



AT THE HEART OF INNOVATION.



# QENVI

ROBOTICS

**OUR VALUES**  
Passion for technology  
Improve together  
Integrity  
Work

Since 2016, our subsidiary company QENVI Robotics designs and develops load-carrying follower and / or autonomous robots.

Our robots can carry any conceivable load (people, products, goods, foods, tools, ...) by following the user's movements.



The QENVI Robotics follower robots are based on the Cobot concept : collaborative robotics. Our robots assist humans in their tasks and do not replace them.

# OUR CUSTOMISABLE BASES

**QENVI Robotics offers 3 standard and customisable bases with different load capacities (carrying 30, 100 and 200 kg), and also offers custom services by robotising any structure.**

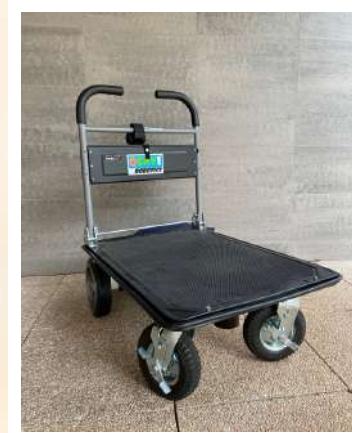
**Our customisable bases have the "following" function as well as the "autonomous" mode to meet the customer's needs.**



**Modifiable base  
carrying 30 kg**



**Modifiable base  
carrying 100 kg**



**Modifiable base  
carrying 200 kg**

# TWO DIFFERENT MODES : FOLLOWING & AUTONOMOUS

## FOLLOWING MODE

The **following mode** enables the robot to follow its user's movements thanks to a tag that he wears.



## OUR ROBOT TRAINS

In addition to the following mode, it is also possible to create **robot trains** without prior configuration: the robots follow each other.

- A simple button to turn on the following mode
- 2 hours of autonomy with the possibility to change the battery
- The robot can be used indoors and outdoors
- Adjustable speed of movement
- Obstacle detection and avoidance
- A secure system (flashing light, motor brake, emergency stop button, etc.)



# TWO DIFFERENT MODES : FOLLOWING & AUTONOMOUS



## AUTONOMOUS MODE

The autonomous mode enables the robot to move autonomously towards the destination chosen by its user thanks to a control box (smartphone, tablet, etc.).



## OBSTACLE DETECTION AND AVOIDANCE

If the robot encounters an obstacle, it detects it and avoids it to reach the chosen destination.

If the obstacle becomes permanent, it records it in its internal map and takes it into account in future journeys.

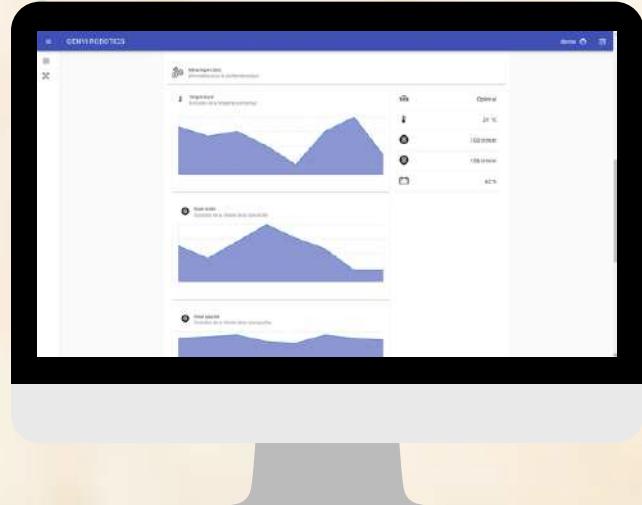
The two modes are complementary and can be used in succession.

# OUR QENVI ROBOTICS SOFTWARE

QENVI Robotics offers software for :

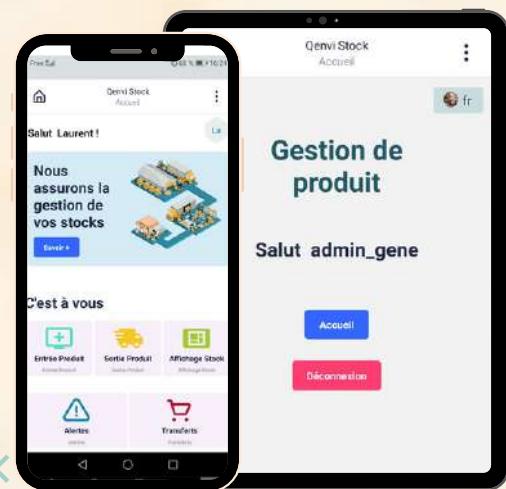
## FLEET MANAGEMENT

For robot location, machine status, alert management, and machine maintenance management.



## STOCK MANAGEMENT

For better monitoring of incoming and outgoing goods or stock variations, either with or without the use of robots.





## **WORKING WITH OUR ROBOTS ENSURES IMPROVED PRODUCTIVITY**

Time saving reduction of micro-operations between each task

Cost optimisation in the autonomous mode frees up resources, reduces costs associated with work-related accidents

Reduction in arduous tasks reduction in work-related injuries, such as musculoskeletal disorders (MSDs) and back pain

Facilitation of order preparations & picking

Employee satisfaction and reduction in absenteeism

Modernisation of a business with an innovative solution

Optimisation and simplification of movements

# QENVI ROBOTICS : A UNIQUE AND INNOVATIVE SOLUTION

We take advantage of the advances in **artificial intelligence** to make our mobile robots interactive and acceptable to humans.

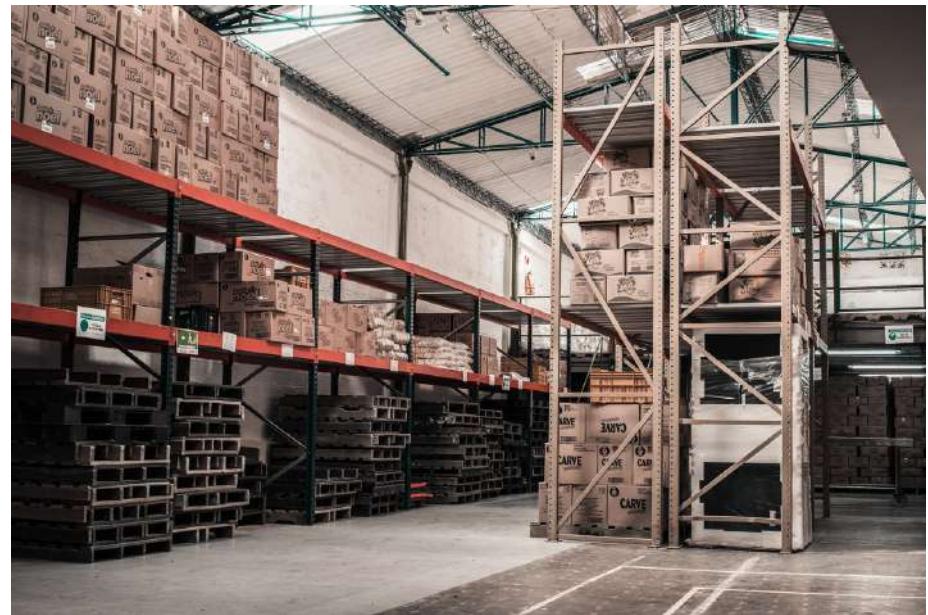
We develop motion control algorithms that allow our robots to move smoothly and safely while carrying heavy loads.

## INNOVATIVE FEATURES OF OUR ROBOTS

- Fully electric robots
- Adaptability of the following system to any structure
- Reduction in work-related accidents and injuries caused by arduous tasks (back pain, MSDs,...)
- Our robot trains : the robots can follow one another
- Hybrid solution which allows you to switch from one mode to another
- Secure robot tracking with a unique identification : no loss in tracking due to light disturbance or detection of movement from passers by
- The adaptability of the solution and the communication system allow usability in any environment

# OUR FOLLOWER ROBOTS IN ACTION

We have developed robots for the **industrial**, **medical** and **large distribution** sectors. Thanks to the customisation of our robots (load, size, environment), the use cases are multiple.



## INDUSTRY

The robot, coupled with the mobile application and the stock management software, follows all the user's movements and carries heavy loads during order preparations, shelving, picking, ...

The application and software are connected and are used to scan products and to manage stock.



## MEDICAL

The adaptability of our tracking systems on any structure enables our follower robots to provide relief for healthcare workers in hospitals and nursing homes.



We have developed robotic wheelchairs so that healthcare workers do not have to push the patient : it's the patient in the chair who follows the healthcare worker.

The mobile application, which accompanies the robot, enables the use of the autonomous mode : the patient in the wheelchair chooses the destination by using a smartphone or tablet and the robot follows the directions. The patient becomes more independent.

We also offer trolleys for transferring linen, meals, solutions and medication, as well as robotic stretchers to assist the medical staff.

# LARGE DISTRIBUTION

Our follower robot, coupled with a mobile application, helps the user to stock shelves or prepare orders for the drive-in service.

The robot also assists people who need help doing their shopping. The robot follows the shopper, carries their items until they have finished and loaded everything into their vehicle. The robot then returns to its base autonomously using the "return to base" mode.



## Other sectors considered ...

Agricultural : harvesting assistance, food logistics

Urbanisation : support for urban development, delivery assistance

Army : accompaniment during missions, equipment transportation

Tourism : airport trolleys, luggage transportation

# A FEW WORDS ABOUT THE PARENT COMPANY ...

# QENVI

Created in 2008, QENVI is the parent company of QENVI Robotics. It is recognised as an innovative company by Frenchtech and has a CIR accreditation.



## CUSTOMER NEEDS AT THE HEART OF QENVI



QENVI enhances the performance of companies by offering various services:

- Diagnosis, consulting, audit, training
- Services in strategy and business organisation
- Implementation of Quality, Safety, Environment, Lean/6sigma approaches
- Engineering services in the fields of IT, robotics, embedded systems and artificial intelligence



# CONTACT US

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