



Which Lifting Accessories are Fit for Purpose?

Is the shackle on the right the correct one to use as part of a sling for a 800kg tender?

While at first glance it may appear to be, closer inspection will reveal why it doesn't in fact meet safety standards. Understanding the difference between certified lifting accessories and non-certified ones is crucial to maintaining safety aboard.



Under current regulations all passenger ships must inspect their lifting appliances and lifting accessories once a year, and the inspection should be [completed by a competent person](#).



HSE (Health & Safety Executive) considers lifting accessories to be *“pieces of equipment which are used to attach the load to lifting appliances, providing a link between the two”*.

Examples of lifting accessories include:

- Fibre or rope slings
- Chains (single or multiple leg)
- Hooks
- Eye bolts
- Spreader beams
- Shackles

Accessories which are not certified are not fit for purpose. So how can you tell the difference between non-certified accessories, and those designated safe for lifting?

The Difference Between Non-Certified Equipment and Lifting Accessories

All lifting accessories must be **traceable**, meaning it's possible to trace the equipment to its manufacturer. You must also be able to see the EC Declaration of Conformity issued by the manufacturer.

Any lifting accessory purchased must be supplied with:

- Business address of the manufacturer or the authorised representative
- Trace-ability, for example a serial number, model or type identification, or batch number
- If applicable, the name, address and identification number of the notified body which carried out the conformity assessment procedure

- The relevant legislation with which the product complies, as well as the harmonised standards or industry standards used
- Name and signature of the manufacturer
- The date the declaration was issued
- CE Marking (for EU market)
- Declaration of Conformity certificate

Case Study: Reading Shackle Identification Markings

An example of a shackle provides us with a clear view of the markings you should expect to see on certified lifting accessories. They include:

- **Identification mark** - Shackles will not have a unique serial number from the manufacturer, but will have a batch number. A serial number should be stamped with a unique number for trace-ability by the supplier or user.
- **SWL** (safe working load) or **WLL** (working load limit)
- **Grade** – Metal
- **Unique trade mark** – for example the CE mark for the EU market



In some instances, markings may not be straight forward.

For example, Hundredweight or CWT marked on a shackle means a weight of 50kg for 1CWT.

The shackle on the right is marked as 10CWT and therefore have WLL of 500kg.



In the image below, we can see a comparison of the shackles discussed in this article. The smallest one is a stainless steel lifting D shackle with WLL of 1T, while the middle one is a High Tensile Grade 4 Bow shackle with a WLL of 500kg. The shackle on the left is a non-certified shackle and should not be used for any lifting operations.





Understanding the Markings can be the Difference between Safe use and a Potential Accident

During most of our inspections we find lifting accessories which are not certified and should not be used for lifting operations. In many instances the equipment is brand new and has been purchased from a supplier who does not specialise in lifting and is unaware of the regulations.

When this happens, engineers will not be able to issue a Certificate of Thorough Examination, and the non-certified accessories should be removed out of service until the correct accessories are sourced, installed and checked.

To avoid these types of errors, but more importantly to ensure your crew and guests are safe, we highly recommend [contacting a specialist supplier](#) who will be able to match the required lifting accessories to the task.

The following images are of non-certified accessories which our engineers found during annual inspections:





No date of manufacture.
2 standards quoted
Incorrect safety factor
Wrong CE mark



Please contact AM Defence & Marine for any questions regarding the supply and inspection of lifting equipment, working at height and bespoke sling solutions.

nivs@am-dmservices.co.uk

www.amdefencemarine.co.uk