



Pressure vessel failure injures worker

Background

In April 2020, a worker was transferring compressed air from one air receiver (pressure vessel) to a second air receiver that was mounted on a frame for transportation with a forklift. The second air receiver ruptured and broke away from the frame. Parts of the vessel struck the worker, causing an eye injury, hearing damage and other injuries.

The air receiver on the frame was used to repressurise pneumatic systems on trucks.

Possible contributing factors in incidents of this type

- Use of an air receiver with unknown design pressure requirements and of a design that was not compliant with appropriate technical standards.
- Inadequate or no pressure relief devices.
- Lack of information on an air receiver identifying the design pressure, such as a data plate.
- Inadequate inspection and maintenance regime to ensure an air receiver is safe to operate.
- Repair work on an air receiver not conducted to a safe standard, i.e. non-compliant with relevant Australian Standards.

Managing hazards and risks

1. Select a pressure vessel that is appropriate for the required task, which has been designed and manufactured in accordance with relevant Australian Standards referenced in AS1200.
2. Ensure all pressure equipment is periodically inspected and maintained by a competent person in accordance with relevant Australian Standards, including AS/NZS 3788.
3. Ensure pressure equipment of Hazard Levels A, B, C, or D is design registered with WorkSafe or applicable regulatory authority.
4. Ensure that pressure vessels have a manufacturer's data plate attached, identifying the design pressure and design registration details.

Further information

Department of Mines, Industry Regulation and Safety

- [Plant and design registration – an overview](#)
- [What kinds of plant requires registration or re-registration?](#)
- [Safety alert 11/2012 Weld cracking in transportable pressure discharge dry powder vessels](#)

Safe Work Australia

- [Compressed air and air receiver information sheet](#)

SAI Global

- AS 1200:2000 Pressure equipment
- AS/NZS 3788:2006 Pressure Equipment – In-service inspection

The above information is provided based on WorkSafe's preliminary investigation and further investigation is continuing.

Regional Offices