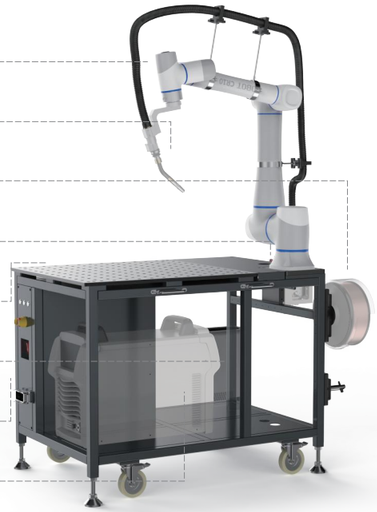
Dobot Mobile Welding Platform

The platform uses Dobot CR10 cobots as the motion mechanism. They are easy to integrate, flexible to move, and can match with different welding components to create exclusive welding workstations. The platform works with various welding machines from major brands worldwide. With Dobot's welding process package, users can quickly customize various welding schemes to meet the needs of small-batch and diverse production.



Product Specifications

Model	Intelligent Mobile Welding Platform
Dimension (L x W x H)	1220 mm x 800 mm x 945 mm (Platform dimension does not include pipeline package height)
Weldable Range	(R600 - R1200) x 180°
Weight	200 kg (Platform weight does not include weight of welding machines, robots, wire feeders)
Robot Payload	10 kg
Robot Effective Reach	1300 mm
Compatible Welding Machine	User integrated
Welding Torch	User integrated
Wire Feeder	User integrated
Welding Process Package	Yes
Drag-and-Drop Teaching	Yes

DOBOT

www.dobot-robots.com
sales@dobot-robots.com
linkedin.com/company/dobot-industry
youtube.com/@dobotarm
China | Germany | USA | Japan

D20231219

Welding Solution

Simple, efficient, quick, and safe

Why Dobot Welding Solution?

Easy-to-use

The solution has a simple and easy-to-use welding process package developed by Dobot. It can go from debugging to production in as fast as 30 minutes.

Consistent

Using cobots for welding is a reliable solution to ensure product consistency, unlike repetitive manual work that is susceptible to errors.

Quick return

There is no requirement for on-site instructions as regular workers can easily grasp the usage of the platform, resulting in low maintenance costs in the later stages. Once it is implemented, the platform typically recovers its cost within a span of 8-10 months.

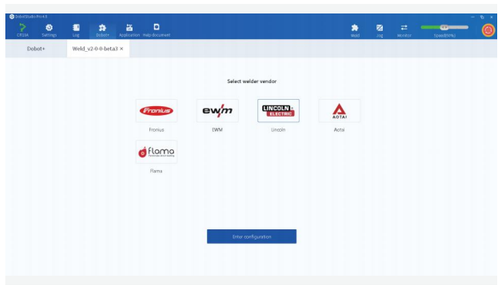
Safely collaborative

The cobot comes with an advanced level 5 collision detection capability, guaranteeing the safety of human-robot collaboration without the need for safety fences. This enables a higher level of safety to be achieved.

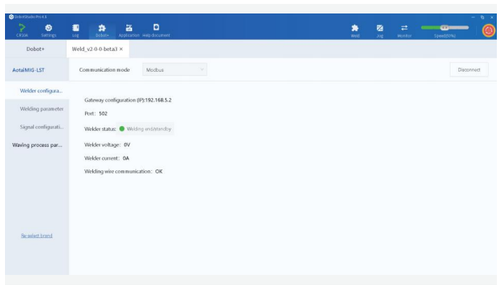
Dobot Welding Software Process Package

Simple process

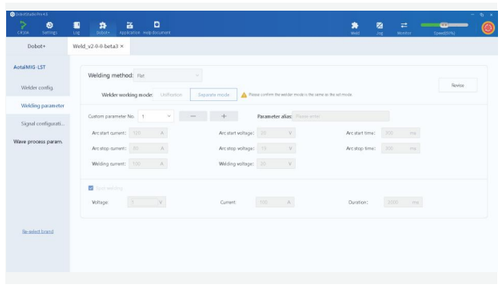
4 steps to start your journey to welding automation:



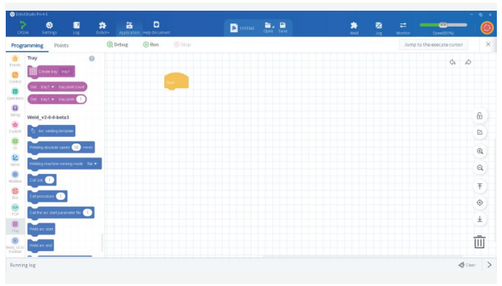
Step 1:
Choose the brand of the welding machine



Step 2:
Set the communication method for your welding machine



Step 3:
Set welding parameters



Step 4:
Complete the graphical programming to start welding

Strong adaptability

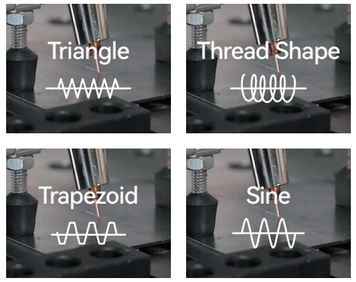
It has the capability to adjust to over 10 leading welding machine brands globally, providing a range of communication options including DeviceNet, Modbus, and analog quantity.

Fronius · ewm · Miller · LORCH · LINCOLN ELECTRIC · GYS · OTC DAIHEN Inc. · AOTAI · MEGMEET · flama · Panasonic · And more.

Versatile features

1. It supports communication methods such as DeviceNet, Modbus, and analog quantity;
2. It supports welding modes such as MIG, MAG, and TIG;
3. It supports manual debugging features such as simulated welding, manual wire feeding, wire retraction, gas inspection, and spot welding;
4. It provides multiple arc swinging methods (as shown in the right picture);
5. It supports arc start retry, re-ignition after arc breaking, and the wire sticking removal feature;
6. It supports advanced features such as contact positioning, laser positioning, and laser tracking.

(Note: More features are continuously being developed and iterated)



Easy to get started

Achieving the calibration of various welding points is made simple with the drag-and-drop teaching technique. This encompasses the calibration of the safety point, arc start point, middle path, arc extinguishing point, and the end point. By utilizing the data from end-effector force control, the robot guarantees precise calibration of these points, leading to a seamless welding outcome. The drag-and-drop teaching method streamlines the debugging process, making it effortless to complete.
The robot allows users to freely drag objects and has end-effector force control. It can accurately calibrate a sequence of welding points using drag-and-drop teaching, including setting safety, arc start, middle path, arc extinguishing, and end points. Additionally, it can quickly set up welding tasks.