# YASKAWA

## STANDARD, PRE-ENGINEERED ARC WELDING SOLUTION

# ArcWorld<sup>®</sup> C-50 Series

with DX200 Controller

## ARCWORLD C-50 | ARCWORLD C-52 | ARCWORLD C-50S | ARCWORLD C-52S

## **KEY BENEFITS**

Compact workcell suited to high production

ArcWorld

Mounted on a common base for quick installation and relocation

High productivity without increased footprint or integration complexity

### SPECIFICATIONS

Max Part Size (mm) AWC-50: 1,650 x 685 AWC-52: 775 x 685 each

Max Tooling Diameter (mm) AWC-50S: 1,300 x 700 AWC-52S: 550 x 700 each



- Designed specifically for high-mix production of small- to mediumsized parts
- Workcell is shipped pre-assembled on a common base.
- Power supplies and controller are on a sub-base which can be pulled out for servicing access.
- Twist-lock connectors are included on all interconnection cables.
- World's fastest MA1440 arc welding robots can reduce cycle time by 15 percent, greatly enhancing productivity.
- MA-series robots are backed by the industry's only two-year torch cable warranty.
- Unique 7-axis VA1400 II robot provides additional application flexibility in the dual station workcells. The added "elbow" axis allows it to easily bend around the center partition.

- The AWC-50 models include a single welding station with fixed tooling (AWC-50) or a servo-driven MH185 headstock (AWC-50S)
- Dual-station models are available with fixed tooling (AWC-52) or with two MH185 headstocks (AWC-52S).
- Due to high payload capacity of headstock, a tailstock is not needed.
- Tooling risers are provided for the fixed-station workcells. Dowel pins can be used for changeover between multiple parts/fixtures.
- Single large tabletop (AWC-50) or two smaller tabletops (AWC-52) are available as options.
- Dual station eliminates sweep time of part positioner.
- Powered roll-up door(s) improve operator ergonomics.
- Robot operation is interlocked with roll-up doors to safeguard the operator during part load/unload.



All dimensions are metric (mm) and for reference only.

Request detailed drawings for all design/engineering requirements.

#### **SPECIFICATIONS**

Robot

MA1440: 6 kg payload; 1,440 mm reach VA1400 II (optional): 3 kg payload; 1,434 mm reach

#### DX200 Controller

Programming pendant with single point of control Large color touch screen USB and CF card memory storage Standard workcell software functions Multi-tasking (up to 7 jobs at once) Coordinated motion Twin synchronous Mirror copy Ladder logic editing/display Collision detection Software weaving Ethernet port Fieldbus I/O options

#### ArcWorld Welding Package HyperStart™ Weld-in-Teach mode function Graphic arc files Digital weld interface Integrated torch package Arm-mounted 4-roll wire feeder Welding power source Two-year torch cable warranty

#### Workcell Features

Common cell base and programming platform Pneumatic F/R with manifold

#### **Operator Control**

E-Stop Single push button cycle index (latching relay interlocked for safety) Door up/down interlocked with cycle start

#### Fixture Mounts (AWC-50 and AWC-52) Risers provide both locating pins and threaded holes

Risers provide both locating pins and threaded holes Center post supports single fixture completely (AWC-50) or one side of the two smaller fixtures (AWC-52) per side

MH185 Headstock (AWC-50S and AWC-52S) 185 kg payload @ 152 mm off-center, 250 mm (7.9") overhang Rated speed: 12.4 rpm Rated weld current: 400A Coordinated motion software

#### Total Safety Environment

(in compliance with ANSI/RIA R15.06-2012 and Canadian safety standards) Safety-rated, tamper-resistant interlocks Single point of operator control Barrier guarding with protective arc curtains Cycle start button interlocked w/safeguards L-shaped, dual-channel light curtains Dual sliding interlocked doors on each side of cell Funtional Safety Unit (FSU) to monitor station axis on operator side Safety PLC

# OPTIONS

Binzel or Tregaskiss torches and reamers Variety of weld packages; Miller, Fronius, Lincoln Wide variety of fieldbus cards and HMIs Vision systems Seam tracking and seam finding packages Tip changing service window ToolSight® TCP gauge Kinetiq Teaching™

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