

NSW Resources Regulator

SAFETY BULLETIN

DATE: JUNE 2022

Issues found on forklifts during mine site assessments

This safety bulletin provides safety advice for the NSW mining industry.

Background

NSW Resources Regulator inspectors have observed maintenance and operational issues involving forklifts operating on NSW mines, during recent assessments.

Forklifts are a well-known, high risk plant. There is a need for operators to have an up-to-date high risk forklift license (LF or LO endorsement depending on the type of machine) and training, to be familiar with the controls and to know the forklift's limitations before operating it. Because forklifts are manoeuvrable, they are designed to be compact and, when carrying loads, they can become unstable under certain conditions.

Not maintaining a forklift correctly can increase the risk of worker injury or harm. Likewise, not undertaking operator pre-start checks and standing it down when appropriate, as well as operating the forklift outside of its design parameters can increase the risk profile for the machine.

Observations

Inspectors noted several issues during assessments about forklifts operating at NSW mine sites recently:

- Worn and damaged hydraulic hoses.
- Extremely worn and/or damaged tyres.
- Underinflated tyres where they are pneumatic.
- Missing wheel nuts and their security tabs (where used).
- Debris in cabins/operator compartments and fines build-up around operator pedals.
- Rubbish and slings sitting unsecured on the forklift that could become projectiles.

NSW Resources Regulator

- Damaged operator seats and seat belts.
- Operators not wearing seat belts while driving.
- Non-existent or ineffective guarding able to make contact with rotating parts such as fan blades.
- Unreadable/missing load labels and safety decals.
- Worn out/missing operator pedal rubber.
- Worn, damaged and/or buckled/deformed tynes.
- Damaged lights (including protective diffusers and flashers) and horn.
- Fire extinguishers not maintained lack of test tag stamping.
- Operator pre-starts not completed or workers failing to identify items requiring attention and/or standing down of the machine.
- Operators reporting issues multiple times on pre-starts over extended periods of time and these not being addressed.

Figure 1 Damaged hydraulic hoses



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Figure 2 Worn tyres and damaged lights



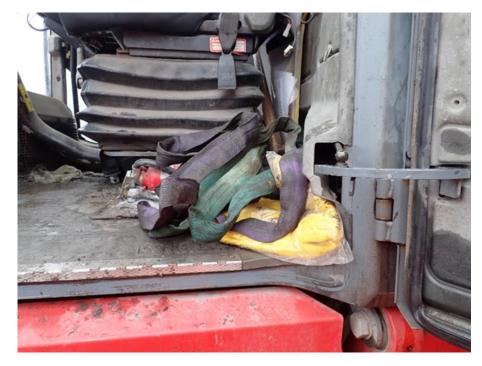
Figure 3 Guarding. Rotating parts contactable through the rear



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Figure 4 Debris and unsecured items in a forklift cabin



Recommendations

Mine operators must ensure:

- forklifts used at a mine workplace are fit for purpose. Consult with workers and safety and health representatives (where possible) to determine their suitability. Forklifts must be operated within the manufacturer's design parameters.
- forklifts are regularly inspected, serviced and maintained to original equipment manufacturer (OEM) specifications by trained and competent personnel.
- forklift operators must have a current high risk work license for the appropriate type of machine (mostly LF). In addition, mine operators must ensure that forklift operators are also provided with additional training, instruction and information on the equipment operation, hazards, risks and control measures relevant to the workplace.
- pre-start inspections should be undertaken and documented before using a forklift. The machine must be stood down whenever safety critical functions fail a pre-start examination. Report all other defects to supervisors for defect management.

NSW Resources Regulator

There are limitations with respect to forklift visibility while carrying and moving loads. Speed, load size, ground conditions including ramps and weather may come into play with respect to pedestrian interaction. Positive communications must be invoked between the pedestrian and forklift operator if the pedestrian needs to approach a working machine or area.

Example of issues that pre-start checks should consider

- Lift and tilt systems mast should not be bent, worn or cracked. The tilt lift and lower should operate smoothly. Hydraulic lines and hoses should be undamaged and secured in guides. Cylinders and hoses should be checked for damage and leaks. Chains, cables and limits must be in good order.
- Check steering and brakes, fluids and operating controls (labelled, not lose or binding).
- Examine tyre condition and wear, damage, inflation (pneumatic type) and wheel rims for damage and any missing nuts and their security tabs (if used).
- All warning devices, load rating plates and safety decals must be legible and operational.
- Fork arms and attachments should be inspected for damage, adjustment, deformation and wear.
- The fire extinguisher must have an in-date test label.
- Rollover protection (ROPS and FOPS) and egress steps and handrails should be in good order and secure. Chassis and glass (where fitted) should be in good order with wipers operating and effective where they are installed.
- The seat and seat belts should be in good order and operate freely and reliably.
- Cabin or operator compartment should be free of debris and there are no unsecured objects stored in the cabin/compartment or sitting on the machine itself.
- The battery isolator should be functional and able to be locked in the off position.



NSW Resources Regulator safety alerts:

SA18-16 Tyre falls from tyre handling forklift

SA13-09 Seatbelt saves forklift driver

SA00-03 Operator crushed by overturned forklift

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- find more safety alerts and bulletins
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