

CX Series Magnetic Crawler Welding Carriage

Magnetic Crawler Welding Robot for Pipe & Tank Circumferential Welding

Magnetic-wheel crawler that grips steel directly — no track required for pipe and shell welding. Walks around circumferential seams and curved surfaces from Ø108 mm, inner shells from Ø700 mm.

Models Covered

CX-III-Q1/Z-W (straight swing) · CX-III-Q1/J-W (angle swing) · track and anti-drift fixture optional

Technical Specifications

Item	Specification
Carriage model	CX-III-Q1/Z (straight swing) · CX-III-Q1/J (angle swing)
Drive mode	Magnetic-wheel drive
Welding speed	0–650 mm/min (digital display)
Minimum suction thickness	3 mm (magnetically permeable material)
Welding diameter range (outer)	Ø108 mm and above
Minimum welding inner diameter	Ø700 mm
Carriage dimensions (L×W×H)	335 × 305 × 312 mm
Carriage weight	12.8 kg
Swing mode	Straight swing / angle swing
Swing width	0–32 mm (digital, simulated value)
Swing angle	30° (angle-swing version)
Swing speed	0–2700 mm/min
Dwell time left / right	0–4 s each
Centre offset compensation	±5 mm
Torch adjustment — vertical	65 mm (vertical slide)
Torch adjustment — horizontal	125 mm (main unit left/right rail)
Oscillator rotation	±60°
Torch nozzle travel angle	±25°
Magnet wheel tolerance	Permanent high-temperature magnets hold full strength below 580 °C; no wear, no track required
Controller	Gen-III split controller with 7-pin aviation socket for the optional intermittent welding module
Standard configuration	Carriage ×1 · Gen-III controller ×1 · Gen-III power unit ×1 · Gen-III straight/angle oscillator · Universal horizontal and vertical adjustment · Universal torch fixture ×1 · Torch cable support ×1 · Tool kit ×1 · Documents ×1 · Packaging ×1

Standard Configuration

Each machine is supplied complete and test-welded before packing, with export documents in order. See the specification table above for the exact bill of items.

Options & Customization

- Magnetic track for larger diameters and extended travel
- Anti-drift fixture to keep the torch locked on the seam line
- Universal castor wheels for fast repositioning between joints
- Intermittent welding module, battery pack, external auxiliary devices

Why Fabricators Choose Little Gecko®

- Single-purpose engineering team — we build welding carriages and crawler welding robots, nothing else.
- Works with your existing power source, wire feeder and torch: no extra investment in welding equipment.
- Every machine test-welded before packing; ISO quality management system and registered trademark behind it.
- Full English documentation, installation video guidance and responsive pre-sales support.
- Customization built to your workpiece — track length, torch fixture, dual-torch setup, expanding-head size.

Request a quotation or a live demo

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