YASKAWA

ARCWORLD® HS

COMPACT AUTOMATED ARC WELDING SOLUTION

KEY BENEFITS

Extremely compact, economical pre-engineered MIG arc welding solution

Fast and easy installation or relocation

Facilitates quick tooling changeover

Functional Safety Unit (FSU) eliminates the need for costly safety PLC and robot zone ring

Ideal for small- to medium-part welding for medium volume fabrication

APPLICATION

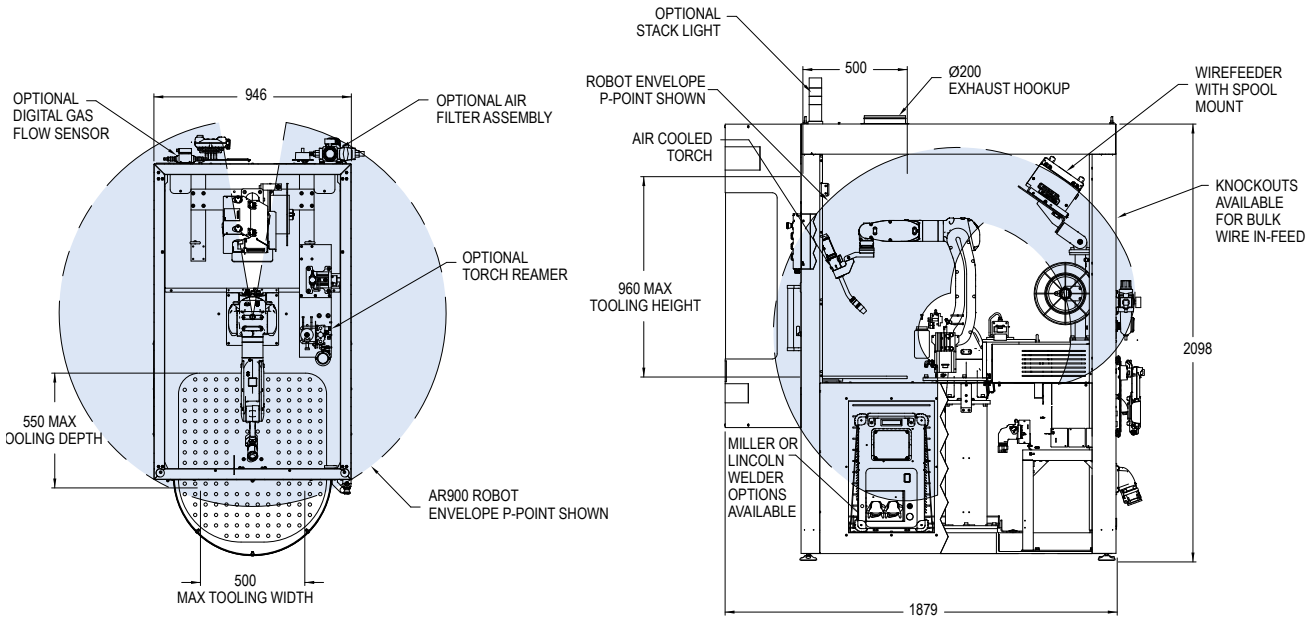
Arc Welding

CONTROLLER

YRC1000

- Highly flexible and ultra-compact workcell helps to replace or supplement manual welding, such as pre-assembly before welding in larger robotic workcells.
- Requires only 1.4 square meters (15 sq ft) of valuable floorspace.
- Hinged station (HS) design features a single fixture table with 100 kg payload capacity, and can process parts up to 550 x 500 x 1,050 mm in size.
- A single high-speed Motoman® AR900 arc welding robot welds parts with efficiency and consistent high quality.
- AR-series robots are backed by the industry's only two-year torch cable warranty.
- A built-in extraction vent for fume filtration and four-button operator panel with E-stop comes as standard.
- Overhead LED lighting for interior illumination.
- Sheet metal enclosure and light-reducing polycarbonate for arc and spatter protection.
- Common base with integrated cable management for easy shipping, installation and setup.
- Easy-open, safety-interlocked side panels allow for easier robot programming and equipment access.
- Enhanced safeguarding, including Functional Safety Unit (FSU) is fully compliant with latest robot safety standards (ANSI/RIA R15.06-2012, ISO and CSA).
- Choice of Miller® Auto-Continuum™ 350 or Lincoln Electric Power Wave® R450 power supply, wire feeder, wire spool holder and a variety of available torch options.
- Processes from the power supply are accessed by Yaskawa's Universal Weldcom Interface, giving full control of welding parameters and settings from the robot programming pendant.

ARCWORLD HS



All dimensions are metric (mm) and for reference only.
Request detailed drawings for all design/engineering requirements.

SPECIFICATIONS

Robot
AR900: 7 kg payload; 900 mm reach

YRC1000 Controller
Programming pendant with single point of control
Large color touch screen
USB and SD 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
Ethernet I/O options

ArcWorld Welding Package
Weld-in-Teach mode function
Graphic arc files
Digital weld interface
Integrated torch package
Arm-mounted 4-roll wire feeder
Welding power source

Common Workcell Features
Single piece cell enclosure
Tinted arc flash protection
Front hinged manual part access door
Full-width side access doors
Common base houses:
- YRC1000 controller and cables
- Power supply
  Lincoln (inside enclosure)
  or Miller (outside enclosure)

Operator Control
Push-button operator station mounted on right of each workstation's barrier door
Three buttons with illumination for cell control
E-Stop palm button

Fixture Mounts
550x500 mm perforated tooling table

Total Safety Environment
(in compliance with ANSI/RIA R15.06-2012 and Canadian safety standards)
Barrier guarding with protective arc shield
Safety-rated, tamper-resistant interlock
Interlocked access doors at the sides of the cell
E-Stop (pendant and operator station)
FSU software safeguarding without safety PLC or robot base switches

CONFIGURATION OPTIONS

- Beacon stack light
- Shielding gas flow sensors
- Pendant Armor
- Air filter/regulator

PROCESS OPTIONS

- Miller or Lincoln weld packages
- Binzel, Tregaskiss or Yaskawa air-cooled torch options
- Torch cleaning station
- Digital TouchSense part detection

YASKAWA

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