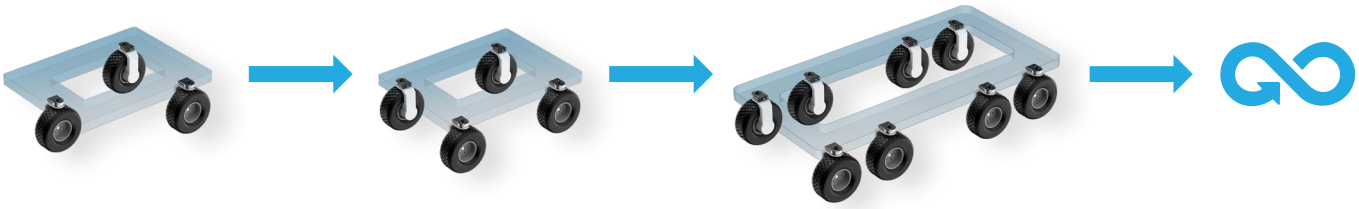
Safety & Communication:

- Comunication interface options: CANopen, EtherCAT, ProfiNET
- Integrated Parking & Emergency brakes
- Safety encoder interface: SSI, BiSS, Sin/Cos

Tire profile for any application (up to 26”)



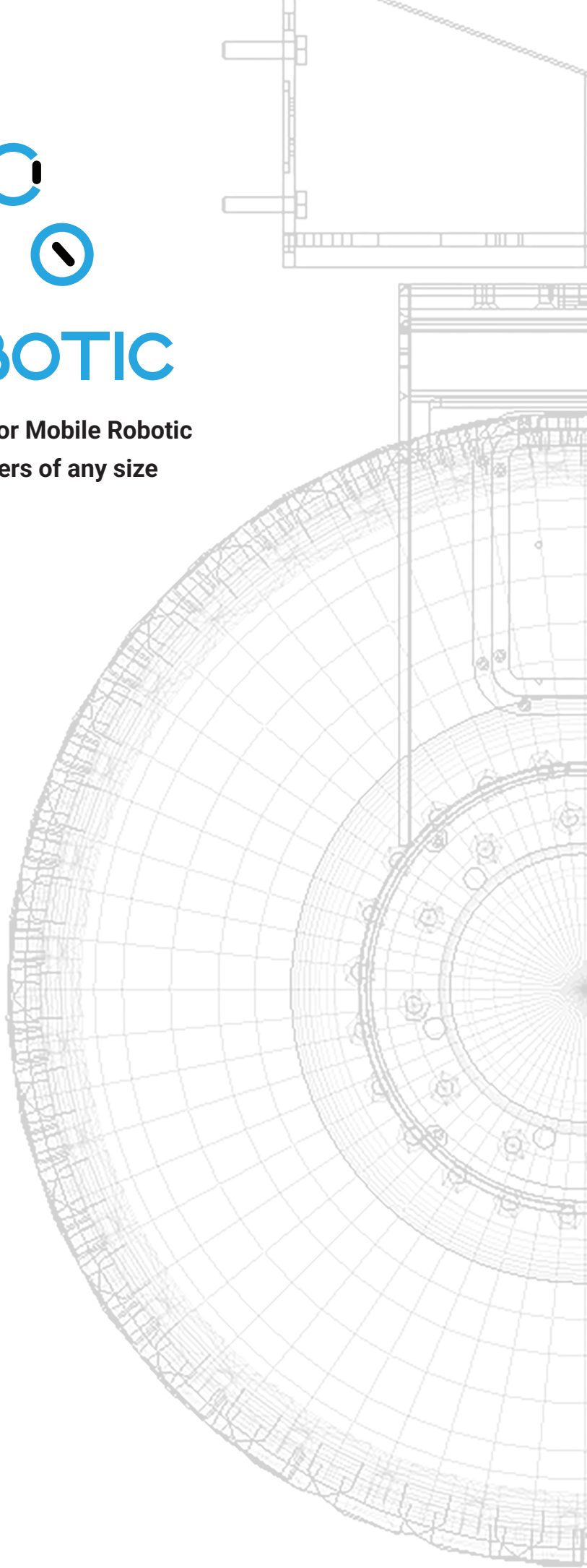
Load scalable with number of wheels from 100kg to infinity



Technical Specification	STO-1200-380	STO-1200-560	STO-1200-700
Rim size	380 x 130 mm	560 x 160 mm	380 x 130 mm
Maximum load capacity	1200 kg	1200 kg	1200 kg
Traction torque	Up to 320 Nm	Up to 500 Nm	Up to 500 Nm
Traction speed	Up to 25 km/h	Up to 40 km/h	Up to 45 km/h
Steering torque	250 Nm	250 Nm	470 Nm
Supply voltage	24-60 V	24-60 V	24-60 V

MOBOTIC

Right partner for Mobile Robotic manufacturers of any size



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