BI.02.11 Wheel assembly component inspection before first use or re use

(Accountable - Company 2 Representative (Unassigned))

Expectations

Wheel assembly components are inspected before use.

Specify

Wheel assembly of components typically comprise:

- a rim base with a wheel disc or nave plate welded onto it
- bead seat band
- flanges and lock ring

Together these up a disc wheel, which is directly fastened via the wheel disc/nave plate to the vehicle axle hub using bolts or studs and nuts.

Each of these components is inspected before use and in addition workers carry out:

- Tolerance checks during a staged inflation process (to align with tyre inflation protocol(s));
- Engagement with OEM on a regular basis to confirm standard is maintained;
- Supply chain process is in place to confirm correct parts are supplied to standard on site;
- Change and/or risk assessments are conducted for any identified conditions requiring consideration.

Audits of wheel assemblies are undertaken (ideally as an included item in the maintenance strategy for the wheels) that confirm that current NDT certificates are held in appropriate plant safety file management systems.

Safety interactions/task observations are targeted, scheduled and confirmed in terms of quality and quantity (of the works and the interactions).

Senior management review the protocols and approve scheduled inspections as required.

Key technical workers on the site are tasked with monitoring industry information and incidents - linking these back to site protocols as appropriate (including triggering reviews of site activities).

Documents related to Tyres, Rims and Wheel Assemblies are included in a register and tracked during their presence on site.

Implement

Inspection is undertaken by competent person(s) and as required there is non-destructive testing (NDT) of wheel assembly components - using visual inspection, crack testing and dimensional gauges (dependent on assembly type). All of these checks are conducted prior to assembly and inflation. NDT inspection frequency is based on site conditions, risk analyses and observed component performance.

Tyres and components that are unfit for use are removed from service.

Where repaired tyres are intended for use - then any repairs are considered in tyre placement (to confirm these tyres are not in critical locations and that any repairs face into the machine or are used as the inner tyre for a dual wheel assembly).

Monitor

Trained workers conduct visual and dimensional checks on wheel assemblies as part of any maintenance task (to confirm they continue to meet site requirements).

Outputs from inspections are included in a Rim Register for the site, which provides reminders on inspections and prompts for confirming status of corrosion and wear and defect response (also tied to the Plant Safety File for the item of plant).