
Robotnik
CASOS DE ÉXITO EN LA IMPLANTACIÓN DE ROBOTS DE SERVICIO INDUSTRIALES
UNITED ROBOTICS .GROUP
acciona
intel
BMW
hp
BOSCH
Google
SIEMENS
AIRBUS
HONDA
orano
orange
UNIVERSAL ROBOTS
LEONARDO
Pioneer

Global Leader in Multi-Purpose AMRs, Mobile Manipulators & Robotics Software

Company overview

- Industry leader in general-purpose mobile robots & robotics software
- Team of 80 robotics and software experts
- Multi-industry application: Energy, industrial, retail, logistics, healthcare, etc
- Strong in-house IP: Software, Mechatronics, R&D, Industry thought leadership

Highlights

5,000+ Active robots powered by Robotnik's software	**8.5 MM€** Operating revenues (FY22)	**50+** Countries with presence globally
38%+ YoY revenue growth FY21-22	**20 years** Experience	**EBITDA** 1.6 MM€

USP

- **Broad range of robotic applications:** full hardware & software modularity
- **#1 positioning tech**: indoor and outdoor switch, 3D SLAM and GPS
- **Highest integration versatility**: cloud-based, on-premise, 5G, 3rd-party tech
- **Fastest and most flexible go to market** from production to deployment

Our product lines

Robotnik's software platform

Autonomous Mobile Robots (AMR)

Mobile Manipulators

Robotnik product overview

Robotnik's software stack

Modular software architecture with an extensive set of 400+ packages that can be customized to provide turnkey and full-stack solutions covering a wide range of applications using C++, C, Python, HTML and PHP

- Improved advanced ROS based solutions & algorithms
- Robot Control Software robust and highly tested
- API and 3rd party integrations
- Component based architecture

Autonomous Mobile Robots (AMR)

Portfolio of mobile bases for multi-industry indoor and outdoor applications with modular configuration to be integrated with any components.

View our video here

Mobile Manipulators bases

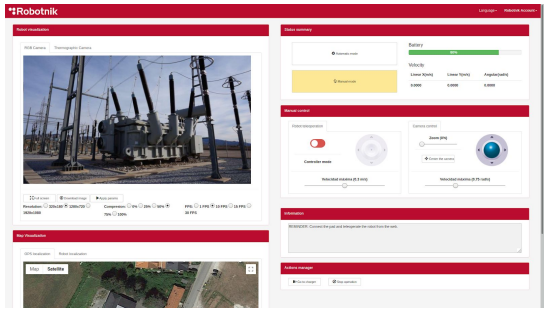
Mobile Manipulator bases designed for plug & play with robotic arms or any other components working autonomously or collaboratively.

View our video here

State-of-the-art proprietary software for indoor & outdoor mobile applications

Localization and Navigation

Localization and autonomous navigation packages indoor & outdoor using 3D/2D SLAM & GPS.

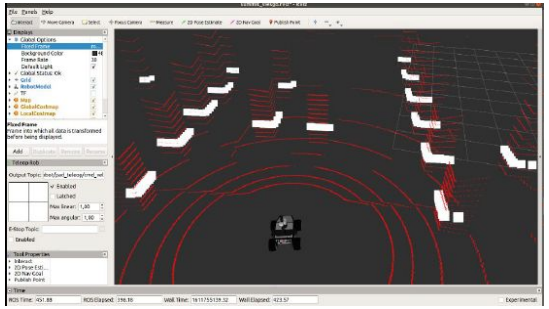


Teleoperation & Human-Machine Interface

Remote and local operation, for app development.
Web-served with real-time interface with robot.

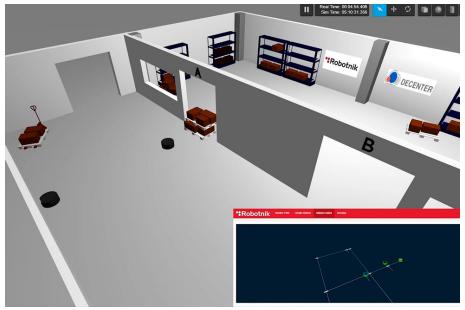
Fleet Management System

Centralized management of the robot fleet.
Multi device through communication protocols
Cloud/Edge implementation



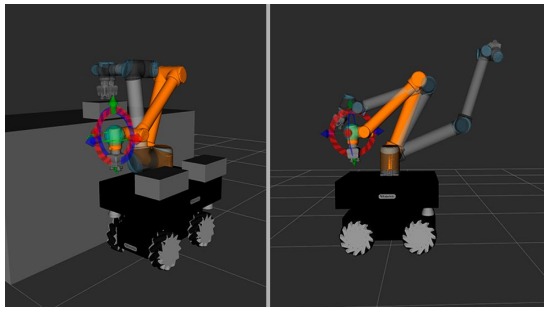
Perception and control

Interactive real-time 3D visualization
PointCloud segmentation, clustering & processing
High-accuracy docking algorithms
API for integrators



Simulation

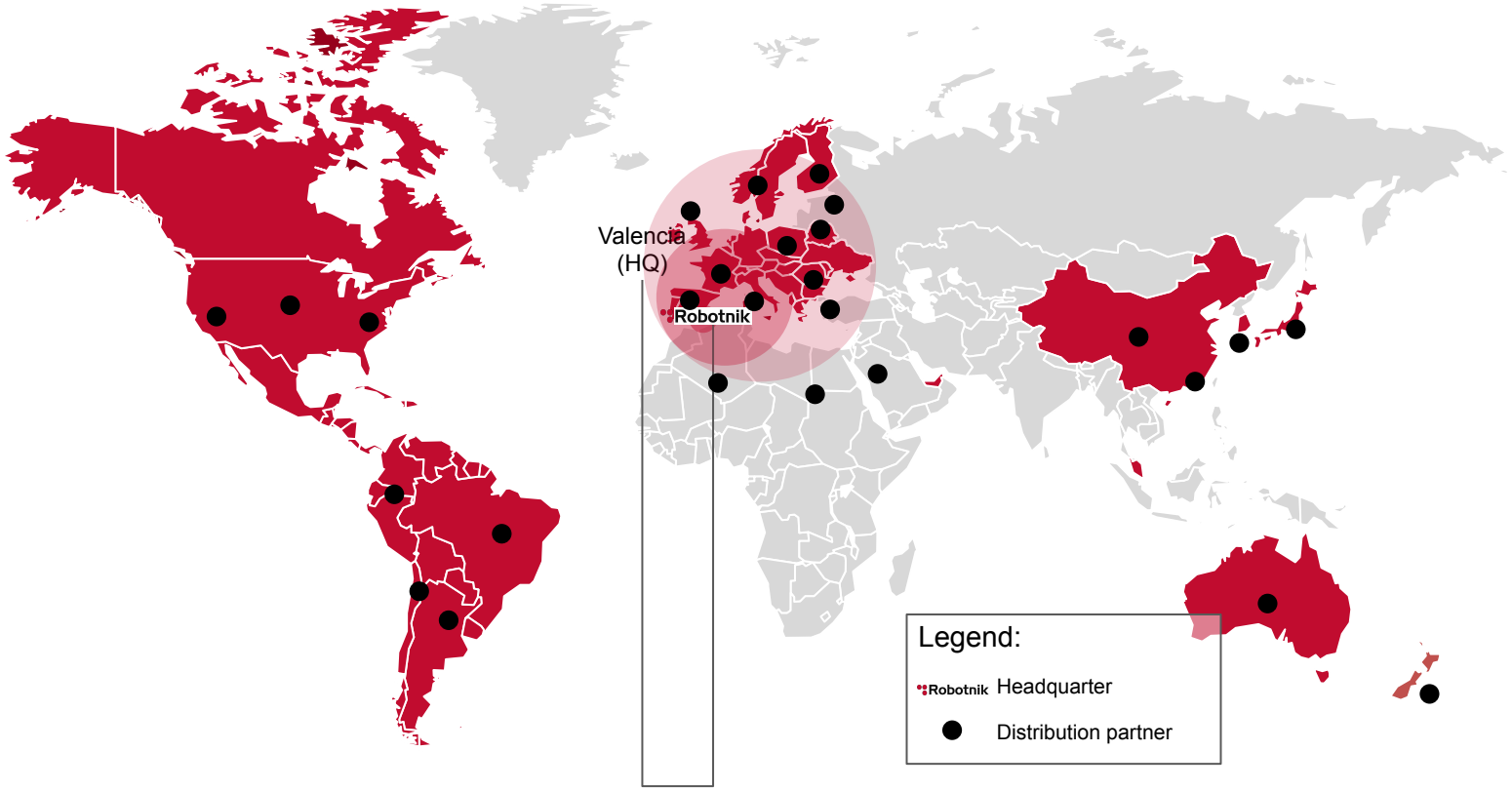
Simulation of all Robotnik's robots and sensors
Gazebo (ROS based) and other simulators
Simulation & Real control of arm's hardware.



Material Handling & Human Interaction

Industrial Applications in Mobile Manipulation.
Proprietary code for human interaction & object detection and avoidance

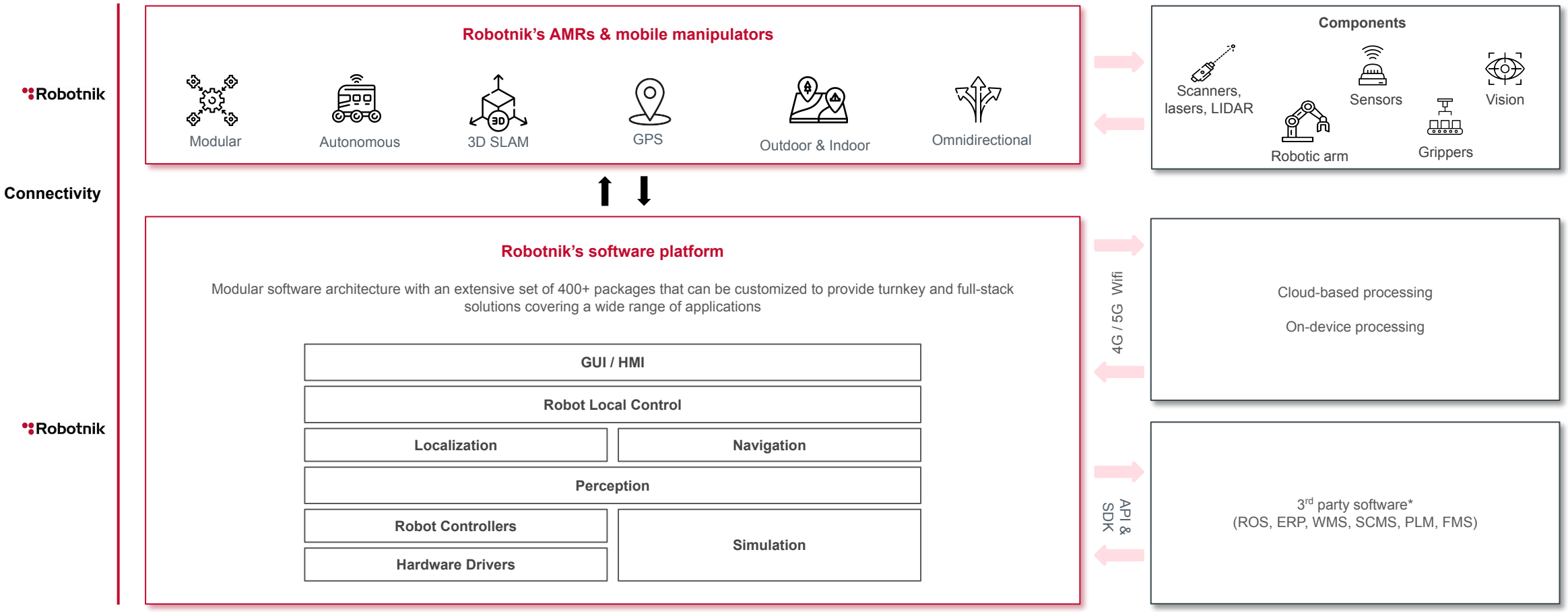
Robotnik global presence across multiple industries



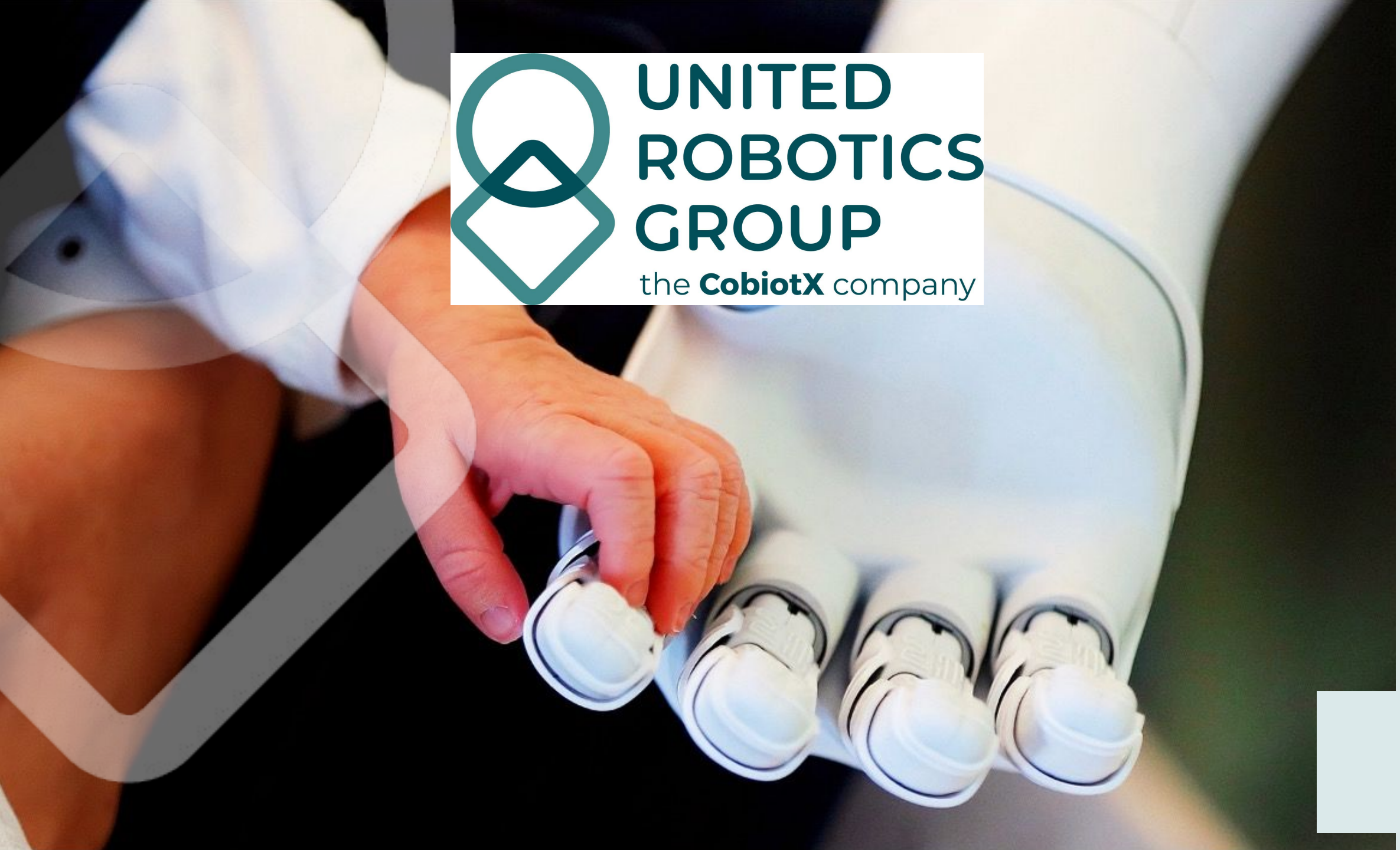
Robotnik industries

- Energy
- Retail
- Healthcare
- Defense
- Manufacturing
- Aerospace
- Logistics
- Construction

Robotnik technology overview



Notes: ROS = Robotic Operating System | ERP = Enterprise Resource Planning | WMS = Warehouse Management System | SCMS = Supply Chain Management Software | PLM = Product Lifecycle Management; FMS = Fleet Management System


UNITED
ROBOTICS
GROUP
the CobiotX company

UNITED ROBOTICS GROUP, WE COME FROM A RECOGNIZED & VISIONARY FUND: RAG STIFTUNG, AND WE ARE PART OF RSBG AUTOMATION & ROBOTICS.

SoftBank
Multinacional de gestión de inversiones
(Tecnología, Energía, Finanzas)

RAGSTIFTUNG

> **21 Billion** Euros
In foundation assets at the end of 2021

RAG-Stiftung
Ruhrkohle AG - Fundación
Obligaciones perpetuas minería carbón.

100%

RSBG

> **1 Billion** Euros
Turnover in 2019

RSBG
Grupo inversor orientado a medianas empresas de carácter innovador.
Invierte en mercados, sectores e industrias de futuro y de alto crecimiento (tecnológicas)

SoftBank Robotics

- Advanced Manufacturing
- Information & Communication
- **Automation & Robotics**
- Infrastructure

Minority shareholder

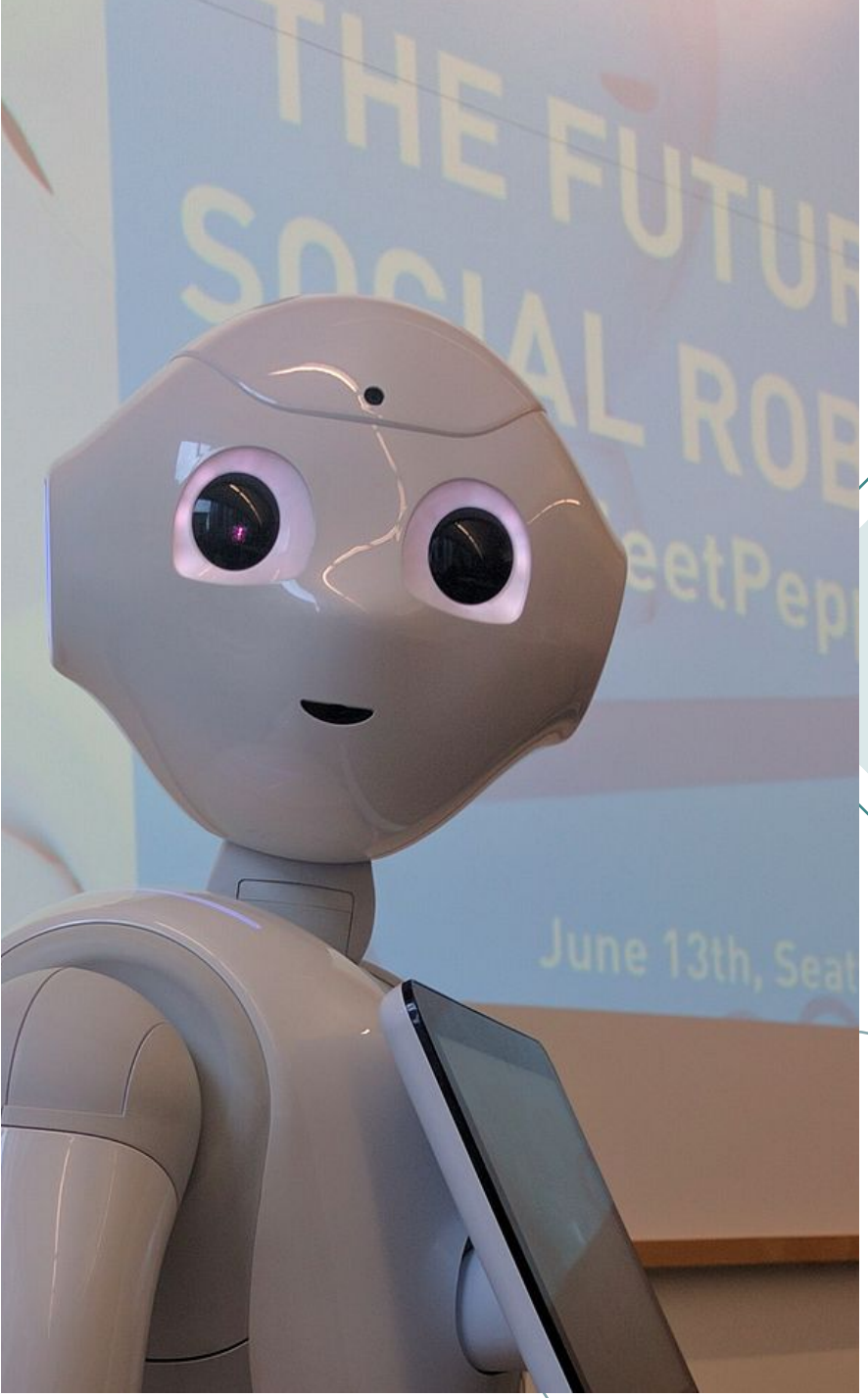
Majority shareholder

UNITED ROBOTICS GROUP

UNITED ROBOTICS GROUP
the CobiotX company

WE ARE A YOUNG CORPORATION FORMED OF ONE UNITED GROUP OF 9 ROBOTIC COMPANIES.

UNITED ROBOTICS GROUP
the CobiotX company



WE ARE A EUROPEAN ROBOTICS CHAMPION.

>500
employees

>40.000
Robots in the field

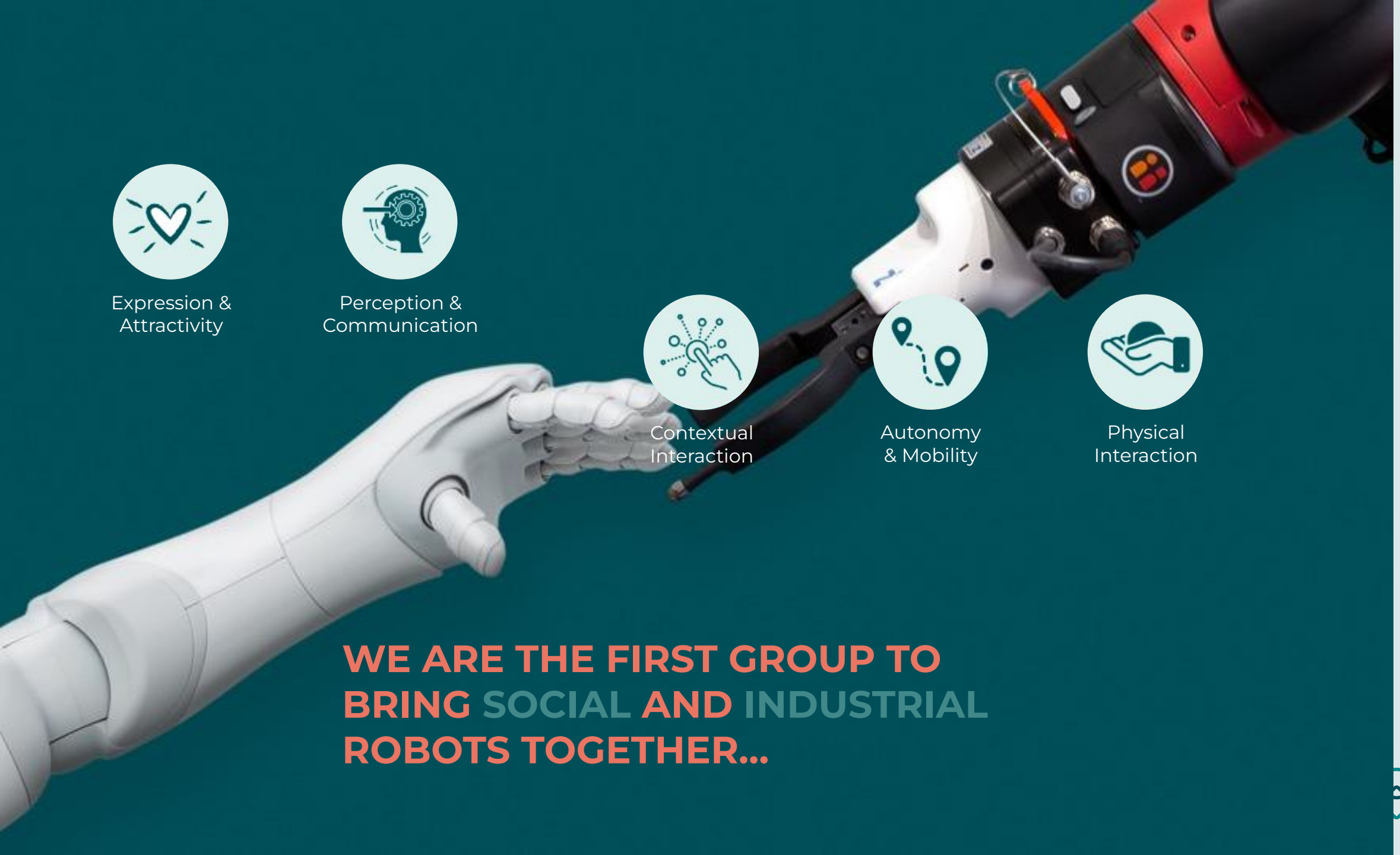
European corporation with American and Japanese roots

Stands for European, human-centric values in relation to privacy, security, safety & sustainability

Works with
>1.000 universities and research institutes

>10.000
existing customers

UNITED ROBOTICS GROUP
the CobiotX company



WE ARE THE FIRST GROUP TO BRING SOCIAL AND INDUSTRIAL ROBOTS TOGETHER...

UNITED ROBOTICS GROUP
the CobiotX company

...TO ANSWER THE UNMET AND FAST-GROWING MARKET NEEDS.

North America

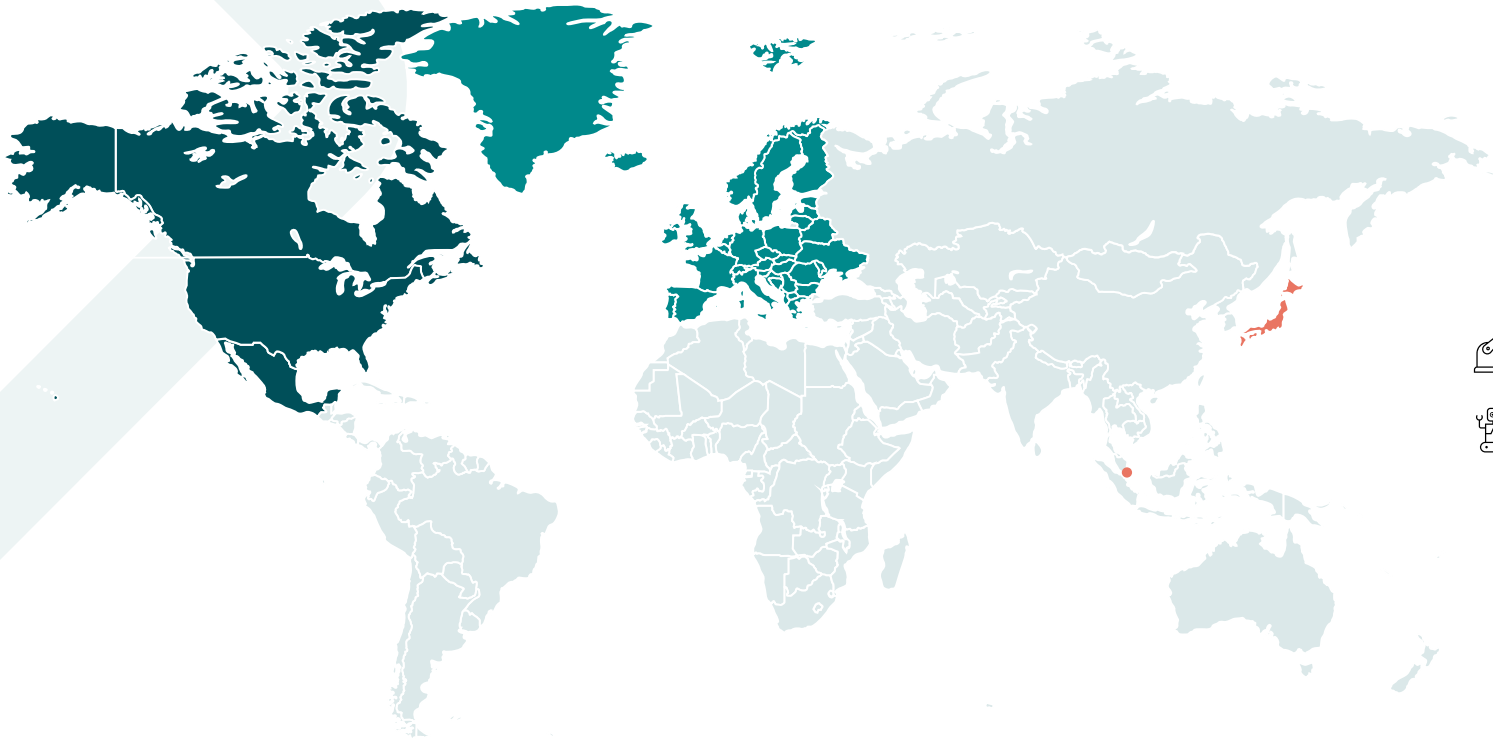
2020	€ 2.3 bn	€ 4.6 bn
CAGR 20-24	4.3%	14.1%

Europe

2020	€ 3.6 bn	€ 3.1 bn
CAGR 20-24	4.4%	12.4%

Japan & Singapore

2020	€ 2.8 bn	€ 1.6 bn
CAGR 20-24	2.0%	22.5%



Industrial robot market

Service robot market

UNITED ROBOTICS GROUP
the CobiotX company

WE ARE DEDICATED TO DESIGN AND CREATE ROBOTS FOR HUMANS...

Sawyer

The smart collaborative robot, born in MIT

NAO 6

The most well-known humanoid robot for education

pepper

The world first emotional robot

plato

The first serving Cobiot

UNITED ROBOTICS GROUP
the CobiotX company

WE ARE DEDICATED TO DESIGN AND CREATE ROBOTS FOR HUMANS...

plato

The first serving Cobiot

UNITED ROBOTICS GROUP
the CobiotX company

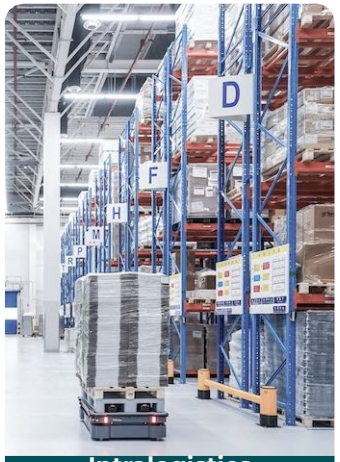
...OF INTELLIGENT SERVICES AND STANDARDIZED, CUSTOMIZED & END-TO-END ROBOTIC SOLUTIONS


uMobileLog & uMobileLab


uMobileLog


'The Box' for Lab Automation


Workstation delivering

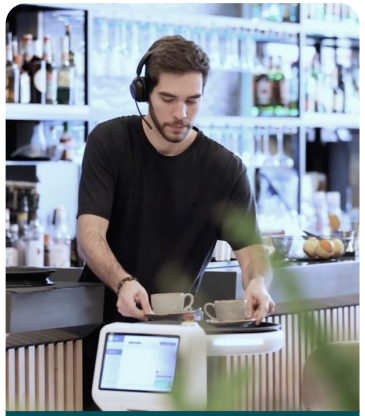

Intralogistics automation


Smart cleaning


Serving drinks


Greeting


Learning


Helping


Carrying & delivering

Some examples, not limited.

UNITED ROBOTICS GROUP
the CobiotX company

...TO FULFILL DIFFERENT NEEDS OF BOTH PUBLIC LIFE AND INDUSTRIAL ENVIRONMENTS

LIFE SCIENCE

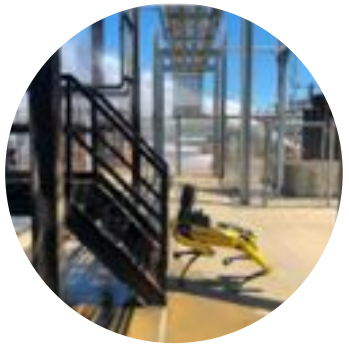
HEALTH & CARE

EDUCATION

HOSPITALITY & RETAIL

INTRALOGISTICS

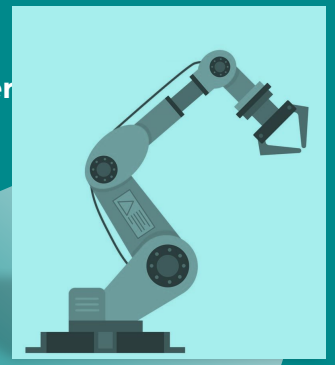
INSPECTION & MAINTENANCE



UNITED ROBOTICS GROUP
the CobiotX company

WE ARE CREATING A NEW ERA OF ROBOT: COBIOTX

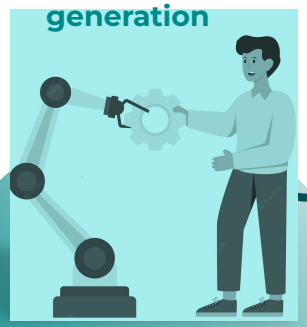
1st gener



Robots

Designed to
Work independently **FROM** people

2nd generation



Cobots

Designed to
Work side by side **WITH** people

3rd generation

CobiotX

Designed to
Work hand in hand **FOR** people

UNITED ROBOTICS GROUP
the CobiotX company

WELCOME TO THE COBIOTX TIME: ROBOTS AND HUMANS JOIN FORCES TO BUILD A BETTER FUTURE.

Designed for & controlled by humans

Respectful of data privacy and human safety

Agile, versatile, and flexible between missions

Dynamically adapts to existing human environments

Socially responsible for nature and humanity

Work hand in hand
FOR people

CobiotX

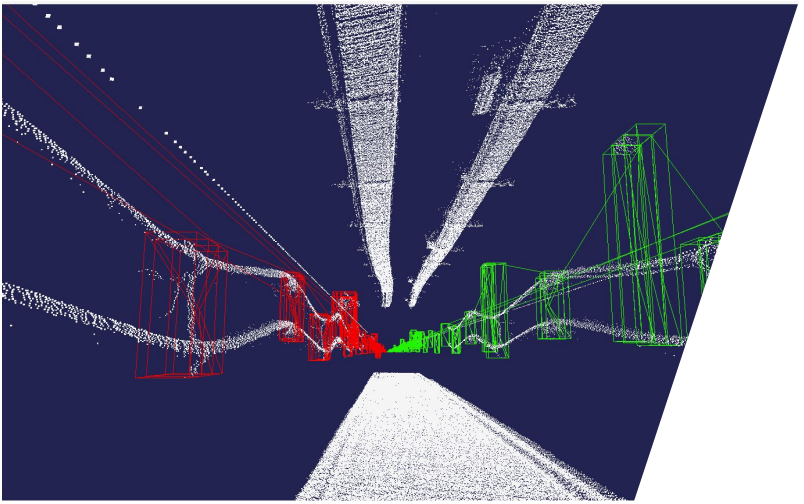
UNITED ROBOTICS GROUP
the CobiotX company

THANK YOU

UNITED ROBOTICS GROUP
the CobiotX company

Applications: Inspection & Maintenance

Market challenge: Difficult to reach and hazardous work environment for a human



Maintenance

Indoor and outdoor 3D SLAM navigation systems

Inspection

Adaptable hardware & software for any type of environment

Sensors, cameras and intelligent solutions mounted on Robotnik's bases for accurate information and monitor

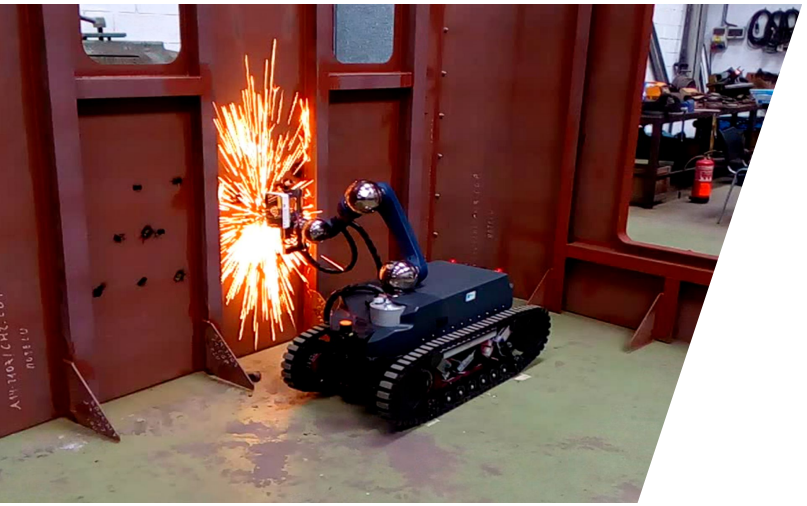
Surveillance & Operations Monitoring

Robots can switch from omnidirectional configuration to the versatile skid-steering configuration

Applications: Inspection & Maintenance

Applications: Industrial Mobile Manipulation

Market challenge: Hybrid human-robot collaborative workspace



Machining

Material Handling

Smart Industry Collaborative Robot

- Complex manipulations capabilities
- Adaptability & Flexibility
- Cost - & Time - efficient setup
- Indoor and outdoor 3D SLAM navigation systems
- Safe work environment Human & object detection and avoidance software

MARKET OPPORTUNITY - MOBILE MANIPULATION

-Over 150,000 picking robots installed by 2030

-Annual shipments will jump from less than 2,000 in 2022, to just above 50,000 by the end of the decade.

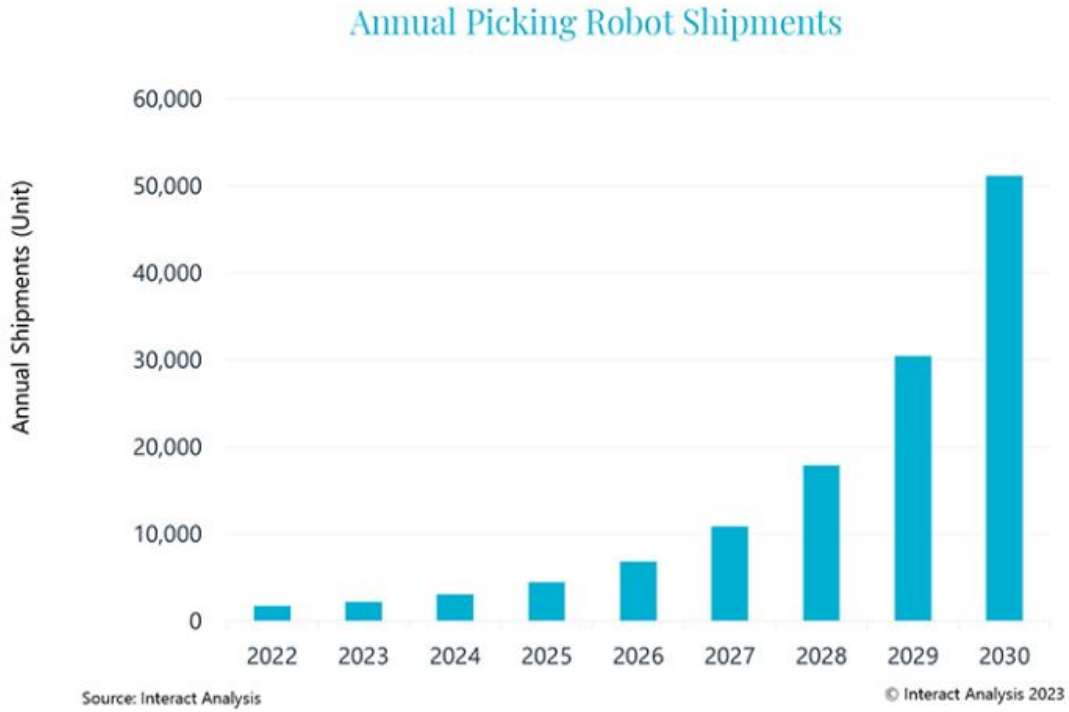
-The price of labor to continue going up while robotic picking prices decrease.

-Robotic picking is still prohibitively expensive, especially for one-shift operations. However, by 2030, the average price of picking robots will drop by 40% while the cost of warehouse labor will increase by 30% over the same period.

-Robot density is expected to increase as time goes on. For every 3-5 robots, there will be one full-time equivalent (FTE) employee supervising them. By 2030, this will change to one FTE for every 7-10 robots.

Over 150,000 picking robots to be installed by 2030

Interact Analysis expects annual shipments will jump from less than 2,000 in 2022, to just above 50,000 by the end of the decade.



Applications: Industrial Mobile Manipulation

Applications: Inventory

Library Inventory

Library and bookstore autonomous inventory

Retail Inventory

Mobile Robot using RFID tracking

Retail inventory

Mobile Robot using RFID and Vision based tracking

Implementation of Robotnik's unique indoor and outdoor autonomous navigation software packages

Experience in the conception and fielding of a wide range of robot systems/platforms

3rd Party solutions integration and industry-grade partnerships

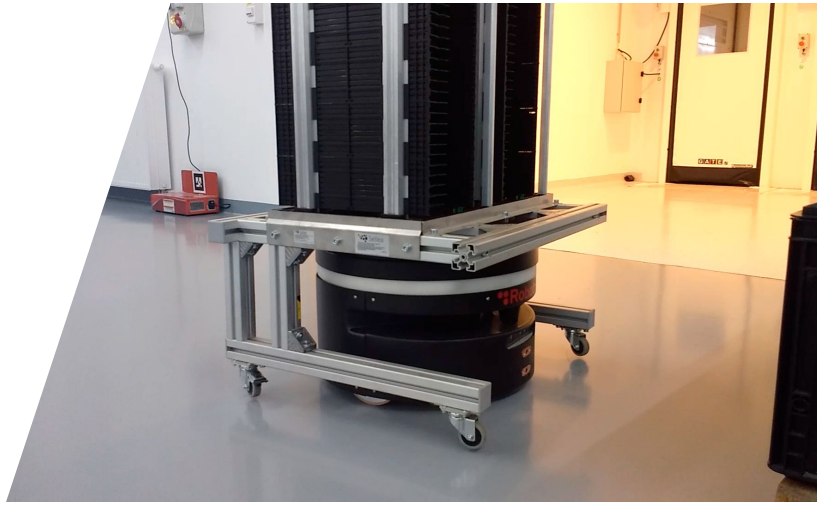
Applications: Inventory

Applications: Logistics & Warehousing

Market challenge: increasing efficiency of logistics tasks that are labor-intensive, repetitive and tedious

Healthcare logistics AMR

Warehousing AMRs & Cobots



Industrial logistics AMRs

Advanced smart functions to collaborate with humans: person-following or autonomous

Advanced localization: SLAM 3D, laser, tape navigation

High payload capability: Up to 1,750kg

FMS and configuration tools included

Autonomous deployment: No infrastructure requirements

Safe work environment capabilities

Applications: Logistics & Warehousing

ROBERTO GUZMAN
CEO
rguzman@robotnik.es
+34 961 475 400

Thank you!

Robotnik

www.robotnik.eu