



All-in-One Welding Solution

Ensure Consistent Quality and Throughput to Ignite Efficiency

Wide Compatibility

| Widely Compatible with 10+ Leading Welding Machine Brands Globally



Supports 4 Communication Methods:

DeviceNet™

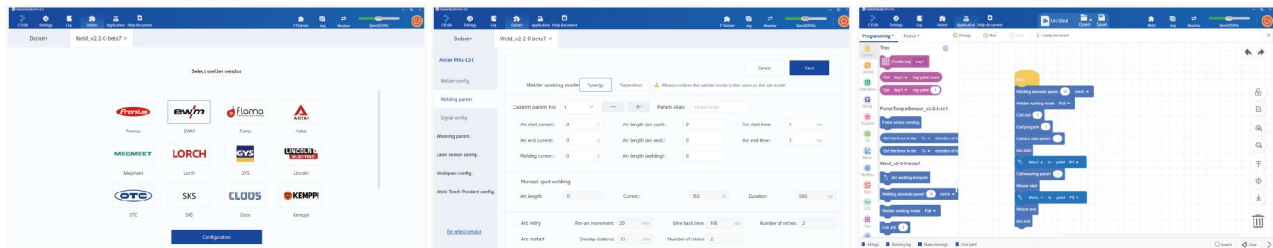
EtherNet/IP™



*When performing laser welding or arc welding, it is available to flexibly choose the appropriate communication method with Dobot Welding Process Package.

Customize Your Specific Needs in 3 Steps

| Plug and Play, Quick to Configure



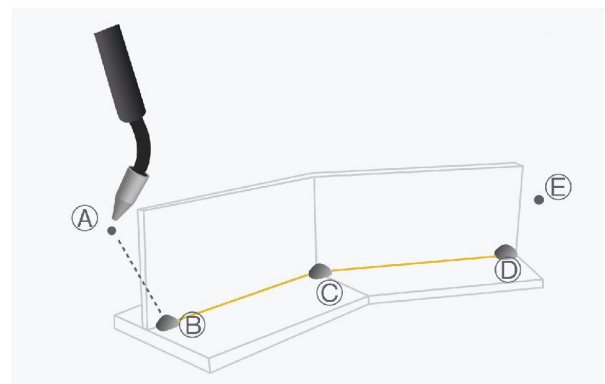
① Select the Welding Machine Brand.

② Select the Welding Parameters.

③ Easy to customize the welding steps with blocky programming.

| Set up Welding Trajectory at 4 Points

- ① Set the approach point (A) where you're about to weld.
- ② Set the starting point (B) for your welding path (arc on).
- ③ Set the ending point (D) for your welding path (arc off)
- ④ Finally, set the exit point (E) where the welding will end.



*C: Turning Point.

*Welding trajectories such as straight lines, arcs, and circles can be directly set up using with blocky programming.

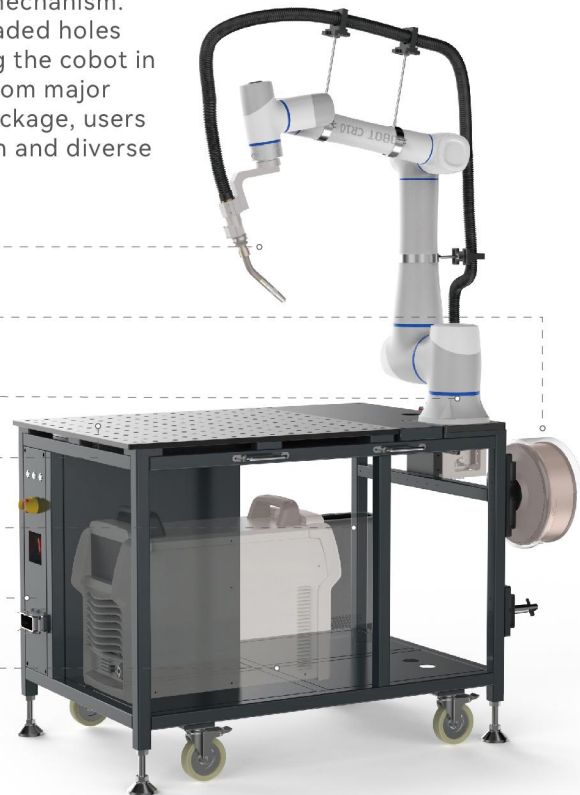
Flexible, Stable, High Precision

DOBOT CRA series collaborative robots feature a lightweight design with a repeat positioning accuracy of up to ± 0.02 mm. They can be integrated with mobile welding workstations or magnetic bases, allowing for quick station changes in confined spaces.

| Dobot Mobile Welding Platform

The platform uses Dobot CR10A Cobot as the motion mechanism. They are easy to set up and flexible to move, with threaded holes evenly distributed across the surface for securely fixing the cobot in any position. It works with various welding machines from major brands worldwide, and with Dobot Welding Process Package, users can quickly customize welding schemes for small-batch and diverse production.

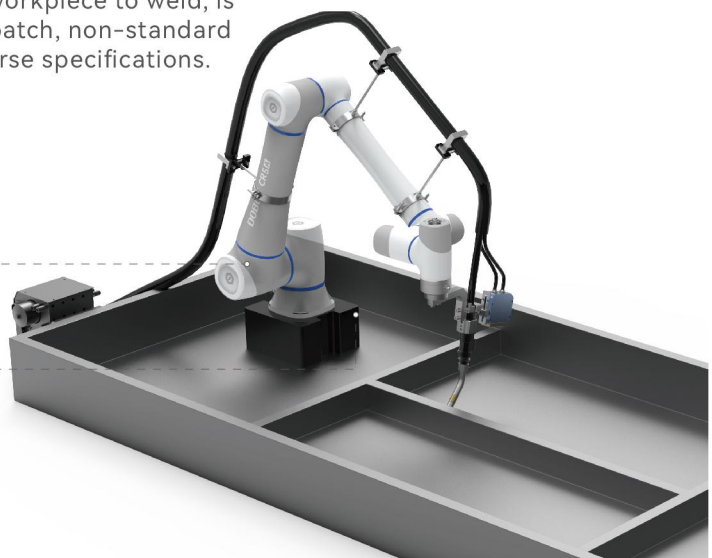
- Arc Welding Torch (Integrate by user)
- Welding Wire (Integrate by user)
- Wire Feeder (Integrate by user)
- Welding Platform
- Robot Control Box
- Control Box
- Welding Machine Power (Integrate by user)



| Dobot Mobile Magnetic Welding Solution

This solution is equipped with a magnetic base to integrate with Dobot CR5A Cobot, is quick to move near the workpiece to weld, is flexible and compact, and is perfect for small-batch, non-standard custom workpieces with low accuracy and diverse specifications.

- DOBOT CR5A Collaborative Robot
- Magnetic Base



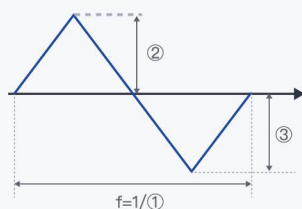
Welding Process Package

Quickly, Easily Start the Welding Process

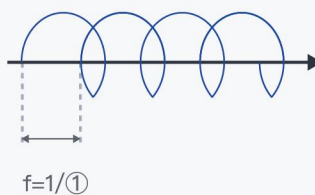
Features an intuitive user interface and a wealth of built-in functions, catering to diverse welding needs across steel structures, hardware components, and large vessels.

01 Multiple Arc Swinging Modes, No Programming Required

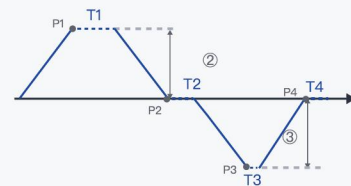
- **Supports Various Oscillation Welding Methods:** Adapts to complex welding scenarios.
- **Parameter Customization:** Allows settings for amplitude, frequency, dwell time on the left and right, and swing direction.



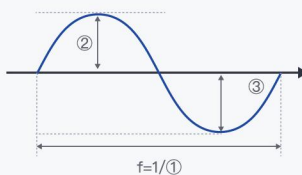
Sawtooth



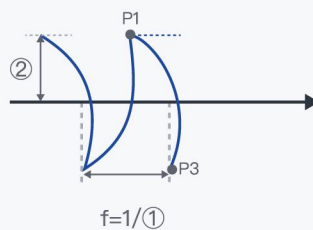
Spiral



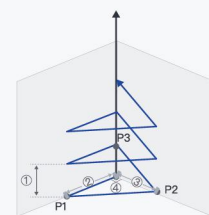
Trapezoid



Sine



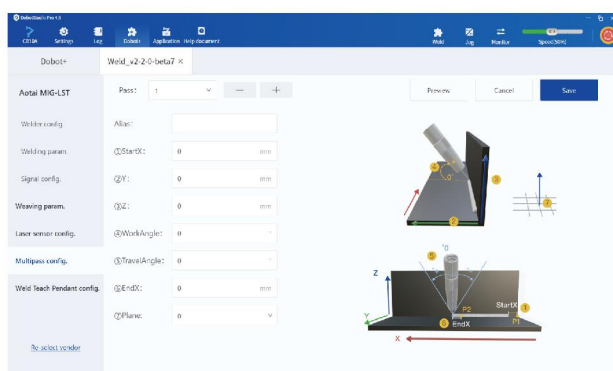
Crescent



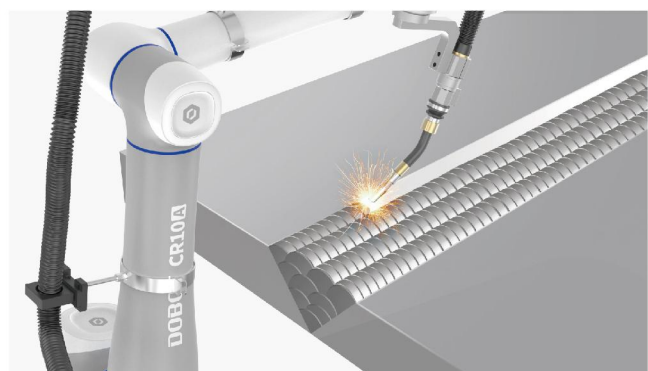
Triangle

02 Multi-Layer Multi-Pass Welding

Repeatedly welding the same area in order to increase the width of the weld.



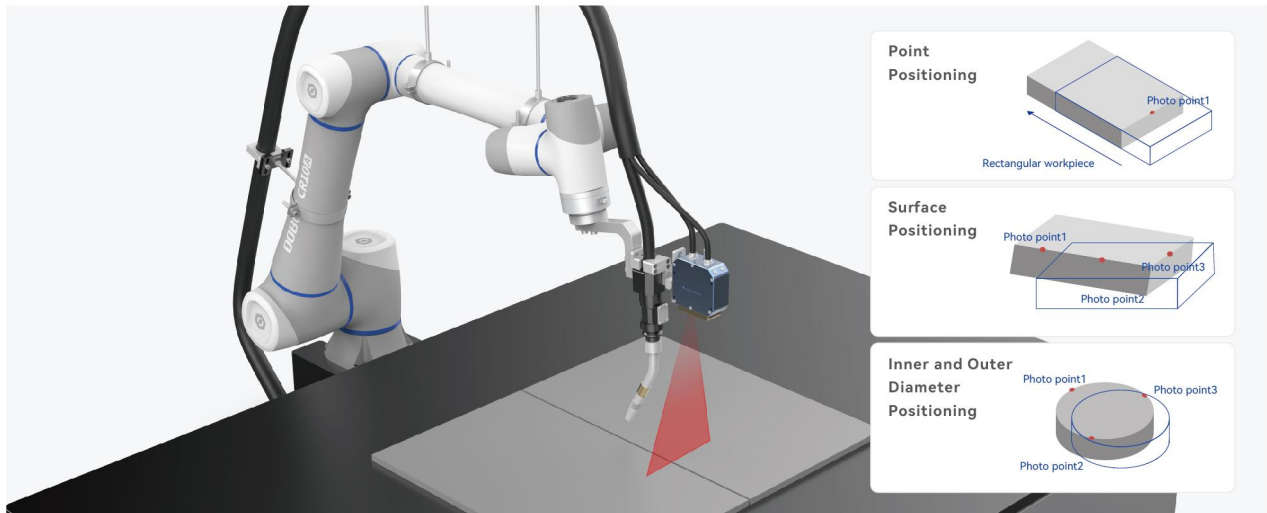
Set the amount of welding channels,
angle, points, etc.



According to the setting,
complete to fill the weld seams.

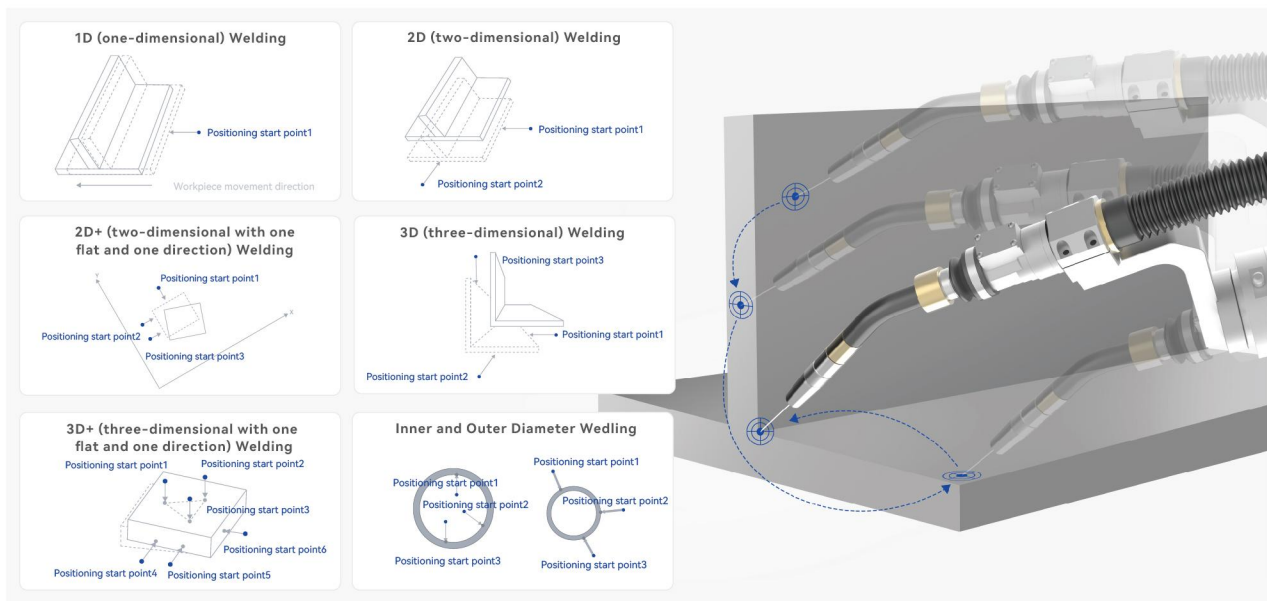
03 Laser Positioning for Multi-Shape Workpieces

Judge the exact position of the weld by scanning the position of the workpiece weld with a laser sensor to get the position deviation of the weld.



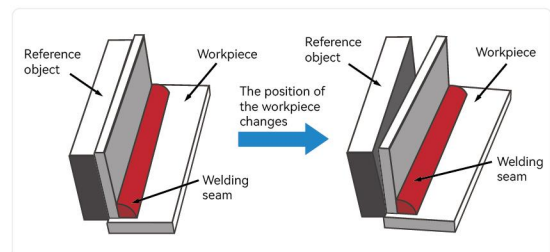
04 Touch Positioning for Multi-Dimension Welding

This function can smartly estimate the presetting welding positions when the workpiece placement is wrong, then back to the correct points to weld.



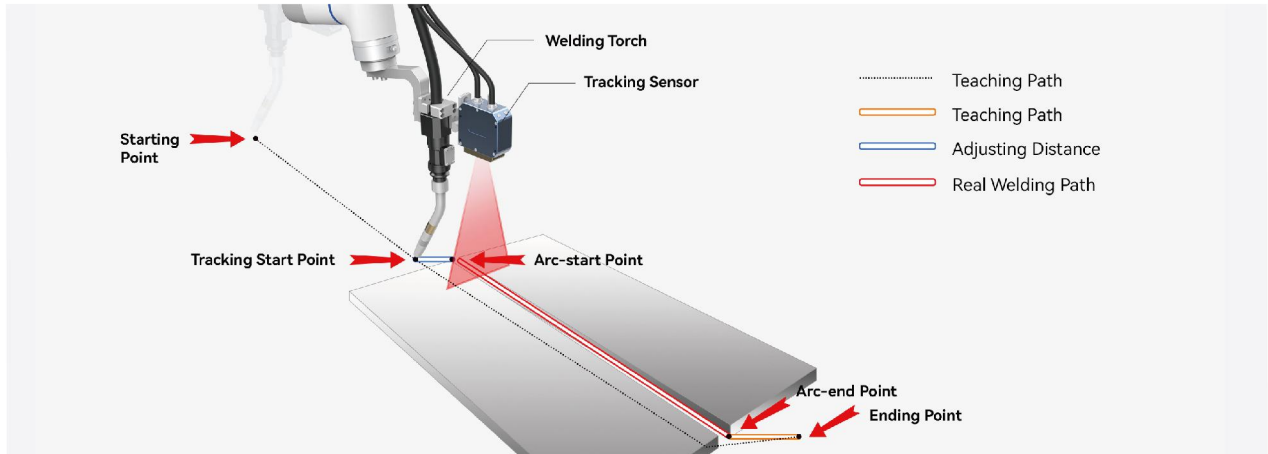
05 TAST Tracking (Through-Arc Seam Tracking)

This function is used in thick plate welding to maintain a consistent current between the welding wire and the workpiece. This allows the robot to automatically compensate for misalignments, deviations, or thermal deformations, ensuring accurate welding.



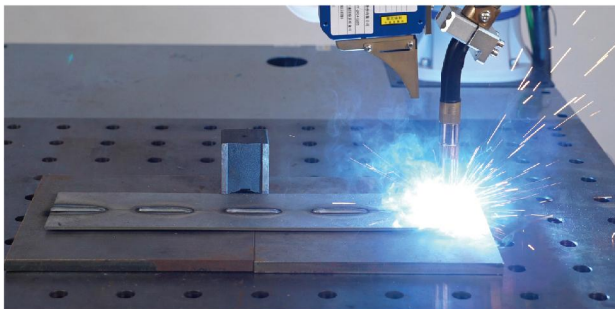
06 Laser Tracking

The Laser Tracking can calculate the positional deviation between the welding machine and the laser sensor. By identifying this offset, the system adjusts the welding machine's position to ensure precision. This function is particularly useful for welding heat-sensitive components or large workpieces.



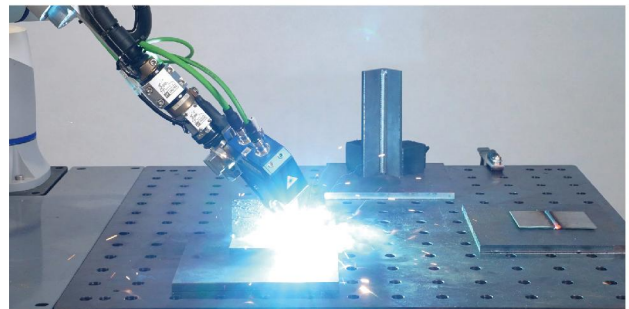
07 Intermittent Welding

Supports intermittent welding operations, enabling quick point storage to enhance welding efficiency while significantly reducing thermal distortion of workpieces.



08 Multi-Tasks Scheduling

A single cobot can continuously perform multiple welding tasks, doubling work efficiency.



09 Arc Restart

When encountering abnormalities with the welding machine, welding wire, or shielding gas that cause welding interruptions, users can activate the Arc Restart function to ensure high-quality continuous welding.

10 Arc Retry

If rust or oxidation prevents arc initiation, users can activate the arc retry function to ensure stable, uninterrupted welding and achieve strong, visually appealing welds.

More Functions are in development...

