

Instructions for the safe use of chlorine lifting beams

This document shall be passed to the user of the equipment.

Purpose

This document is issued in accordance with Australian Standards 4991-2004 and 2550.1-2011. It outlines the care and safe use of lifting beams. It should be read in conjunction with the requirements for general purpose slinging practice, given overleaf, which forms an integral part of these instructions.

This information is of a general nature only covering the main points for the safe use of lifting beams and spreaders, including lifting frames. It may be necessary to supplement this information for specific applications.

Always

- store and handle lifting beams correctly
- refer to the safe use instructions for slings and attachments used with the beam
- include the self-weight of the beam and attachments when calculating the load imposed on the crane hook
- ensure the load will remain stable when lifted
- ensure that no one lifting point becomes overloaded by the handling methods

Never

- use lifting beams to handle loads other than those for which they are designed
- fit lifting beams to a hook other than those for which they are designed
- use damaged or distorted lifting beams and attachments
- unevenly load lifting beams
- allow lifting beams to foul the underside of the crane or any other obstructions in the area

Storage

- Never return damaged lifting beams to a storage area. They should be clean and where necessary protected from corrosion
- Chlorine lifting beams should be stored in a manner that will provide protection from damage whilst in storage
- Stands or packing should be provided where this has not been built into the beam. Ensure the beam is stable and cannot topple over

Using lifting beams safely

- Do not use defective or distorted beams or attachments. The chlorine drum lifting beams are designed for a specific purpose and should not be used for other purposes without consulting the supplier. This will include the size of crane hook from which they are suspended. On no account should lifting beams be suspended from unsuitable size hooks

- Ensure that the SWL (safe working load) on the individual lift points is not exceeded
- Ensure the load is stable and that the beam remains at its intended attitude during use. Particular care is needed when lifting and setting down as not only may the load become unstable but individual lift points may become overloaded
- Use tag lines to control long loads
- Do not allow the beam to foul the underside of the crane, or any other obstructions, when elevating or transporting loads
- If a TRILITY supplied chlorine drum lifting beam is supplied with forklift tine accessory then a retaining lug to suit D shackle, ratchet winch and strap or turn buckle and chain must be used to secure to the mast head of the forklift (as per AS 4991-2004 section 8)

In-service inspection

- Maintenance requirements are minimal for lifting beams. Ensure that bolted joints are sound and that corrosion damage is prevented. Refer to the individual maintenance requirements for associated loose gear and attachments
- Regularly inspect lifting beams

In the event of the following defects, refer the beam to a Competent Person for thorough examination:

- beam distorted
- damaged or corroded
- worn
- loose or missing bolts
- cracked welds
- attachment points worn, damaged or distorted
- holes and eyes worn or elongated
- any other visible defects

In-service checks

Step	Description of operation
1.	Check for clear marking of identification number
2.	Check for clear marking of SWL and Tare weights on beam
3.	Check all welded visible connections are free from cracking and corrosion
4.	Check that any bolted connections are free from corrosion and visible cracking, all bolts are secure and correct
5.	Check any shackles fitted are free from distortion, nicks, gouges or wear

Minimum maintenance and inspection service requirements

Routine maintenance by a Competent Person every 12 weeks and periodic maintenance by a third-party inspection 12 monthly as per AS 4991-2004 and AS 2550.1-2011.

Verification and inspections

- Lifting beams will inevitably get knocked about or even misused in service resulting in damage that requires repairing
- Whenever a lifting beam is damaged requiring repair, it is advised that the cause of the damage be investigated

Service wear and tear

If a TRILITY supplied chlorine lifting beam is to be repaired it is recommended to be returned to place of purchase. Repairs will be conducted against original design specifications.

Where this is not feasible, then the repairer must take responsibility to ensure that the correct materials and components are used.

Following completion of any repairs, tests must be conducted by a Competent Person as per AS 4991:2004.

Reference material

- AS 4991-2004 *Lifting devices*
- AS 2550.1-2011 *Cranes, hoist and winches—Safe use—General requirements*

