



WELDING AUTOMATION FOR EVERY SHOP

RAS CL840

Robotic Welding System

The RAS CL840 is a powerful, easy-to-use robotic welding solution designed for real-world production. Built for welding shops of all kinds, it delivers consistent quality, repeatable results, and improved throughput—helping you take on more work and stay competitive.

Ideal for miscellaneous metals, structural steel, barge work, dumpster manufacturing, custom fabrication, and other production welding environments.



Single Robot

Streamlined system design for efficient, reliable performance.



8-Axis Horizontal Configuration

Extended reach and flexibility for long parts and complex welds.



Built for All Welding Shops

Versatile solution for miscellaneous metals, structural steel, and custom fabrication.



Precision in Every Arc. **Performance in Every Build.**

Why the RAS CL840

The RAS CL840 is a versatile robotic welding system built for today's welding shops. Designed to handle a wide range of metals and applications—from structural fabrication to heavy plate assemblies—it delivers consistent weld quality, high productivity, and long-term reliability across industries.

From job shops and custom fabricators to barge builders, dumpster manufacturers, and beyond, the CL840 streamlines production and helps your team do more, every day.

One robot. Limitless applications.



Open-Access Design

Unobstructed front and three-sided access make loading, fixturing, and unloading fast and easy. Accommodates large and irregular parts with confidence.



Repeatable Robotic Weld Quality

8-axis horizontal configuration with advanced motion control delivers consistent, high-quality welds across a variety of metals and joint types—every pass, every shift.



Efficient Operator Loading

Low bed height and open deck rails simplify part handling and fixturing, reducing strain and setup time while improving throughput and workcell safety.



Production-Focused Structure

Heavy-duty steel construction and precision linear motion provide the rigidity and accuracy needed for demanding applications and high production volumes.



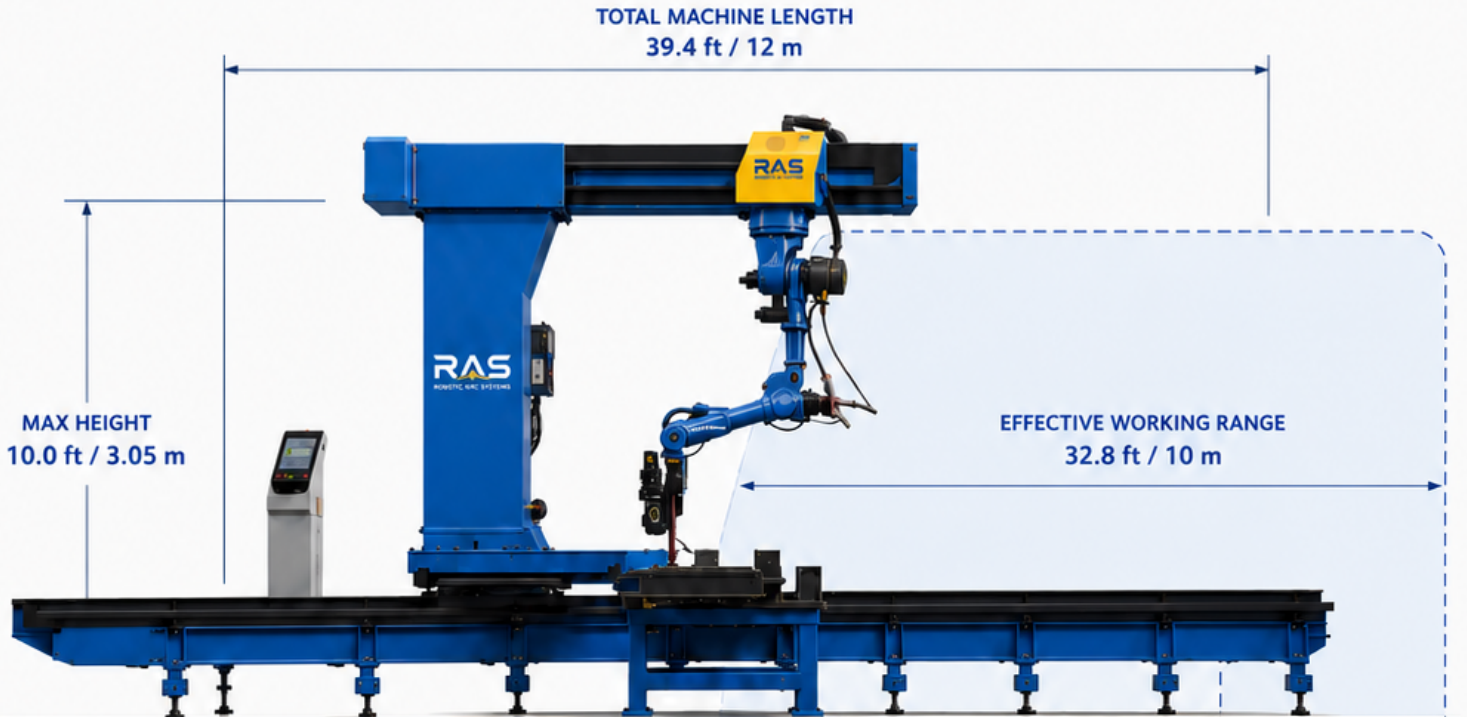
Single-Robot Simplicity

A single robot system reduces floor space, simplifies programming, and lowers total cost—while delivering maximum uptime and return on investment.

“ Engineered for practical shop welding automation for *many industries*. ”

CL840 SYSTEM LAYOUT

8-Axis Horizontal Robotic Welding Configuration



SIDE ELEVATION

KEY SPECIFICATIONS

	Configuration	8-Axis Horizontal Robotic Welding System
	Robot Qty	1
	Effective Working Range	32.8 ft / 10 m
	Total Machine Length	39.4 ft / 12 m
	Primary Process	GMAW / MIG
	Application Focus	Miscellaneous Metals, Structural Steel, Barges, Dumpsters, and Custom Fabrication



EXTENDED REACH

32.8 ft / 10 m of horizontal reach to handle large and complex parts.



OPEN ACCESS DESIGN

Open design provides unobstructed access for loading, fixturing, and welding.



BUILT FOR ALL WELDING SHOPS

Engineered for versatility to handle a wide range of materials, components, and production needs.

Precision in Every Arc. **Performance in Every Build.**

RAS Software Interface

Intuitive. Powerful. Built for All Welding Shops.



The screenshot displays the RAS Software Interface with a central 3D simulation of a robotic welding arm. The interface includes several panels:

- Program Panel:** Lists parts and welds. For 'Beam_36x150_A', it shows 24 welds (Weld 001 to Weld 009).
- Seam Tracking Panel:** Shows 'Seam View' and 'Extraction' views. It includes fields for 'Seam' (Seam_001), 'Status' (Tracking OK), 'Points' (412), 'Length' (10' 2 1/4"), 'Weld Direction' (Forward), and 'Offset' (1/4").
- Program Setup Panel:** Includes dropdowns for Project (CL840_StdJob), Machine (RAS CL840), WPS (General_GMAW), Base Frame (World (0)), and Tool (Weld Gun).
- Log / Messages Panel:** Displays a list of messages:
 - 09:15:22 Program loaded successfully.
 - 09:15:25 Workcell verified.
 - 09:15:27 24 welds validated.
 - 09:15:29 Simulation complete. No collisions detected.
 - 09:15:30 Seam extraction complete.
 - 09:15:31 Model import: SolidWorks file loaded.
- Axis Monitoring & Process Controls Panel:** A table showing real-time data for various axes:

Axis	Position	Speed	Load	Status
X (Rail)	118.54"	120 ipm	22%	Ready
Y (Beam)	60.10"	120 ipm	8%	Ready
Z (Vertical)	44.51"	80 ipm	11%	Ready
R (Rotate)	45.0°	30 °/s	12%	Ready
W (Wrist)	15.0°	20 °/s	10%	Ready
E (Tilt)	2.25°	15 ipm	9%	Ready
T (Torch)	0.00°	0 °/s	5%	Ready
Base	0.000 in	0 ipm	6%	Ready
- Process Controls Panel:** Includes a 'Cycle Start' button and fields for Arc On, Wire Feed (350 ipm), Travel Speed (120 ipm), Voltage (24.5 V), Current (220 A), and Gas Flow (40 CFH).

- 1 Program Setup**
 Define machine, base frame, tools, WPS, and global parameters in one streamlined setup.
- 2 Free Software Options**
 Flexible offline programming packages available to support different budgets, workflows, and production needs.
- 3 3D Workcell View**
 Visualize the complete workcell and robot reach in realistic 3D for layout planning and verification.
- 4 3D Scanning & Model Import**
 Support 3D scanning workflows and import production models from SolidWorks or Tekla for faster programming and setup.



- 5 Axis Monitoring & Process Controls**
 Monitor axis positions, speeds, and loads in real time, and adjust process parameters with confidence.

Plan smarter. Weld better. Produce faster.

The RAS offline programming platform helps reduce setup time, improve accuracy, and simplify production planning. Free software options, 3D scanning capability, and model import from SolidWorks or Tekla help your team move from design to weld-ready programs faster. Build offline, validate in 3D, and stay ahead on the shop floor.



Real Steel. Real Results. Every Shift.

The RAS CL840 is engineered for the real-world demands of today's welding shops—handling a wide range of miscellaneous metals, structural work, barges, dumpsters, custom fabrication, and more.

From one-off jobs to production runs, it delivers repeatable welds, smooth workflows, and practical integration that keeps your shop productive.



Built for a Wide Range of Welding Applications



Miscellaneous Metals

Weld plates, tubing, angles, channels, and other metals with precision and speed.



Structural Fabrication

Handle beams, columns, and assemblies for buildings, bridges, and infrastructure.



Barge & Marine Work

Fabricate and repair barges, decks, bulkheads, and marine components with confidence.



Dumpsters & Custom Fabrication

Build and weld dumpsters, enclosures, frames, and custom projects to spec.

Support That Builds with You



Layout Review

We review your parts, processes, and goals to ensure the CL840 layout fits your workflow and maximizes productivity.



Setup Planning

Our team plans tooling, fixturing, and robot paths to simplify implementation and shorten ramp-up.



Operator Training

Hands-on training for your team ensures confident operation, best practices, and long-term system success.



Ongoing Support

Responsive service and technical support keep your system running strong—day in and day out.



Start Your RAS CL840 Conversation

The RAS CL840 is built for all welding shops—from miscellaneous metals and structural steel to barges, dumpsters, and custom fabrication. Our team will help you design the right solution for your workflows, capacity needs, and growth goals to drive precision, productivity, and long-term value.



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What to Share With RAS

- ✓ Member sizes
- ✓ Production goals
- ✓ Available floor space
- ✓ Preferred workflow



Precision in Every Arc. **Performance in Every Build.**