

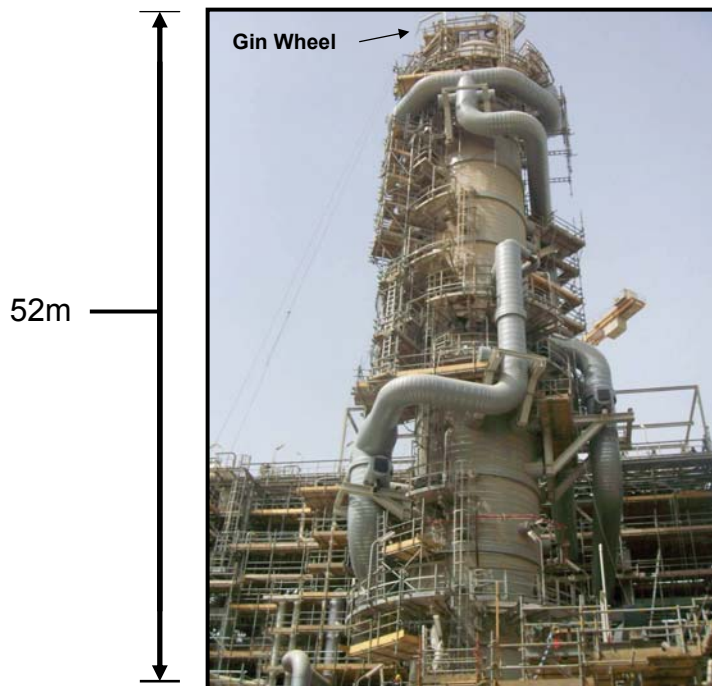
Gin Wheels



Please be aware the NASC have been advised of a Safety Alert regarding the failure of a number of Gin Wheels.

Details of the alert are as follows:

SAFETY ALERT GIN WHEEL FAILURE



A Gin wheel failed and fell from 52m. No property damage or Injuries were Sustained

The following pictures show the Results that were undetected until after the event.

All Gin wheels were Immediately Removed from site and a full Inspection carried out.

A total of 500 Gin wheels were disassembled and Inspected.

The Inspection revealed that a further 43 showed similar signs of wear and tear that had occurred.

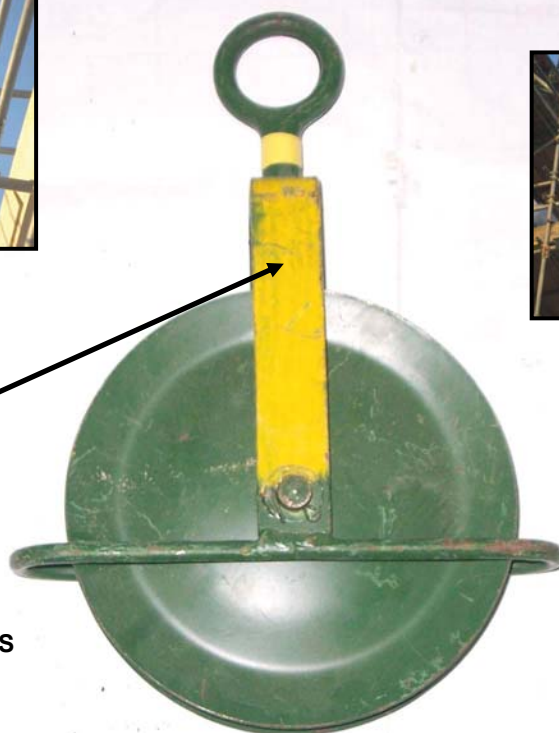
This was a very serious near miss.

Gin Wheels

NASC

NATIONAL ACCESS & SCAFFOLDING
CONFEDERATION

Gin Wheel



Tested to 1,000 KGS
To lift 250 KGS
Hoisting 50 kilos

Gin Wheels

NASC

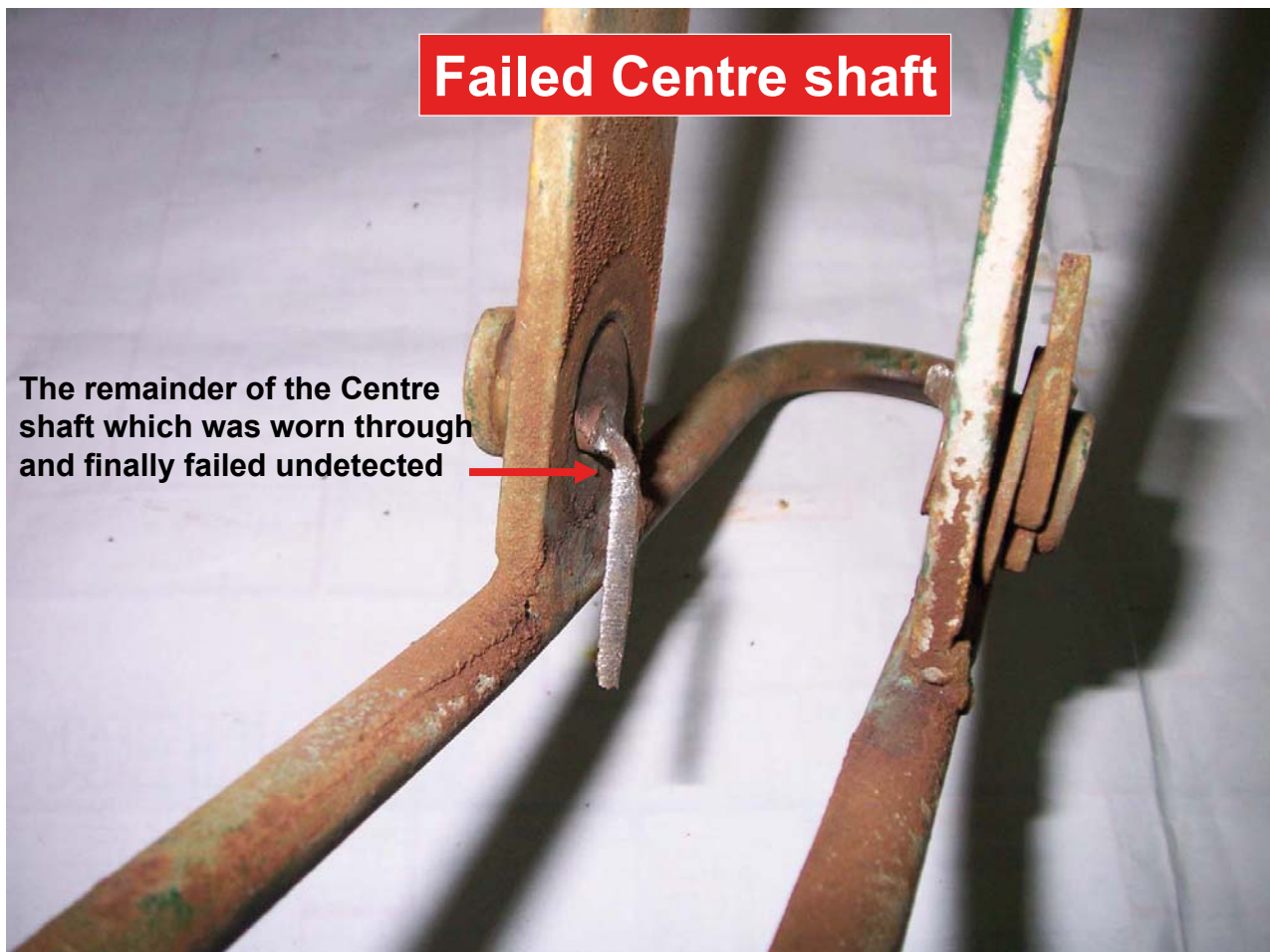
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Gin Wheels

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Gin Wheels



Gin wheel discovered during Inspections with similar Undue wear and tear



Centre hole Showing signs of wear and Tear



Fractured guides

Worn centre shafts



Centre bush Remaining part



Damaged Rope guide

Gin Wheels

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Actions Taken

Gin wheels being disassembled and the Inspection work being Supervised by a Competent Supervisor



Completion of Inspection and Service

Failed unsafe to use
Taken out of circulation



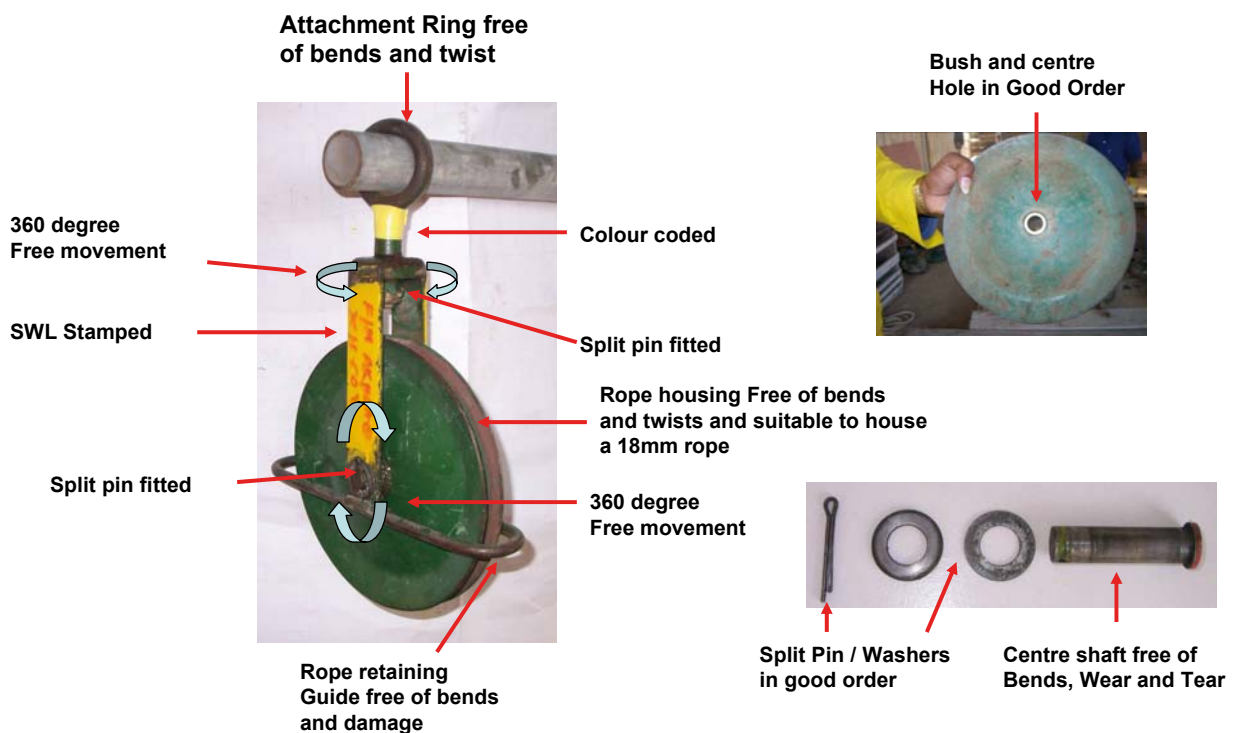
In good order Grease being
applied before reassemble



Fully serviced and Inspected
Re assembled Ready for Site use



Check list Inspection Record not Attached but is available for Inspection in the Central Office TSF Yard



TOOLBOX TALK

THE SAFE USE OF A GIN WHEEL AND ROPE

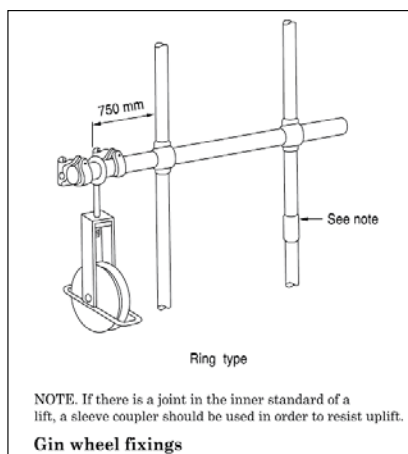
Using a rope and wheel safely is often an underestimated skill. Misuse will cause accidents and injury

Points to remember:

- Only use a gin wheel and rope if you have been properly trained to do so.
- Gin Wheels and ropes must be inspected prior to going to site and before each use.

Before use check:

- The wheel has an identification number.
- The safe working load SWL (e.g. 50 kgs) is marked on the wheel.
- The wheel runs freely and true, with no visible signs of corrosion, excessive wear, deformity or contamination from oil, paints, concrete etc.
- The edge of the wheel is free from any sharp edges that could damage the rope.
- The wheel is not crimped, which will prevent the rope from running smoothly.
- The two split pins are in place, unbroken and not corroded (bent over nails are not an acceptable alternative)
- The centre pin for any signs of excessive wear
- The supporting ring/hook is not cracked, damaged or deformed.
- The rope has a means of identification (ID tag with safe working load SWL)
- The rope is in sound condition, is not cut, frayed, worn or damaged.
- The rope is not kinked or contaminated by oil, paints etc.
- The rope core is firm and consistent along the rope length.
- The ends of the rope are properly spliced.



Setting up the gin wheel and rope:

- Carefully select a safe area where co-workers and members of the public are not at risk, and barrier off an exclusion zone.
- The gin wheel horizontal supporting tube should be fixed with double couplers to 2 standards.
- Where a joint occurs on the inside standard between the supporting tube and the working platform a sleeve coupler should be used.
- The Gin Wheel must be suspended from its supporting tube no more than 750mm (2' 6") from the scaffold.
- A load bearing fitting is required each side of the gin wheel on the horizontal support tube.
- Remove any obstructions, e.g. transoms from route of travel of rope.

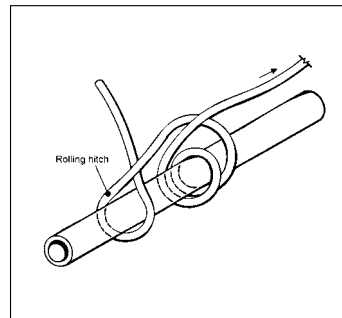
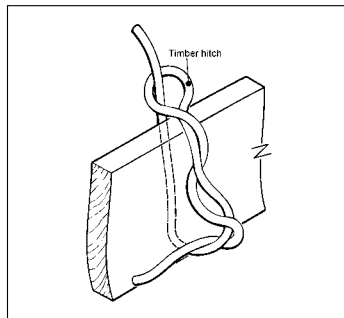
Gin Wheels

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Using the rope and wheel:

- Never stand directly under the load, keep others clear and concentrate at all times.
- When lowering materials over the side, the top man must ensure that the person below is holding the rope securely and is ready to receive the load.
- Make sure the load is properly secured; use the rolling hitch knot for tubes, and the timber hitch knot for boards.
- When raising/lowering more than one tube or board, use an additional half hitch knot to improve the grip on the load.
- The maximum amount of material to be lifted or lowered:
 - 2 x 38mm (1 1/2") thick boards of any length
 - 1 galvanised tube up to 6.4m (21')
 - 2 galvanised tubes up to 3m (10')
 - 3 galvanised tubes up to 2.4m (8')



- Assess the weight and shape of the system components before deciding on the number of items to be attached at any one time.
- A figure of 8 knot is used to prevent the rope going completely through wheel.
- Only purpose made lifting bags or baskets are to be used for raising fittings.
- Safety helmet, safety footwear and gloves must be worn.
- The top man must work behind a protective guardrail and, if possible a toe board, or wear a Harness/Lanyard attached to a suitable anchorage point.

Note:

- Never hang a Gin Wheel from a scaffold fitting.
- Never use a knot to join two lengths of rope together. The joint should be spliced by a competent person.
- Take extra care in windy conditions. If it is too windy, stop work.
- If you have forgotten which knots to use, do not be afraid to ask to be shown them again.
- Under LOLER 1998 Regulations, a Gin Wheel must be thoroughly examined by a competent person every 12 months and a report issued.

The NASC would like to thank John Lock of SGB for producing this article.

