

Fatal Haultruck Tire & Rim Disassembly during a Tire Change

Classification: Fatality Injuries: Four fatalities
Otraco incident: No



Description

Three tire fitters and a workshop assistant were changing the right outside rear (position 6) tire on a Komatsu HD785 haultruck at a tire workshop on a minesite in South Kalimantan, Indonesia.

As the tire fitters were attempting to remove the wheel cleats holding the right rear tires in position, there was a sudden release of inflation air, presumably from the right inside rear (position 5) tire.

The outside (position 6) tire and rim assembly was propelled off the wheel hub. The four workers, who were all facing the sidewall of the tire, were hit by the tire and rim assembly as it flew sideways off the truck.

All four employees died due to injuries.

Causes

The incident is currently being investigated by the mining company and its contractor. Details of the investigation have not yet been disclosed. The causes (and consequences) of this incident appear to be similar to those of the recent fatality in Queensland.

Reports indicate that the right outside rear (position 6) tire was at least partially deflated prior to removing any wheel nuts.

The Komatsu HD785 truck is fitted with demountable rims (i.e. rims attached to the truck by a cleat system rather than being retained by a wheel disc). Under AS 4457, an Australian Standard dealing with off-highway rims, **both** right rear tires should be deflated, to a maximum inflation pressure of 35kPa (5psi), prior to loosening any wheel nuts from this dual assembly.

It seems likely that the inside (position 5) tire had not been properly deflated prior to the wheel nuts being loosened. **While this appears to be the case, it now seems probable that it was the outside (position 6) assembly that failed – indicating inadequate deflation of the position 6 tire. Otraco's standard procedure is TOTAL deflation of both tires.**

Action

- When changing a tire fitted to a demountable rim, ensure that the tire (both tires in a dual assembly) is deflated to a maximum pressure of 35kPa (5psi), but preferably totally deflated, before loosening any wheel nuts.

Another critical procedure, that may or may not be related to this particular incident, is:

- Use a tire manipulator, forklift, etc. to press against the wheel assembly, holding it firmly in position, as wheel nuts are being removed.

