

SAFE USE OF GRADE 80 & 100 CHAIN SLINGS

Applies to: Pewag, Crosby, Gunnebo, RUD, William Hackett, and similar types

Purpose

Grade 80 and 100 chain slings are high-strength alloy steel lifting assemblies designed for safe and reliable lifting of heavy loads. They are used with cranes, hoists, and lifting frames to attach loads securely. This leaflet provides guidance for safe operation, inspection, and maintenance to prevent accidents, overloading, or sling failure.

Before Use

- Inspect the sling – Check all chains, links, hooks, and fittings for wear, distortion, cracks, or corrosion.
- Verify WLL (Working Load Limit) – Ensure the sling's rated capacity exceeds the total load weight, considering the number of legs and the included angle.
- Check identification – Ensure tags are legible and display WLL, grade, configuration, and manufacturer.
- Confirm compatibility – Verify correct sling type (single, double, 3- or 4-leg) and end fittings for the lifting points.
- Check shortening clutches and master links for free movement and secure pins.
- Inspect hooks – Safety latches must close fully and not be bent or damaged.
- Check for twists or kinks in chain legs.
- Ensure the load's lifting points are sound, positioned above the centre of gravity, and suitable for the sling angles.
- Ensure operator competence – Only trained, competent personnel should select and use lifting slings.

During Operation

- Position correctly – Attach slings evenly so the load is balanced and the included angle between legs does not exceed 120°.
- Protect the chain – Use edge protectors or softeners to prevent damage from sharp corners or abrasive surfaces.
- Apply load gradually – Take up slack and lift smoothly; avoid jerking or shock loading.
- Keep personnel clear – No one should stand beneath or near the suspended load.
- Maintain control – Use tag lines to steady large or awkward loads.
- Maintain communication – Use standard hand signals or radio communication as required.
- Ensure even loading – Adjust legs to share the load evenly and prevent overloading any one leg.
- Lower carefully – Avoid sudden stops or drops that can overload the sling.

Do Not

- Exceed the rated WLL or lifting angle limits.
- Use slings with illegible identification tags.
- Use if links, hooks, or fittings are cracked, stretched, or distorted.
- Twist, knot, or hammer chains to shorten them.
- Use makeshift connections such as bolts or wire loops.
- Lift loads over people or allow anyone beneath suspended loads.
- Heat, weld, or modify any part of the sling.
- Use in acid or chemical environments unless approved by the manufacturer.
- Leave suspended loads unattended.

After Use

- Lower the load completely and remove the sling carefully.
- Clean and inspect all components for wear, stretch, or deformation.
- Tag out and report any defects immediately to your supervisor.
- Store slings on racks or hooks in a clean, dry, designated area.
- Keep slings free of moisture, dirt, and corrosive substances.
- Ensure periodic thorough inspection by a competent person per regulations.

Safety Reminders

- Always follow the manufacturer's specific instructions and load charts.
- Never exceed the sling's WLL or lifting angle limits.
- Ensure lifting equipment (hooks, cranes, hoists) are rated for the combined load.
- Conduct a risk assessment and lifting plan before every operation.
- Use correct PPE: gloves, safety boots, helmet, and high-visibility clothing.
- Keep accurate records of inspections, tests, and maintenance.

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