

JJ / GJ Series Fillet Welding Carriage

Automatic Fillet Welding Machine for H-Beam & Box Beam Welding

Trackless fillet welding carriage that rides directly on the workpiece with permanent-magnet wheels, following H-beams, box beams and gussets. Dual-torch versions weld both sides of a fillet in one pass.

Models Covered

JJ-III-Q1/J-W (rubber wheel) · GJ steel-wheel versions · dual-torch Q2 models

Technical Specifications

Item	Specification
Carriage model	JJ-III-Q1/J (angle swing, trackless)
Drive mode	Rubber-wheel drive with internal permanent magnets
Welding speed	0–990 mm/min (digital display)
Minimum suction thickness	4 mm (magnetically permeable material)
Minimum travelling outer diameter	3000 mm (outside of shell)
Minimum travelling inner diameter	2900 mm (inside of shell)
Carriage dimensions (L×W×H)	308 × 260 × 288 mm
Carriage weight	9.2 kg
Swing mode	Angle swing
Swing angle	0–30° (digital, simulated value)
Swing speed	0–2700 mm/min
Dwell time left / right	0–4 s each
Centre offset compensation	360° rotation adjustment on the angle oscillator
Torch adjustment — vertical	65 mm (vertical slide)
Torch adjustment — horizontal	140 mm (main unit left/right rail)
Oscillator rotation	±60°
Torch nozzle travel angle	±25°
Magnet wheel tolerance	Permanent magnets keep full strength below 300 °C; the magnet arrangement does not affect the weld
Fillet width coverage (dual-torch versions)	400–800 mm web-to-flange fillet welds
Standard configuration	Carriage ×1 · Gen-III power unit ×1 · Gen-III angle oscillator · Two-axis adjustment assembly · Universal torch fixture ×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

- GJ steel-wheel versions for scaled or heavy sections
- Q2 dual-torch versions — both fillets of a beam welded in one pass
- CZ-III-Q1 side-mount carriage for corners where the carriage cannot sit over the joint
- Battery power pack, TIG / plasma / flame-cutting torch adapter, intermittent welding controller

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

Email: zhanghexuan20262026@outlook.com

WhatsApp: +86 133 1120 9085

Office: Room 716, Building 9, Yard 1, Tianxing Street, Fangshan District, Beijing, China

Manufacturing base: Fucheng County, Hengshui City, Hebei, China