



MR4Weld

Welding Mobile Robot

A new paradigm in sustainable automation.

MR4Weld is an innovative outdoor automation solution that improves quality, performance, and wellbeing during labor-intensive welding activities.

Designed in collaboration with Fincantieri, one of the world's leading shipbuilders, the easy-to-use MR4Weld mobile robot can autonomously weld up to 170 meters of steel in a single shift, a 3-fold increase compared to manual processes.

And because the system is in complete compliance with current safety regulations, it can be used without fences on each of the multiple floors that make up a given ship.

Making outdoor automation a reality

Intelligent mobile robotics

Managed by a single operator without specific robot programming expertise, MR4Weld is controlled through sensors, embedded programming algorithms and highly intuitive navigation software to move in any environment with ease.

Better welding quality

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Value-added productivity

MR4Weld features a high-payload, 6-axis articulated robot that is fitted with a welding torch and installed on a tracked undercarriage. It is also equipped with an integrated vision system to autonomously identify welding joints. As a result, it cost-effectively ensures better quality, performance, and safety. It can also be seamlessly integrated within Comau's digital infrastructure to further safeguard productivity and profitability during the entire project.

Value is also created with requalification, whereby workers are trained to perform upgraded activities such as operating the machine or controlling process quality.

Welding Mobile Robot: Unlimited possibilities

Thanks to its highly flexible design, MR4Weld can be adapted to meet a wide variety of applications for different markets.

These include everything from the production of large steel infrastructure projects and continuous structures for suspension bridges to large hoisting systems and more.

Benefits

Automated on-site welding in outdoor and unstructured environments



Up to 3x faster than manual welding



Promotes upskilling opportunities for workers



Pro-active response to the global shortage of welding professionals



Significant time and cost savings compared to manual processes

