

SAFE USE OF PLATE CLAMPS

Applies to: Camlok, George Taylor, Crosby, and similar vertical and horizontal plate lifting clamps

Purpose

Plate clamps are designed for lifting and handling steel plates safely in either a **vertical** or **horizontal** orientation, depending on the clamp type.

Vertical clamps use a jaw and cam to grip plates standing upright.

Horizontal clamps are used in pairs to lift plates lying flat.

This leaflet provides safe-use guidance to prevent clamp slippage, dropped plates, or overloading.

Before Use

- Inspect the clamp – Check body, jaw, cam teeth, springs, pivots, and locking devices for cracks or wear.
- Verify WLL (Working Load Limit) – Ensure clamps are rated for the plate weight.
- Check certification – Plate clamps must have valid inspection and test certification.
- Check jaw condition – Teeth must be sharp, clean, and free from oil, rust, paint, or mill scale.
- Confirm compatibility –
 - **Vertical clamps:** Check jaw thickness range suits the plate.
 - **Horizontal clamps:** Always use in **pairs** with a **spreader beam** unless manufacturer states otherwise.
- Inspect plate surface – Must be clean, flat, and free from coatings where the clamp grips.
- Function test – Open/close clamp and check locking mechanism operation.
- Check sling angles – Ensure slings or beams keep clamps within manufacturer angle limits.
- Ensure operator competence – Only trained personnel should attach or operate clamps.

During Operation

• Vertical Clamps

- Position centrally on the plate to maintain balance.
- Ensure the locking lever is fully engaged.
- Lift slowly and vertically — no dragging or side loading.
- Use tag lines to control plate movement.

• Horizontal Clamps

- Always use in matched pairs.
- Use a spreader beam where required to maintain correct clamp angle.
- Position clamps symmetrically on the plate edges.
- Ensure equal loading on both clamps.
- Lift smoothly to avoid shock loading or twisting.

• General

- Maintain exclusion zones at all times.
- Keep hands clear of clamp jaws when closing.
- Stop immediately if slippage, noise, or cam movement occurs.

Do Not

- Exceed the WLL of clamps or associated lifting gear.
- Use vertical clamps for horizontal lifting.
- Use horizontal clamps singly unless approved by manufacturer.
- Lift painted, greasy, or rusty plates unless cleaned first.
- Modify jaw teeth or cams.
- Shock load, jerk, or drag plates.
- Leave suspended plates unattended.
- Put hands beneath any suspended load.

After Use

- Remove clamps carefully and close jaws for storage.
- Clean gripping surfaces and cams.
- Check for wear, deformation, or broken teeth.
- Tag out any damaged clamps.
- Store dry, off the ground, and protected from impacts.
- Maintain up-to-date LOLER inspection records.

Safety Reminders

- Always use the correct clamp for the orientation of the lift.
- Maintain clean gripping surfaces for maximum holding force.
- Ensure sling angles comply with manufacturer limits.
- Never exceed load rating or thickness range.
- Use appropriate PPE: gloves, helmet, safety boots, and high-visibility clothing.
- Only competent personnel should operate plate clamps.
- Plan lifts and maintain exclusion zones.

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