

SAFE USE OF SHACKLES

Applies to: Bow, Dee/D, Screw Pin, Safety Pin, Bolt-Type, Alloy, and Stainless-Steel shackles

Purpose

Shackles are grade-rated lifting connectors used to attach slings, hooks, chains, and other lifting accessories to loads or lifting points. They provide secure connection points for lifting, pulling, or anchoring operations. This leaflet provides guidance for safe selection, inspection, and use to prevent failure, dropped loads, or misuse.

Before Use

- Inspect the shackle – Check body, bow, pin threads, and collars for cracks, distortion, corrosion, or excessive wear.
- Verify WLL (Working Load Limit) – Ensure the shackle's rated capacity exceeds the load weight, including sling angle effects.
- Check identification – Ensure the WLL, size, and manufacturer markings are clearly visible.
- Confirm correct type – Use Bow shackles for multi-leg slings; use Dee/D shackles for straight pulling or single-leg applications.
- Ensure correct pin type – Safety pin/bolt-type shackles are required where rotation or long-term loading is expected.
- Test pin engagement – Screw pins must fully seat; safety bolt pins must be fitted with split pin or nut as designed.
- Check connection fit – Ensure slings, hooks, and fittings sit correctly in the shackle bow without jamming or side-loading.
- Ensure operator competence – Only trained persons should select and fit shackles.

During Operation

- Align correctly – The load must be applied in-line with the shackle; avoid side loading or point loading.
- Use the correct pin – Always use the manufacturer's original pin; never mix pins between shackles.
- Tighten fully – Ensure screw pins are hand-tight, and safety bolts are fully secured with cotter/split pin.
- Use Bow shackles for bridle/multi-leg applications to allow correct articulation.
- Keep sling legs clear of the pin threads to prevent damage.
- Maintain communication and ensure exclusion zones beneath suspended loads.
- Lift smoothly – Avoid shock loading, snatching, or sudden changes of direction.

Do Not

- Exceed the shackle's WLL.
- Side-load or apply load to the pin (unless shackle is rated for it).
- Use shackles with bent pins, stretched bows, or damaged threads.
- Hammer pins into place or tighten using improvised tools.
- Replace manufacturer pins with bolts, nails, or mixed components.
- Use screw-pin shackles where vibration may cause them to unscrew.
- Leave loads suspended and unattended.
- Allow untrained persons to install lifting shackles.

After Use

- Remove from the load and clean dirt or debris from threads and bow.
- Inspect again for wear, cracking, or deformation.
- Lightly lubricate screw-pin threads if appropriate.
- Tag out and report damaged shackles immediately.
- Store in a dry, designated lifting gear area, sorted by size and type.
- Keep shackles together with their original pins.

Safety Reminders

- Always use shackles with clear WLL markings; discard unmarked or illegible items.
- Ensure the shackle size suits the sling, hook, or load point without causing binding.
- Never force multiple slings into a shackle that is too small.
- Use safety bolt-type shackles for long-term or overhead lifting.
- Include shackles in scheduled thorough examinations.
- Conduct a lifting plan and risk assessment where appropriate.

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