



SAFE USE OF 110V & 415V ELECTRIC CHAIN HOISTS

Applies to: CM, GIS, Morris, Stahl, Donati, Verlinde, Yale, and similar powered electric chain hoists (110V, 230V, 400/415V)

Purpose

Electric chain hoists are powered lifting devices used for vertical raising and lowering of loads in workshops, factories, construction sites, and maintenance areas.

They provide fast and controlled lifting using electric motors and chain systems.

This leaflet provides guidance for safe setup, operation, and maintenance to prevent overload, electrical hazards, or dropped loads.

Before Use

- Inspect hoist – Check body, hook block, chain guide, pendant control, and power cable for damage or deformation.
- Verify SWL (Safe Working Load) – Ensure hoist capacity matches or exceeds load weight.
- Check certification – Ensure hoist, hook, and trolley (if fitted) have valid LOLER documentation.
- Inspect load chain – Look for twisted links, cracks, corrosion, stretching, or stiff joints.
- Check bottom hook – Ensure latch closes automatically and hook swivels freely.
- Verify top suspension – Hook, beam clamp, or trolley must be suitable, secure, and correctly installed.
- Check power supply –
 - 110V units: Use yellow site transformer and correct extension leads.
 - 415V units: Confirm correct phase rotation, isolator lock-off, and RCD protection if required.
- Test controls – Run hoist **unloaded** to verify direction, speed, limit switches, and brake function.
- Ensure correct lubrication – Chains must be clean and lubricated with manufacturer-approved oil.
- Ensure operator competence – Only trained and authorised persons may operate electric hoists.

During Operation

- Keep the load vertical and central under the hoist.
- Lift and lower smoothly — avoid shock loading or rapid reversing.
- Maintain clear communication with any banksman or slingers.
- Ensure chain feeds smoothly through the guide, without twisting or snagging.
- Keep hands clear of chain, hook, and load path.
- Use tag lines to steady long or awkward loads.
- Maintain exclusion zones — no personnel under suspended loads.
- For powered trolleys: Move the load slowly and avoid side pulls.
- Watch for abnormal noises, heat, or vibration — stop immediately if detected.

Do Not

- Exceed the hoist's SWL or duty cycle rating (e.g., FEM 1Bm, 2m, etc.).
- Use if chain is twisted, stiff, rusty, or dry.
- Ride on the hook or lift people.
- Allow the chain to kink, jam, or run dry.
- Shock load the hoist or drag loads sideways.
- Operate with damaged pendant controls or exposed wiring.

- Bypass or disable upper/lower limit switches.
- Leave suspended loads unattended.
- Use incorrect voltage supplies or mismatched transformers.

After Use

- Fully lower the load and disconnect the power supply.
- Coil pendant cable neatly to prevent damage.
- Wipe chain and hooks clean and lightly oil if required.
- Inspect for wear, deformation, or electrical damage.
- Tag out and report defective equipment immediately.
- Store hoists in a dry, secure location, protected from dust and moisture.
- Maintain LOLER inspection and periodic service records.

Safety Reminders

- Always follow manufacturer instructions (CM, GIS, Morris, etc.).
- Perform pre-use checks at the start of every shift.
- Maintain exclusion zones and safe lifting plans.
- Never exceed duty cycles — powered hoists require cooling intervals.
- Ensure correct voltage supply and electrical safety controls.
- Use appropriate PPE: helmet, gloves, safety boots, and high-visibility clothing.
- Arrange periodic thorough examination and servicing by a competent person.

Support and Maintenance

For service, inspection, and spare parts, contact your local Lifting Gear and Safety Depot

Depot List

Bristol: 0117 9714883

Avonmouth: 0117 9550456

Newport: 01633 334450

Port Talbot: 01639 540007

Pembroke: 01646 574000

Plymouth: 01752 474488

Fareham: 01329 550988

Redruth: 01209 703990