



safety & lifting

For Safe Working Lives.



# LIFTING EQUIPMENT INSPECTIONS Guide



## HOW OFTEN & BY WHOM SHOULD LIFTING GEAR BE INSPECTED?

The safety of those using lifting and rigging equipment is of utmost importance, and employers and worksites must ensure they are adhering to regulations when it comes to inspecting and maintaining such equipment.

Nowadays, there is a great selection of lifting equipment available, including chain slings, wire rope slings, wire rope terminations, shackles, chain blocks, lever hoists and synthetic slings. Just trusting that the device meets Australian Standards is not sufficient.

Manufacturers can be located anywhere in the world and must comply with different laws. At Bunzl Safety & Lifting, we can inspect, repair and certify lifting equipment to make sure it not only meets the product's requirements, but complies to the relevant Australian Standards and safety regulations.

Lifting equipment inspections involve the assessment of cranes, forklifts, and other heavy machinery and equipment to ensure that they are in proper working condition and not a hazard to anyone in the workplace.

### Types of equipment requiring inspections include:

- |               |                  |                 |
|---------------|------------------|-----------------|
| 1. Cranes     | 4. Scissor lifts | 7. Air hoists   |
| 2. Forklifts  | 5. Hoists        | 8. Chain hoists |
| 3. Boom lifts | 6. Pallet jacks  | 9. Winches      |

## WHO SHOULD INSPECT LIFTING EQUIPMENT?

As stated in the Australian Standard AS 2550.1-2020 it is required that a 'competent person' inspect the equipment, and records should be kept of these inspections.

Under the Standard, a 'competent person' to inspect lifting equipment is someone who, through training, experience, and knowledge, is capable of identifying existing and potential risks, hazards, and non-compliances with the standards and regulations applicable to lifting equipment. This person should be able to evaluate the safety of the equipment, develop inspection plans and procedures, and provide advice on preventive and corrective maintenance.

Lifting equipment inspections also need to involve a detailed evaluation of the machinery, its components and safety features. At Bunzl Safety & Lifting, we can provide inspections on all forms of under the hook lifting rigging and height safety equipment at your site (or alternatively, equipment can be dropped into one of our branches) by our fully qualified and highly experienced inspectors.

All inspections of equipment are also electronically recorded in real time using the latest asset management software, which can be securely accessed by our customers at any time.

## HOW FREQUENTLY DOES LIFTING EQUIPMENT NEED TO BE INSPECTED?

Depending on the type of gear and frequency of use, inspections may need to be carried out more regularly than others.

For example, slings made of synthetic fibres may need more frequent examination than other types of gear. Additionally, any repairs or modifications to the gear must be followed by a proof load test.

The Australian Standards discuss two distinct types of inspection: in-service and periodic.

### In-Service Inspections

An in-service inspection is a visual assessment of the equipment prior to each lift, where the user looks for any wear or damage and verifies the weight limit tag is visible and legible. If any defects are observed, the equipment should be removed from service and inspected by a qualified individual to determine if it can be used, repaired, or discarded.

## Periodic Equipment Inspections

A periodic inspection is a more thorough examination of the equipment, where the equipment is cleaned and needs to be done in a well-lit area by an inspector who has been trained and has proven good vision. These inspections also need to be properly recorded.

### Factors To Consider

When determining how often to inspect an item, factors to consider include the amount of use it gets and the intensity of the job it is being used for (i.e. is it being used to its full capacity all the time). Additionally, the working conditions, such as if the environment is contaminated or corrosive, should be taken into account. Certain types of lifting equipment, such as slings made from synthetic fibres and wire rope slings with soft eyes, tend to suffer from quicker wear and tear, thus requiring more frequent inspection.

## LIFTING & HEIGHT SAFETY EQUIPMENT INSPECTIONS - FREQUENCY GUIDELINES

In general, the recommended frequencies for inspecting lifting equipment are as follows:

<b>Soft Slings/FWS</b>	<b>AS 1353.2</b>				
<b>Round Slings</b>	<b>AS 4497.1</b>	Slings shall be inspected by a competent person at intervals of service of not more than 3 months.			
<b>Flat Slings</b>	<b>AS 1353.1</b>				
<b>Chain Assemblies</b>	<b>AS 3775.2</b>	Periodic inspection by competent person. Bunzl Safety & Lifting suggests referring to the below table. For Alloy Chain Slings T(80) and V(100).			
	<b>LIFTS PER WEEK</b>	<b>Inspections / monthly</b>	<b>Inspections / 3 months</b>	<b>Inspections / 6 months</b>	<b>Inspections / 1 year</b>
	<b>1 - 5</b>	-	-	-	Yes
	<b>6 - 25</b>	-	-	Yes	
	<b>26 - 200</b>	-	Yes	-	-
<b>201+</b>	Yes	-	-	-	
<b>Lashing Chain</b>	<b>AS 4344</b>	Regular inspection by the user.			
<b>Wire Rope Assemblies</b>	<b>AS 1666</b>	Recommended periodic inspection by a competent person 12 monthly, subject to usage.			
<b>Concrete Clutches</b>	<b>AS 3850.1</b>	A proof test using a load equal to 1.2 times the WLL shall be conducted and recorded at least 12 monthly intervals. Prior to each use, inspections of the lifting clutches shall be conducted to check for wear and deformation on suppliers specification.			
<b>Lifting Beams</b>	<b>AS 4991</b>	Lifting devices shall be inspected by a competent person at intervals specified by the manufacturer or by the competent person. Bunzl Safety & Lifting suggest 12 monthly.			
<b>Monorail/Gantry</b>	<b>AS 1418.3</b>	Initial inspection not greater than 2 years (in first 6 years), then 12 monthly. At the time of commissioning only each hoist shall be proof loaded to 100% of its rated capacity AS1418.3, 1418.18.			
<b>Safety Harnesses</b>	<b>AS 1891.1:2020</b>	Before and after each use, users should inspect the harness, and it should also undergo a six-month inspection by a certified height safety equipment inspector.			
<b>Energy Absorbing Lanyard</b>	<b>AS 1891.5:2020</b>	Before and after each use, users should inspect the lanyard, and it should also undergo a six-month inspection by a certified height safety equipment inspector.			
<b>Horizontal or vertical lifelines Webbing or fibre ropes</b>	Before and after each use, users should inspect, and it should also undergo a six-month inspection by a certified height safety equipment inspector.				
<b>Horizontal or vertical lifelines Steel rope or rail</b>	As per the manufacturer's recommendation, a height safety equipment inspector should conduct a yearly inspection, with a maximum interval of five years. In the absence of this manufacturer's recommendation, a 12-month inspection is advised.				
<b>Anchors chemical &amp; mechanical If not secured with nut</b>	A proof load must be conducted on a yearly basis, with a rating of 15kN for one person and 21kN for two people. It is imperative to document these proof load tests.				
<b>Anchor nut secured</b>	In the absence of a proof load, it is necessary to conduct testing on the structure or obtain certification from an engineer.				
<b>Type 2 Fall Arrestors</b>	<b>AS 1891.3:2020</b>	Self-retracting lifelines necessitate a documented inspection every six months. Additionally, servicing should be conducted in accordance with the manufacturer's recommendations, with a maximum interval of five years. In the absence of such recommendations, a 12-month inspection should be performed. These inspections and servicing tasks should be carried out by a certified height safety equipment inspector.			
<b>Type 3 Fall Arrestors</b>	<b>AS 1891.3:2020</b>				