

General Workplace Inspectorate

Promoting Safety and Health in the Workplace

ACCIDENT/INCIDENT ALERT

3 June 2004

Tyre Fitter Killed by Exploding Tyre

An 18-year-old tyre fitter was inflating a rear tractor tyre in a workshop, when it exploded, hurling him against a wall and inflicting fatal injuries.

Circumstances

The tyre fitter was instructed to inflate the tyre to 10-12 psi. The workshop owner, who was helping the tyre fitter, went to answer the telephone, and whilst he was on the phone he heard the loud bang of the tyre exploding.

Investigation

The wheel rim was severely corroded, with much pitting and some rust holes. This had weakened the rim edge, allowing it to fold inwards under pressure of inflation.

The wheel assembly was not restrained in any way, nor placed in a tyre cage, as there was no cage on the premises.

The assembly was lying flat on the workshop floor, and it seems likely that the tyre fitter was leaning across the tyre when it exploded.

The victim had learned tyre repair on the job.

Recommendations

Damaged or heavily rusted wheel rims should be rejected.



Photo of the wheel rim showing rust holes and folding in of rim edge.

A suitable safety cage is required for the inflation of all large tyre/wheel assemblies or tyre/wheel assemblies for high-pressure tyres.

When a tyre cage is not available, the tyre should be restrained by some other safe method.

The OSH *Health and Safety Guidelines for Tyre Fitters* describes other safe methods of work. One such method follows:

The wheel is mounted on the vehicle, and the tyre fitter remains out of the likely path of exploding wheel parts. A clip-on chuck and long air-hose is used to allow the tyre fitter to stand well clear.

Employers should ensure that tyre fitters are trained in the hazards of tyre repair work, and that they use safe methods of work.