



Achieves High-quality Welding with Various Functions and Space Saving

Arc Welding Optimal Collaborative Robot

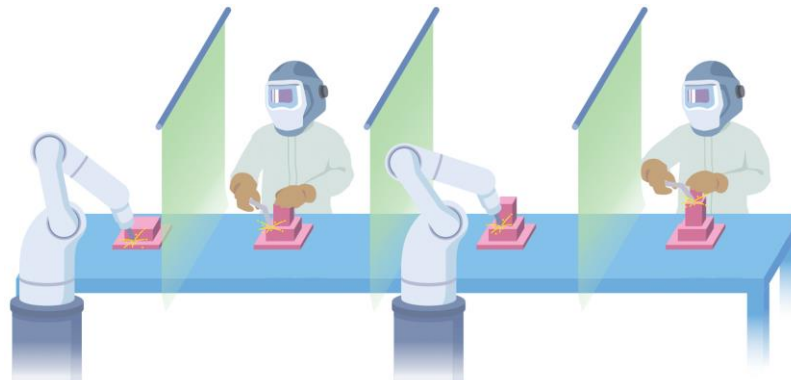
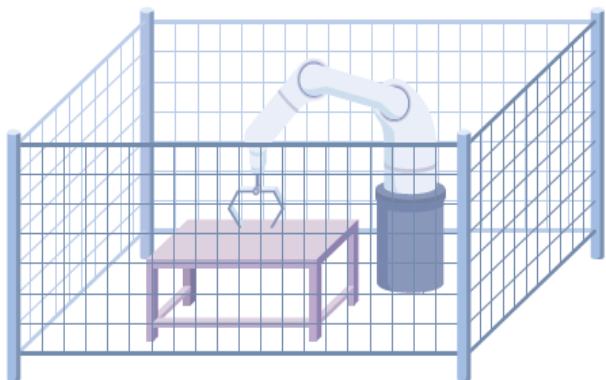
- Reducing the space required for installation
- Collaboration between humans and robot
- Flexible production line changes
- Same welding quality as industrial robots
(Trajectory accuracy, noise resistance, anti-spatter measures)

DAIHEN's optimum collaborative robot for arc welding applications solves various challenges in introducing robots



Can be installed without safety fence Occupied area reduced by 80%

- Immediately stops upon detection of contact with a person
- Arm-shaped and corner-free design to prevent pinching
- Safety certification obtained by a third-party certification organization



Compact and lightweight design

Body mass reduced by 36%

- No need for crane. Movable manually
- Contributes to the automation of welding process with the platform type and trolley type

Easy teaching by direct teaching

Robot Approaches Work

Ideal for welding large structures



Trolley type



Platform type

Welding quality equivalent to that of industrial robots

- High trajectory accuracy
- Supports TIG welds that generate high-frequency

Equipped with DAIHEN's extensive welding-related functions

Abundant welding methods

CO₂/MAG weld

MAG pulsed weld

Low sputter welding

Synchro feed welding

TIG weld

Extensive welding-only functions

Touch sensor function

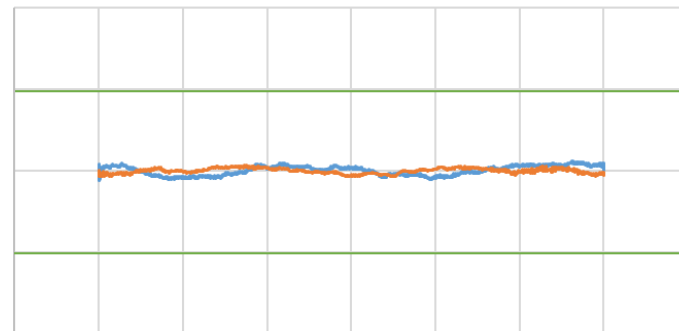
Arc sensor function

Weaving function

FD-AM

Various welding torches

Trajectory accuracy during linear motion (up and down)



— Industrial robot

— FD-VC4

— Welding accuracy standards

※Vertical error during left-right linear movement

- Workpiece setting is possible beside the robot during welding
- High quality weld
- Contact detection function

Plasma JET TIG

Welding current: 60A-180A (peak)

Welding speed: 60cm/min

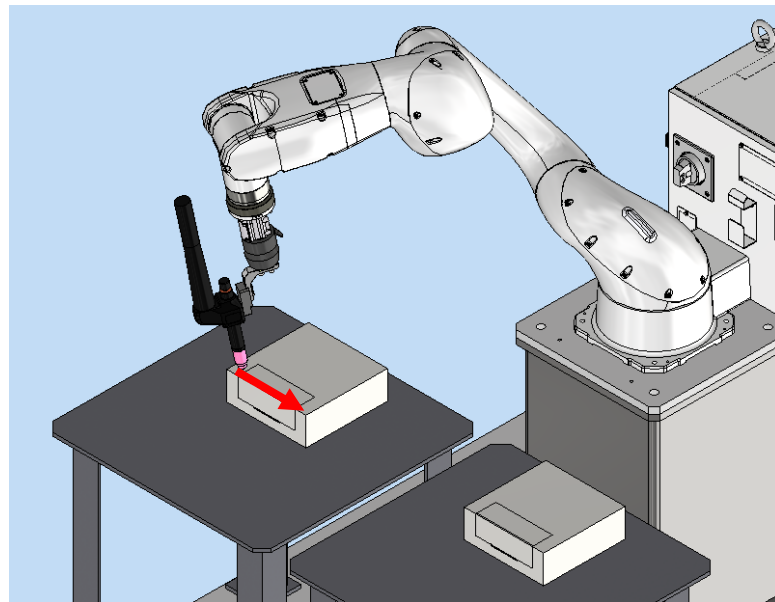
Base metal: SPCC plate thickness 2mmt

Shield gas: 100% Ar

Inner gas: 100% Ar

Pulse frequency: 6Hz

Pulse ratio: 50%



DAIHEN's collaborative robots ideal for arc welding applications can help realize high-quality, space-saving welding processes.

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