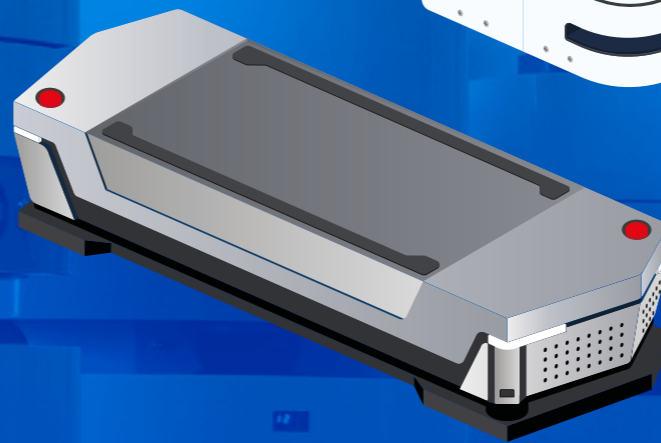
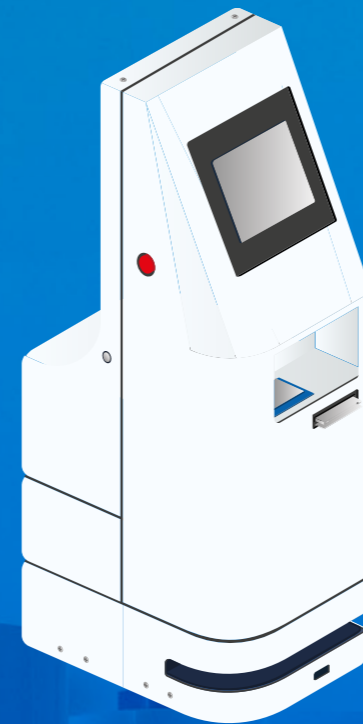
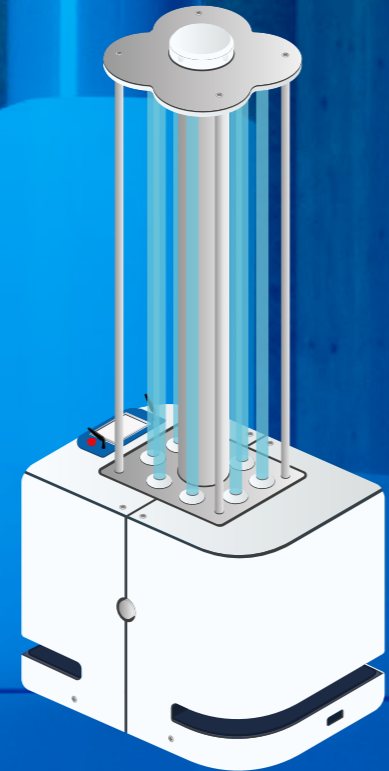
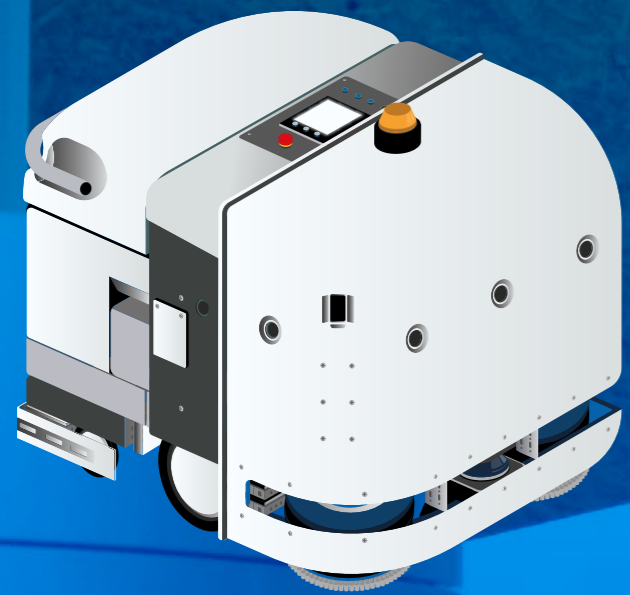


Engineering Services

| From idea to product

BLUEBOTICS

— Your Vehicle Navigation Partner



**EXPERT
TEAM**

of
engineers

**24
YEARS**

of development
experience

**INDUSTRY
LEADING**

ANT navigation
technology

ENGINEERING SERVICES FOR YOUR AGV OR MOBILE ROBOT

Deciding to become one of your market's innovation leaders, or even disrupt a market, by creating an automated guided vehicle (AGV) or autonomous mobile robot (AMR) is one thing. Developing that product is quite another.

At BlueBotics, we've been helping companies to bring mobile robots and AGVs efficiently to market for over two decades.



Team up
with the right partner



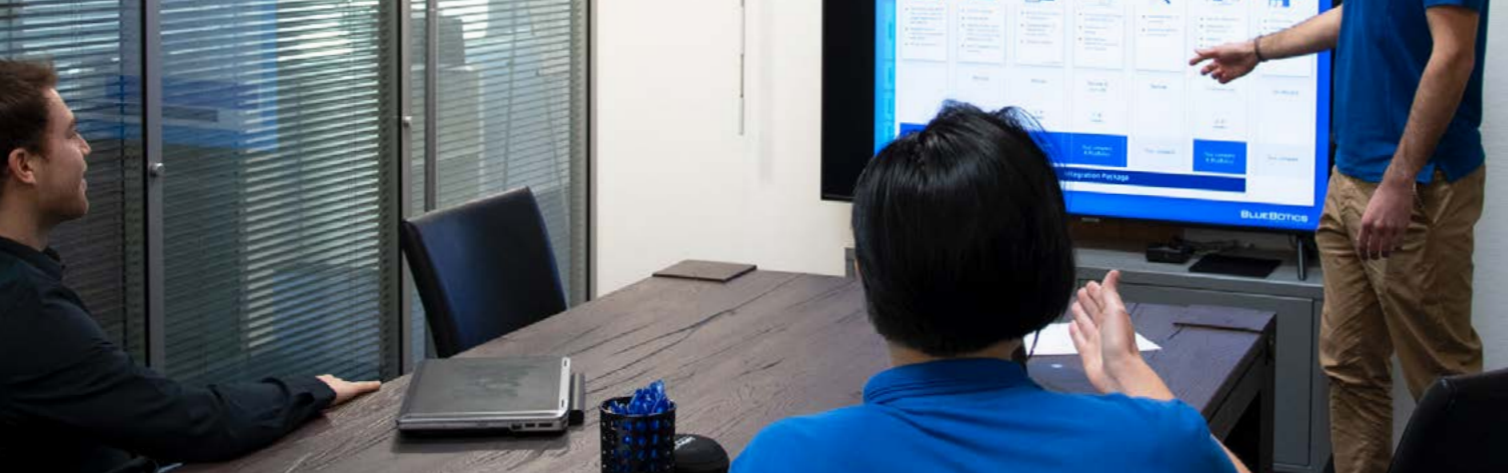
Bring
your vehicle to life



Lead
your market

Inside:

| | |
|------------------------|----|
| Your path to success | 4 |
| ANT navigation | 5 |
| Mobile robot platforms | 6 |
| Example projects | 8 |
| References | 10 |



YOUR PATH TO SUCCESS

To create an AGV or mobile robot that is tailored to your customer's needs, we propose our proven three-phase development process.

1



1. Feasibility

We discuss your product's use case to define its functional specification. This allows us to assess its technical feasibility and costs with you.

2



2. Prototyping

We define technical specifications and together develop a prototype - handling whatever you need, from design to production.

3



3. Launch

When you go to market, we work with you to ensure your launch is a success, including providing on-site support at your first customer installation.

BUILT ON AUTONOMOUS NAVIGATION TECHNOLOGY (ANT)

All BlueBotics engineering services projects are built upon our ANT navigation technology.

The result of over 20 years of industry experience, ANT is a flexible, accurate and robust solution that ensures our partners' AGVs and mobile robots are both simple to use and cost-effective to install and modify.



Explore ANT navigation
Find out how natural feature navigation works by visiting our in-depth webpage.

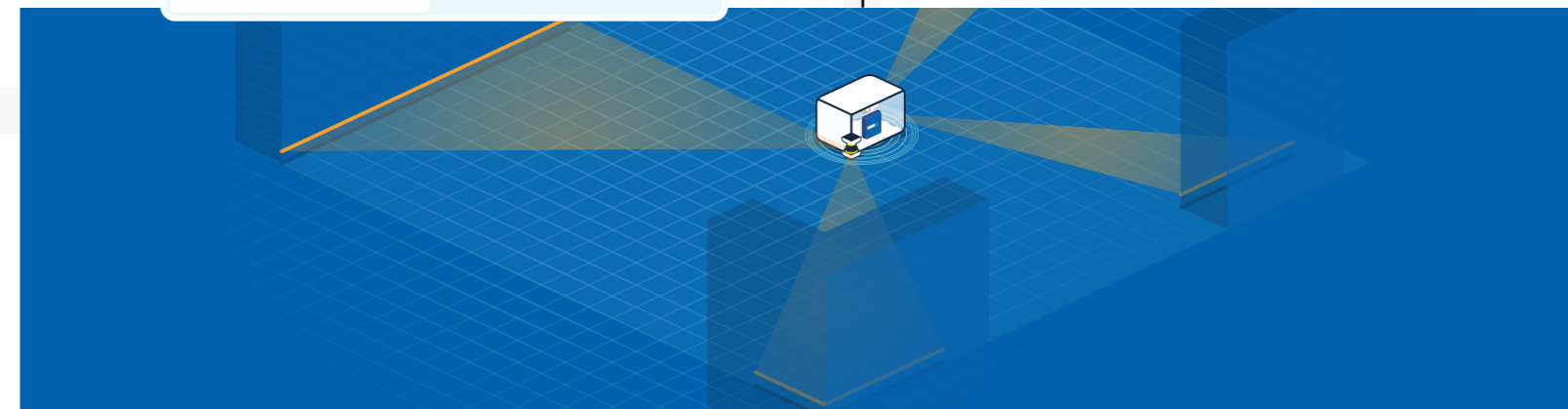
[> LEARN MORE](#)

All BlueBotics products are FCC/CE certified.



NATURAL FEATURE NAVIGATION FOR YOUR AGV OR MOBILE ROBOT

- > Accurate to ± 1 cm / $\pm 1^\circ$
- > Minimal infrastructure changes (reflective stickers possible)
- > Vehicles commissioned in days, not weeks
- > Multi-vehicle fleet management



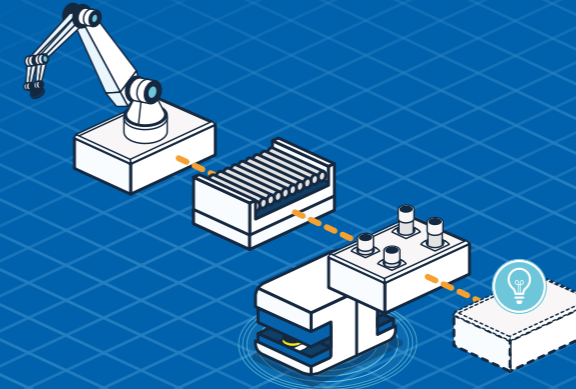
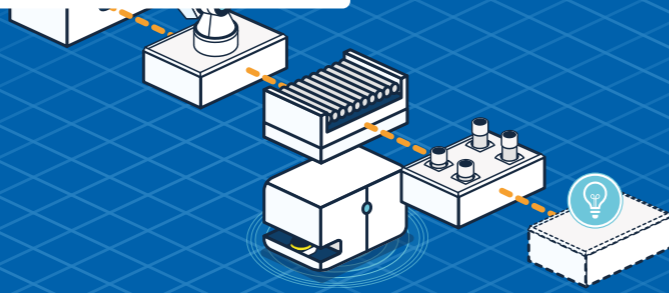
“The robot engineering services of BlueBotics, combined with the robustness of the ANT product, opened the door for Cleanfix to commercialize an autonomous professional cleaning machine for new applications in hospitals, airports, and commercial centers.”



Felix Ruesch
CEO
Cleanfix

AUTONOMOUS MOBILE ROBOT PLATFORMS

These platforms are a proven base on which, together, we can develop a vehicle that meets your exact needs.



mini™ lite

THE MOBILE ROBOT PLATFORM FOR DIVERSE APPLICATIONS

The BlueBotics mini™ lite is a flexible, industry-proven autonomous mobile robot (AMR) platform. Driven by our ANT navigation technology and therefore immediately fleet-ready, it is the perfect base on which to develop a vehicle that meets your organization's specific needs.

mini™

THE MOBILE ROBOT PLATFORM FOR CLEANROOM APPLICATIONS

The BlueBotics mini™ is a compact, low particle emission autonomous mobile robot (AMR) platform. Driven by our ANT navigation technology this fleet-ready performer is the perfect base on which to develop a vehicle that meets your cleanroom's specific needs.

YOUR APPLICATION, OUR MOBILE ROBOT

Ideal for:

- > Light material handling (boxes/racks/trays)
- > Integration of small industrial robots/cobots
- > Custom applications

| TECHNICAL SPECIFICATIONS | mini™ lite | mini™ | TECHNICAL SPECIFICATIONS |
|--------------------------|--|-------------------------|--------------------------|
| Dimensions (WxHxL) | 46 x 39 x 68 cm | 40 x 30 x 59 cm | Dimensions (WxHxL) |
| Weight (platform) | 100 kg | 70 kg | Weight (platform) |
| Weight (modules) | 15 - 25 kg | 15 - 25 kg | Weight (modules) |
| Payload capacity | 100 kg | 150 kg | Payload capacity |
| Max. speed | 1.5 m/s | 1.5 m/s | Max. speed |
| Autonomy | >6 hours | >6 hours | Autonomy |
| Charging time | 1.2 hours | 1.2 hours | Charging time |
| Automatic recharging | Optional | Included | Automatic recharging |
| Safety | 270° laser scanner view (360° with optional 2nd laser scanner) | 360° laser scanner view | Safety |

YOUR APPLICATION, OUR MOBILE ROBOT

Ideal for:

- > Cleanrooms
- > Laboratories
- > Light material handling (boxes/racks/trays)
- > Custom applications
- > Integration of small industrial robots /cobots

Includes:

- ANT navigation technology
- Custom module development
- Lift module option
- Obstacle avoidance option
- Conveyor module option
- Fleet management

Includes:

- Low particle emission
- Conveyor module option
- Articulated chassis
- Custom module development
- Highly compact
- Obstacle avoidance option
- ANT navigation technology
- Lift module option
- Fleet management

EXAMPLE PROJECTS

Our expert team has helped companies around the world to develop AGVs and mobile robots from the ground up. Here are a few key examples...

DEVELOPMENT OF A MOBILE ROBOT FOR CLEANROOM MANUFACTURING



Client: ABB Group
 Application: Semiconductor manufacturing
 Vehicle: BlueBotics mini™



The BlueBotics mini™ mobile robot base was developed to meet the exacting demands of ABB's 'Genesis' production automation project in Lenzburg, Switzerland.

DEVELOPMENT OF A ROBOTIC CLEANING MACHINE



Client: Cleanfix
 Application: Professional cleaning
 Vehicles: RA660 Navi, RA660 Navi XL



We collaborated with Swiss cleaning leader, Cleanfix, to help the company develop its first robotic floor scrubber. This was followed by the development of a larger XL model.

DEVELOPMENT OF AN AUTONOMOUS DISINFECTION ROBOT



mini™ UVC

Client: Engmotion
 Application: Commercial disinfection
 Vehicle: mini™ UVC



BlueBotics was approached by healthcare automation specialists Engmotion to develop a robust and fleet-ready autonomous disinfection robot.

DEVELOPMENT OF A MOBILE ROBOT FOR HEALTHCARE LOGISTICS



Client: Opent
 Application: Hospital logistics, manufacturing
 Vehicle: EVOcar™



We helped the company to design a new hospital logistics robot from scratch. This included the development of a complete traffic management solution and working with a strategic partner for flow and infrastructure control.

DEVELOPMENT OF AN INTELLIGENT ROBOTIC KIOSK



Client: SITA
 Application: Airport check-in
 Vehicle: SITA Kate



We worked with SITA, provider of IT and telecommunication services to the air transport industry, to develop three prototypes of its SITA Kate check-in kiosk, moving from specification to delivery in under four months.



OUR STORY

Established in Switzerland in 2001, we have more than twenty years of AGV and mobile robot development experience. Here is a quick guide to some of our most interesting projects to date.



6,000+

ANT driven vehicles in operation worldwide

2,000+

end-user vehicle installations

10 MILLION KM

driven by ANT (250 times the circumference of the Earth)

PRESENT IN 30+

countries across all 5 continents

50+

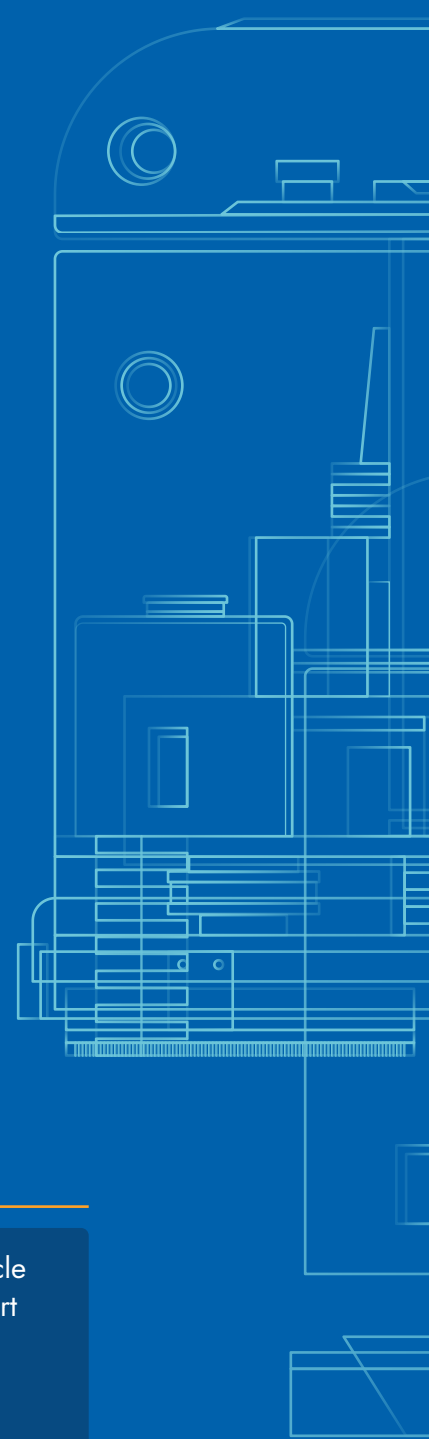
employees based in Switzerland

BLUEBOTICS TODAY



BLUEBOTICS

— Your Vehicle Navigation Partner



About us

At BlueBotics we help companies meet the challenge of vehicle automation. We provide the navigation technology and expert support they need to bring their AGV, automated forklift or mobile robot successfully to market.

A ZAPI GROUP COMPANY

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ISO 9001:2015
certified