RHEINMETALL
YARDSTICK ROBOTICS

Robots for the
World's Toughest Jobs

YARO COBOTS

Built for the Real World

Robots changed how we build, move, and manufacture. But most are still confined to clean, controlled environments. YARO Cobot is different. It's designed to work where others can't: outdoors, offshore, underground — even in space. From dangerous inspection sites to extreme climates, YARO handles the jobs humans shouldn't. At YardStick Robotics, a Rheinmetall company, we're enabling a new generation of robots. Engineered for harsh, unpredictable environments. Tailored to real-world applications.

A Cobot Built to Perform Where Most Can't

Most robots are designed for controlled settings. Yaro Cobot performs even in extreme conditions.

IP67 & IP69
Fully sealed against water and dust

Vibration
Shock and vibration resistant

Sealed
Works under pressure or in vacuum

ATEX
Safe in explosive environments

-20 to 50ºC
Performs in extreme temperatures

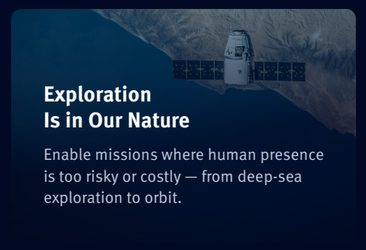
Modularity
Highly customizable to specific needs

Enabling a New Generation of Robots

At YardStick Robotics, we're bringing robots back to their true purpose: taking on the world's toughest tasks in extreme environments. YARO does the jobs humans shouldn't — so we can focus on what makes us human.

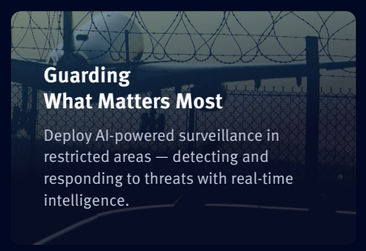
Feeding the Future
Automate labor-intensive work like planting, harvesting, and monitoring — and help farmers focus on innovation and sustainability.

Feeling Safe Is a Human Right
Perform high-risk tasks like bomb disposal, reconnaissance, and remote manipulation — keeping soldiers at a safer distance.



Exploration Is in Our Nature
Enable missions where human presence is too risky or costly — from deep-sea exploration to orbit.

Safety Fuels Progress
Perform inspections and maintenance in hazardous, ATEX-certified environments — reducing downtime and preventing accidents.



Guarding What Matters Most
Deploy AI-powered surveillance in restricted areas — detecting and responding to threats with real-time intelligence.

Protecting Lives and Livelihoods
Carry out inspections and repairs in offshore or underwater sites — ensuring reliability without putting humans at risk.

Tailored for Your Mission. Because no two challenges are the same.

YARO is not a one-size-fits-all solution. Every robot is configured and fine-tuned to meet the specific demands of your environment, task, and team. From design to deployment, we make sure YARO fits your environment, your needs, and your ambition.

Understanding Your Requirements
We collaborate with your engineering and operations teams to identify key needs, constraints, and opportunities.

Testing & Validation
Before delivery, each unit is tested in-house under simulated operating conditions to ensure safety, performance, and durability.

Design & Simulation
We simulate the system in its intended environment using real-world data and our AI-enabled design stack.

Support & Deployment
Our team assists with integration and can provide long-term support through software updates and field servicing.

Modular Configuration
We select and assemble the right components — motion, sensors, communication, and control — for your exact use case.

Smarter Control. Faster Integration.

YARO is powered by a modular control stack that's designed to adapt — to your workflow, your tools, and your environment.

Whether you're building a prototype or scaling for deployment, our software enables fast iteration and seamless integration.

Software Packages

User interface

- Web-based GUI
- API for ROS2 Control
- Programming by demonstration

Robot safety package

- Safe and easy teaching GUI
- Programable safety functions
- Safety control

Optional Features Packages

1. Object recognition package
2. Force/compliance control package
3. Vibration control package
4. End effector stabilisation package
5. Sensor head package
6. Low-level real-time control interface at 1kHz

Made in Germany. Ready for the World.

YardStick Robotics designs and manufactures its robots in Germany, ensuring the highest standards of engineering and quality. As a subsidiary of Rheinmetall AG, we leverage advanced facilities, rigorous testing, and decades of engineering expertise to deliver reliable and innovative solutions for even the most challenging environments.

Yardstick Robotics
Cobots Built for the Real World

At YardStick Robotics, we design cobots for environments most robots were never meant to enter. Where dust, heat, pressure, vibration, and corrosion make automation difficult — we make it possible. We don't believe robots should replace people. We believe they should take on the jobs people shouldn't have to do — so we can focus on what makes us human.

Powered by our AI-enabled software stack and model-based development, every YARO Cobot is customized for your mission. Faster to integrate. Easier to scale. Built to perform.

Find out more at
yardstick-robotics.com

YARO COBOTs
Technical Data

** Technical details and features are customizable upon specific request and subject to changes during development*

	YARO-1603	YARO-1105	YARO-0810	YARO-1115	YARO-1310	YARO-0820
Payload	3 kg	5kg	10 kg	15 kg	10 kg	20 kg
Reach	1600 mm	1100 mm	800 mm	1100 mm	1300 mm	800 mm
Protection class	IP 67 & IP 69					
Operating temperature	-20° to 50°					
Repeatability	‹ 0.1 mm (ISO 9283)					
DOF	6					
EEF speed (max)	1 m/s					
Mechanical brakes	In all joints					
Torque measurement	Yes					
Force / Torque Sensing	Yes, prepared for 6-DOF sensor at wrist					
Tool flange	ISO 9409					
Interfaces	24V DC / 2 A, MODBUS RTU (free, e.g. for optional Gripper), 100Base Ethernet (free, e.g. for optional Camera)					
Conformity	ISO 10218-1, ISO 13849-1, Cat.3 PL d					
Robot mounting	Any orientation					
Weight	46 kg	30 kg	28 kg	41 kg	45 kg	36 kg
Power consumption	450 W (avg) 1050 W (max)	350 W (avg) 850 W (max)	350 W (avg) 850 W (max)	500 W (avg) 1200 W (max)	500 W (avg) 1200 W (max)	500 W (avg) 1200 W (max)

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Contact us today to find out more about the YARO Cobots from Yardstick Robotics and how we can revolutionise your industrial processes together.