YASKAWA

ARCWORLD® HC

PRE-ENGINEERED, HUMAN-COLLABORATIVE ARC WELDING SOLUTION

KEY BENEFITS

Portable, human-collaborative arc welding job shop

Fast and easy installation or relocation

Facilitates quick tooling changeover

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

APPLICATION

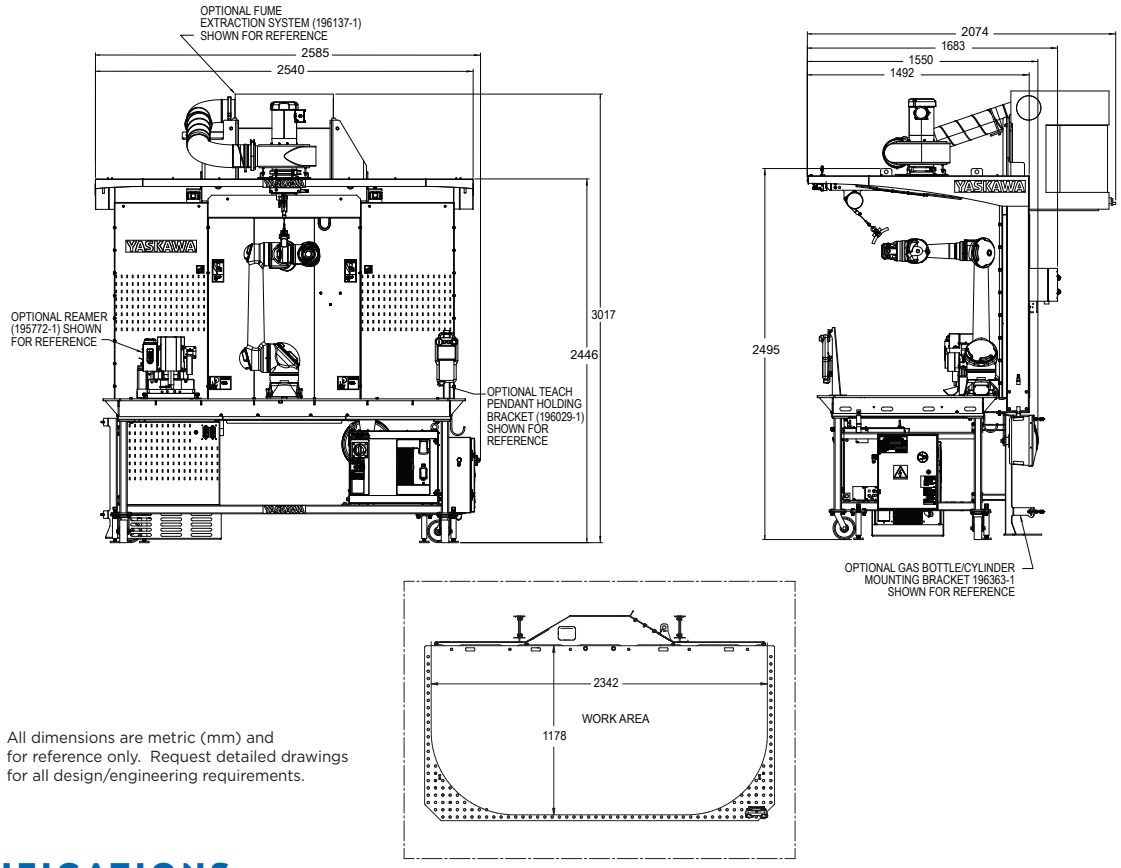
Arc Welding

CONTROLLER

YRC1000

- Highly flexible arc welding solution helps to replace or supplement manual welding, such as pre-assembly before welding in larger robotic workcells.
- Mobile cart design features solid wheels, leveling feet, 14-guage metal tool board, and three-sided access to a perforated 1,200 mm x 2,400 mm fixture table with 2,000 lb payload capacity. Parts up to 500 x 2000 x 800 mm (HxWxD) mm in size can be processed.
- A single human-collaborative (HC) robot – the Yaskawa HC10 with 1,379 mm maximum working range and 10 kg payload capacity – welds parts with efficiency and consistent high quality.
- Air-cut speed limited to 250 mm/s for fast cycle time while maintaining safe collaborative speed.
- HC-series robots offer industrial pedigrees, hand-guided programming and PFL for safe operation. An IP67 rating enables welding without additional coverings or equipment.
- Risk assessment provided for assured, safe design.
- Gridlok™ by Flextur™ tool board provides ample space for organizing tools and clamps.
- A built-in exhaust hood for fume filtration to remove harmful weld fumes.
- Retractable arc curtain for arc and spatter protection.
- Overhead LED lighting for interior illumination.
- Tool balancer reduces stress and interference from torch cable for maximum access of workspace.
- Debris tray protects power supply and controller, allowing for easy blow-out cleaning.
- 480VAC power disconnect for easy electrical setup.
- Compatible with Miller®, Lincoln Electric, SKS or Fronius 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.
- Optional wire spool holder integrated into frame and routed to wire feeder.
- Optional shield gas bottle holder with dedicated onboard space.

ARCWORLD HC



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

SPECIFICATIONS

Robot
HC10: 10 kg payload; 1,379 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
Cell-mounted 4-roll wire feeder
Welding power source

Common Workcell Features
Single piece cell enclosure
Tinted arc flash protection
Full-width side access
Common base houses:
- YRC1000 controller and cables
- Power supply

Fixture Mounts
1,200 x 2,400 mm perforated table

Total Safety Environment
(in compliance with ANSI/RIA R15.06-2012 and Canadian safety standards)
Barrier guarding with protective arc shield
E-Stop (pendant and operator station)
FSU software safeguarding without safety PLC or robot base switches

CONFIGURATION OPTIONS

- Shielding gas flow sensors
- Pendant Armor
- Exhaust system
- Gas bottle holder
- Pendant holder

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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