Engineering Services

From idea to product

BlueBotics
Your Vehicle Navigation Partner
EXPERT TEAM 20 YEARS of engineers of development experience
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.
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. 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. Prototyping
   We define technical specifications and together develop a prototype - handling whatever you need, from design to production.

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.
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 Rüesch
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.

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.

YOUR APPLICATION, OUR MOBILE ROBOT

Ideal for:

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

Includes:

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

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>mini™ lite</th>
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<tbody>
<tr>
<td>Dimensions (WxHxL)</td>
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<tr>
<td>46 x 39 x 68 cm</td>
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<tr>
<td>Weight (platform)</td>
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<tr>
<td>100 kg</td>
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<td>Weight (modules)</td>
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<td>15 - 25 kg</td>
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<tr>
<td>Payload capacity</td>
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<td>Automatic recharging</td>
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<td>Optional</td>
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<tr>
<td>Safety</td>
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<tr>
<td>270 ° laser scanner view (360° with optional 2nd laser scanner)</td>
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</table>
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.

### mini™

**Dimensions**

- 40 x 30 x 59 cm

**Weight (platform)**

- 70 kg

**Weight (modules)**

- 15 - 25 kg

**Payload capacity**

- 150 kg

**Max. speed**

- 1.5 m/s

**Autonomy**

- >6 hours

**Charging time**

- 1.2 hours

**Included**

- Automatic recharging

- Safety

### Technical Specifications

- **360° laser scanner view**

### Ideal for:

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

### Includes:

- Low particle emission
- Articulated chassis
- Highly compact
- ANT® navigation technology
- Lift module option
- Conveyor module option
- Custom module development
- Obstacle avoidance 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.
BlueBotics was approached by healthcare automation specialists Engmotion to develop a robust and fleet-ready autonomous disinfection robot.

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.

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.
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.

- **2001**: BlueBotics is founded as a spin-off of EPFL.
- **2002**: Our team installs 11 BlueBotics-developed ‘RoboX’ guide robots at the Swiss National Exhibition.
- **2007**: We design and manufacture a robotic mobile coffee machine for Nespresso.
- **2013**: Geneva Airport commissions Robbi, its new guide robot, following an engineering services collaboration with BlueBotics.
- **2014**: We launch ANT® lite, a simple and compact navigation solution for service robotics (today ANT® lite+).
- **2014**: Cleanfix launches its RA660 Navi cleaning robot, following an engineering services collaboration with BlueBotics.
- **2014**: OPPENT launches its EVOcart™ AGV for hospital logistics, following another engineering services collaboration with BlueBotics.
SITA deploys its Leo baggage robot at Geneva Airport, following an engineering services project with BlueBotics.

Our team delivers the 1,000th ANT® system to our engineering services client Cleanfix.

BlueBotics and Engmotion launch the mini™ UVC disinfection robot, also the result of an engineering services collaboration.

KLM commissions SPENCER, its BlueBotics-developed guide robot, at Schiphol Airport in Amsterdam.

SITA continues its engineering partnership with BlueBotics by deploying its intelligent robotic kiosk, Kate, at Geneva Airport.

ABB commissions a fleet of mini™ mobile robots at its semiconductor production plant in Lenzburg, Switzerland.

We deliver our 3,000th ANT® system and ANT® driven vehicles are estimated to have travelled over 10 million kilometers.

3,000+ ANT® driven vehicles in operation worldwide

1,000+ end-user vehicle installations

10 MILLION KM driven by ANT® (250 times the circumference of the Earth)

PRESENT IN 25+ countries across all 5 continents

45+ employees based in Switzerland

ANT® driven vehicles in operation worldwide

end-user vehicle installations

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

countries across all 5 continents

employees based in Switzerland

BLUEBOTICS TODAY
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.

About us
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