

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+

Sealed

-20 to 60ºC

Performs in extreme

Fully sealed against water and dust

Works under pressure or



#### Vibration

Shock and vibration resistant



#### **ATEX**

Safe in explosive environments



#### **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.





#### Feeling Safe Is a Human Right

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



Enable missions where human presence is too risky or costly — from deep-sea exploration to orbit.





### 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.



#### **Design & Simulation**

We simulate the system in its intended environment using real-world data and our Al-enabled design stack.



#### Modular Configuration

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



#### Testing & Validation

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



#### **Support & Deployment**

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

## **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

- Object recognition package
- Force/compliance control package
- Vibration control package
- End effector stabilisation package
- Sensor head package
- 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.



## YARO COBOTS Technical Data

	YARO-5	YARO-10	YAR0-20
EEF speed	> 1m/s	>1m/s	>1m/s
Accuracy	+/- 1 mm (ISO 9293)	+/- 1 mm (ISO 9293)	+/- 1 mm (ISO 9293)
Joint speed	20-77 rpm	20-77 rpm	20-77 rpm
Protection class	IP68	IP68	IP68
Op. temperature	-20° to 60°	-20° to 60°	-20° to 60°
Reach	850 mm	1104 mm	1070 mm
Payload	5 kg	10 kg	20 kg
DOF	6	6	6
Tool flange	ISO 9409	ISO 9409	ISO 9409
Interfaces	RS-485, Ethernet	RS-485, Ethernet	RS-485, Ethernet
Conformity	ISO 10218-1	ISO 10218-1	ISO 10218-1
	ISO 13489-1	ISO 13489-1	ISO 13489-1
	Cat. 3PL d	Cat. 3PL d	Cat. 3PL d

<sup>\*</sup>Technical details and features are customizable upon specific request and subject to changes during development



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