

5 SAFETY CHECKS

Before lifting steel plates

Using the correct plate clamp and lifting method is critical for safe steel handling.

Before every lift, ensure these five checks are completed.



1. Use the Correct Clamp Type

Not all plate clamps are designed for the same lifting orientation. Always confirm whether the lift requires:

Vertical Plate Clamps

- Lifting plates upright
- Turning plates from horizontal to vertical
- Transferring fabrications



Horizontal Plate Clamps

- Lifting plates flat
- Moving bundles of plates
- Handling non-sagging material



2. Confirm Load weight & WLL

Every plate clamp has a **Working Load Limit (WLL)**.

- Check the plate weight
- Confirm the clamp WLL rating
- Ensure the load is evenly distributed between clamps



⚠ Never exceed the clamp's working load limit.

3. Check Minimum Load Weight

Many vertical clamps require a minimum load to generate sufficient clamping force.

Typical minimum loads are:

- 5-10% of the clamp's maximum WLL

If the load is too light, the clamp may not grip correctly.

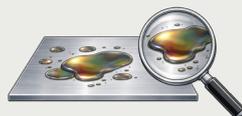


4. Plate Surface Condition

For safe lifting:

- Plate surface should be clean and dry
- Remove oil, grease or scale
- Ensure full contact between plate and clamp

Contaminated surfaces reduce clamp grip and increase risk of slippage.



5. Verify Clamp Condition

Inspect the clamp for:

- Damaged cam teeth
- Cracks or deformation
- Stiff or restricted operation
- Damaged locking mechanisms
- Excessive wear



⚠ Any damaged clamp **must be removed from service immediately.**

Final Reminder

- Determine the centre of gravity
- Use multiple clamps and or spreader beams for large plates
- Ensure load is evenly distributed
- Never lift loads over personnel