

HLGB25-108 Automatic Tube-to-Tubesheet Welding Machine

Automatic Tube to Tubesheet Welding Machine for Boilers & Heat Exchangers

Fully automatic tube-to-tubesheet welding machine for boilers, heat exchangers, condensers and coolers. PLC touch-screen control and servo-driven rotation — each joint gets the same parameter set.

Models Covered

HLGB25-108 (expanding head customized to your tube size)

Technical Specifications

Item	Specification
Model	HLGB25-108
External power supply	AC 220 V, 50/60 Hz ($\pm 10\%$)
Drive voltage	AC 220 V (motor power)
Control voltage	DC 24 V
Ambient temperature	-20 to +60 °C (dry-bulb)
Ambient humidity	0–90 % (relative)
Drive mode	Servo motor drive, spindle rotation with pneumatic expanding head
Working mode	Double half-circle (horizontal tube) / full circle (vertical tube)
Maximum welding speed	16.7 s per revolution
Applicable tube inner diameter	Ø25–108 mm
Expanding-head clamping range	3 mm (tube diameter range)
Tube protrusion above tubesheet	5–20 mm (fillet / outside corner weld)
Torch adjustment range	Vertical 60 mm (vertical slide) · Radial 50 mm (tube welding radius adjustment)
Rotation speed	0–1300 (touch-screen setting, simulated value)
Welding delay	0.0–99.0 s (touch-screen setting)
Arc-out delay	0.0–99.0 s (touch-screen setting)
Wire retract time	0.0–99.0 s (touch-screen setting)
Positioning cylinder delay	0.0–99.0 s (touch-screen setting)
Production counter	0–99999 pieces, display / reset
Manual / automatic wire feed	Jog wire feed (manual) / computer-controlled feed (automatic)
Weld type	Fillet (outside corner) tube-to-tubesheet joints; torch travels without oscillation
Carriage dimensions (L×W×H)	360 × 330 × 430 mm, 15 kg (main unit)
Control cabinet dimensions	650 × 450 × 950 mm, 70 kg; integrated air compressor, wire feeder and water-cooling system; lifting rings and castors

Item	Specification
Connection cable bundle	5 m total length, aviation plugs with anti-misplug design, textile protective sleeve
Dedicated torch	Model 350 A, 5 m cable
Cable suspension bracket	Magnetic base, 1500 mm working radius, 600 kg ideal pull-off force
Standard configuration	Main unit ×1 · Control cabinet ×1 · Integrated cable bundle ×1 · Dedicated torch ×1 · Cable suspension bracket ×1 · Tool kit ×1 · Documents ×1 · Packaging ×1
Packing	Wooden case 820 × 620 × 1720 mm, 140 kg total

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

- Expanding (clamp) head made to order for your tube diameter and wall thickness
- Custom torch fixtures for special tubesheet layouts
- Oscillator kit for wider, controlled beads
- Water-cooling system and air compressor already integrated in the control cabinet

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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