YASKAWA

ARCWORLD® LC SERIES

PRE-ENGINEERED ARC WELDING SOLUTIONS

KEY BENEFITS

Fast and easy installation or relocation

Functional Safety Unit (FSU) eliminates complex switches or a costly safety PLC

Lite Cell (LC) is ideal for job shops and manufacturers looking to automate small to medium part welding

APPLICATION

Arc Welding

MODELS

ArcWorld LC, Single Table

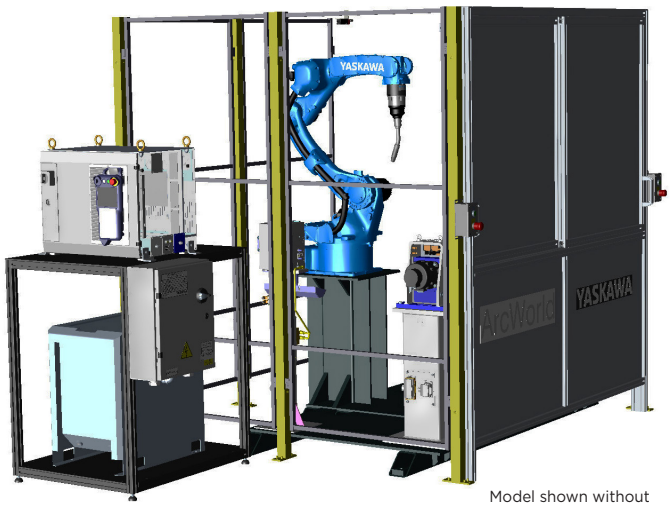
ArcWorld LC, Dual Tables

ArcWorld LC, Single Headstock

ArcWorld LC, Dual Headstocks

CONTROLLER

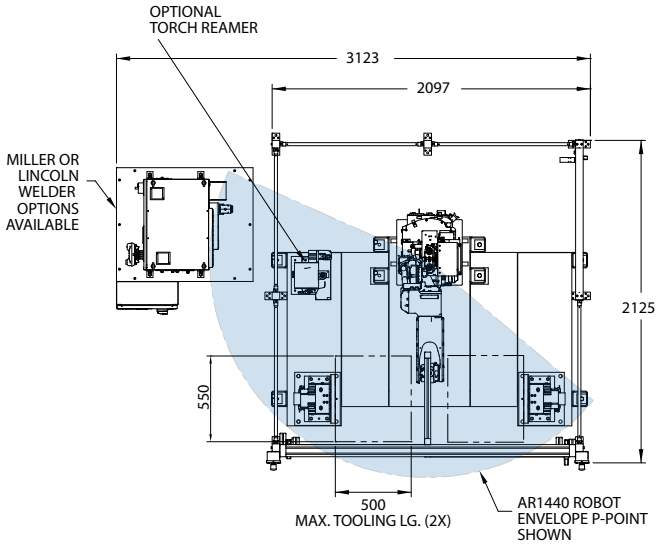
YRC1000

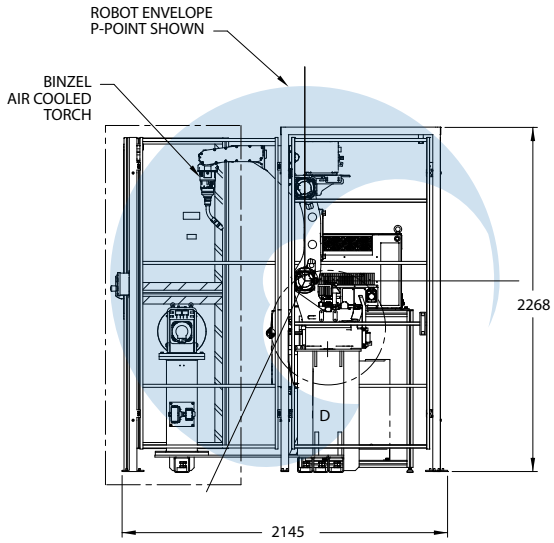


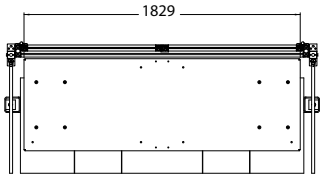
Model shown without weld curtains for interior visual

- Flexible single or dual workstation arc welding cell for Tier 2 suppliers or general fabricators with smaller parts and lighter volume.
- The single workstation is ideal for wider parts and is available with a fixed tooling table or a servo-driven MH185 headstock.
- The dual workstation configuration is available with fixed tooling tables or with two MH185 headstocks. This allows one part to be loaded/unloaded while the other part is welded, and eliminates sweep time of part positioner between part processing.
- Tooling can be quickly changed. Each workstation can be tooled for different parts or be used for sequential operations.
- Manual swinging (single station) or sliding (dual station) doors provide safe access to workstations.
- A single high-speed Motoman® AR1440 arc welding robot welds parts with efficiency and consistent high quality.
- Space-saving design features a common base for the robot and positioner(s) or table(s) for quick, easy installation and setup.
- Protective fencing with interlocked door mates up perfectly with the robot and workstation base for installation directly to the floor. Extended fencing option available for optimized robot reach.
- The robot controller, welding equipment and power disconnect are mounted as an assembly on a separate base to simplify shipment and installation.
- Enhanced safeguarding, including Functional Safety Unit (FSU) is fully compliant with latest robot safety standard (ANSI/RIA R15.06-2012).
- Choice of Miller® Auto-Continuum™ 350 or Lincoln Electric Power Wave® R450 robotic power supply.
- 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.

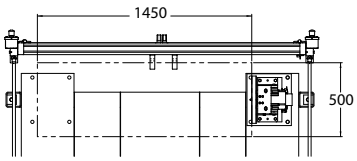
ARCWORLD LC SERIES



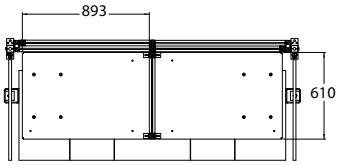




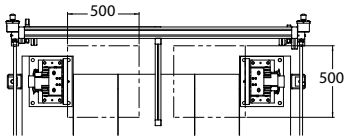
SINGLE TABLE



SINGLE HEADSTOCK



DUAL TABLES



DUAL HEADSTOCKS

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

SPECIFICATIONS

Robot
AR1440: 12 kg payload; 1,440 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
Robot assembly base
Robot controller and welding power source assembly
Wire mesh panels
Dual sliding or swinging doors for access
Power disconnect

Operator Control
Push-button operator station mounted at each workstation's barrier door
Cycle start palm button
Auto/manual selector switch
E-Stop palm button

MH185 Headstock (optional)
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)
Barrier guarding with protective arc curtains
Safety-rated, tamper-resistant interlock
Interlocked access door at the rear of the cell
E-Stop (pendant and door guards)
FSU software safeguarding without safety PLC or robot base switches

PROCESS OPTIONS

- Torch cleaner assembly
- Extended fence

YASKAWA

YASKAWA AMERICA, INC. 100 Automation Way | Miamisburg, OH 45342
937.847.6200 | motoman.com

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