



– Your Vehicle Navigation Partner



EXPERT TEAM

20 YEARS INDUSTRY LEADING

of engineers

of development experience

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	۷
ANT navigation	5
Mobile robot platforms	E
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. 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.

# **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 / ±1°
- Minimal infrastructure changes (reflective stickers possible)
- Vehicles commissioned in days, not weeks
- Multi-vehicle fleet management



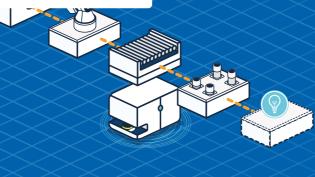
"The robot engineering services of BlueBotics, combined with the robustness of the ANT product, opened the door for Cleanfix to commercialize an autonomous professional cleaning machine for new applications in hospitals, airports, and commercial centers."

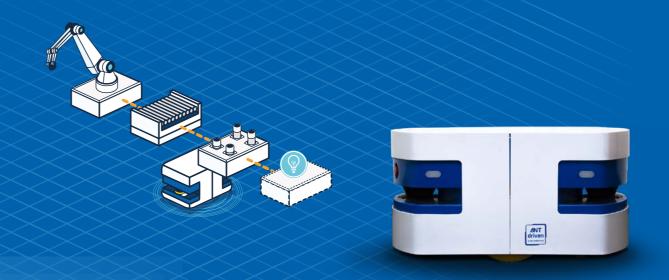
Felix Rüesch CEO Cleanfix

# **AUTONOMOUS MOBILE ROBOT PLATFORMS**

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







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

#### Includes:



**ANT** navigation technology



Custom module development



Lift module option



Obstacle avoidance option



Conveyor module option





Low particle



Articulated chassis







Includes:

Lift module option







# **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**



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

# ABB

ABB Group

	1000	100

Semiconductor manufacturing

BlueBotics mini™



# DEVELOPMENT OF A ROBOTIC CLEANING **MACHINE**





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.



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-		

Cleanfix Professional cleaning RA660 Navi, RA660 Navi XL



# DEVELOPMENT OF AN AUTONOMOUS **DISINFECTION ROBOT**



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

### mini™UVC

Engmotion

Commercial disinfection

mini™ UVC



# DEVELOPMENT OF A MOBILE ROBOT FOR **HEALTHCARE LOGISTICS**



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.



Oppent

Hospital logistics, manufacturing

EVOcart™

# DEVELOPMENT OF AN INTELLIGENT **ROBOTIC KIOSK**



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.



SITA Client: Application: Airport check-in

SITA Kate





# **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.

# 2001

BlueBotics is founded as a spin-off of EPFL.



#### 2007

We design and manufacture a robotic mobile coffee machine for Nespresso.



## 2014

Cleanfix launches its RA660 Navi cleaning robot, following an engineering services collaboration with BlueBotics.

OPPENT launches its EVOcart™ AGV for hospital logistics, following another engineering services collaboration with BlueBotics.



#### 4,000+

ANT driven vehicles in operation worldwide

#### PRESENT IN 25+

countries across all 5 continents

#### 1,000+

end-user vehicle installations

#### 50+

employees based in Switzerland

### 10 MILLION KM

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

# **BLUEBOTICS TODAY**





















#### O 2015

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



#### 2017

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



#### 2019

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



# 2021

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

### <u>2002</u>

Our team installs 11 BlueBotics-developed 'RoboX' guide robots at the Swiss National Exhibition.



# □ 2013

Geneva Airport commissions Robbi, its new guide robot, following an engineering services collaboration with BlueBotics.



We launch ANT lite, a simple and compact navigation solution for service robotics (today ANT lite<sup>+</sup>).



### 2016

SITA deploys its Leo baggage robot at Geneva Airport, following an engineering services project with BlueBotics.



## 2018

Our team delivers the 1,000<sup>th</sup> ANT system to our engineering services client Cleanfix.



#### 2020

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







# 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

#### How to find us

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