



RobCo GmbH

The world's first modular robot enables adaptable, connected and affordable solutions with no-code software for easy plug-and-play use, without the need for expert knowledge

70 employees

Industry: Robotics

ORGANIZATION DESCRIPTION

RobCo GmbH - founded in 2020 by a team led by Roman Hölzl at the Chair of Robotics and Artificial Intelligence at the Technical University of Munich - offers medium-sized industrial companies adaptable, affordable and networked robot solutions to automate repetitive manual tasks. These are based on a patented and world-first modular hardware kit and the RobCo Studio software platform. Whether machine tending, palletising, dispensing or welding - RobCo's modular robots are versatile and intuitive.

Thanks to the unique no-code software, the robots used can be configured, implemented and managed remotely via a digital twin. This guarantees a quick and easy plug-and-play application without complex programming, expert knowledge or specialised personnel. With several thousand modules, RobCo employees support their customers every day in rethinking automation and tackling pressing challenges such as the shortage of skilled labour, production scaling and the transformation to Industry 4.0.

ORGANIZATIONAL VISION

RobCo is revolutionising robotics to raise the performance of companies to a higher level and solve the shortage of skilled workers.

Robotics for everyone. Adaptable. Customisable. Affordable. Our goal is to revolutionise the way companies integrate robotics into their production processes by making advanced automation accessible and practical for everyone.

Connectable: We seamlessly integrate AI into robotics to facilitate the programming and learning of robots. By embedding AI, we enable robots to be more autonomous and intuitive and significantly reduce the complexity of programming and deployment.

Adaptable: Our AI-controlled robots are designed to be adaptable to different tasks and environments. By using sophisticated technologies such as computer vision, our robots can adapt flexibly to different operational requirements and offer customised solutions.

Affordable: We make robotics cost-efficient. Our approach ensures that our customers do not have to make large investments in hardware, programming or software. By using artificial intelligence to automate deployment and operations, we reduce costs and deliver scalable solutions that fit within budget.

PROBLEM STATEMENT

Description of the problem and formulation of the question

Ecological sustainability meets modular robotics

In times of increasing demands for environmentally friendly and economical production, modular robotics solutions offer a promising alternative to conventional automation systems. This technology combines technological innovation and sustainability and offers medium-sized manufacturing companies a future-proof solution by reducing waste, lowering energy consumption and promoting reusability. Investing in modular robotic solutions therefore not only makes economic sense, but also makes a significant contribution to protecting the environment and promoting sustainable production methods.

RobCo has therefore set itself the goal of becoming a thought leader for the combination of modular robotics and ecological sustainability.

Your task

Develops a concept in a business-to-business context in which modular robotics and ecological sustainability are considered together. For example, climate-neutral production, the use of "green energy" in the industry or the certification of suppliers could play a role here.

- Researches which guidelines, regulations and certifications already exist in the field of environmental sustainability in the robotics industry (especially for modular industrial robots).
- Analyses relevant data sources for eco-sustainable robotics: official governmental and political organisations as well as market players should be considered.
- How can these data sources be used to develop a sound concept?



JOKER QUESTION

What innovative sales and/or marketing approaches should we use to realise your ideas (without greenwashing)?

OTHER

For example, existing guidelines, previous efforts, and strategies for responsible AI, digital ethics, or digital responsibility.

Starting points for automation solutions and climate-neutral production:

- **Energy saving:** Automated systems optimise energy consumption through precise control and minimisation of energy waste.
- **Integration of renewable energies:** Supporting customers in the implementation of automation solutions that are compatible with green energy, such as solar or wind power.
- **Energy monitoring:** Real-time monitoring of energy consumption to identify and reduce inefficient processes.
- **Resource efficiency:** Automation enables precise material utilisation and waste reduction, which reduces the ecological footprint.
- **Supplier certification:** Working with certified, environmentally friendly suppliers to ensure that the entire supply chain is sustainable.
- **Optimised logistics:** Automation improves the logistics chain, reduces transport emissions and promotes local procurement.
- **Sustainable production technologies:** Promotion and implementation of technologies such as recycling automation and circular economy.