



Safety alert 01/2013

Fatal injury from heating hydraulic cylinder

The purpose of this Safety Alert is to highlight the dangers of applying heat to sealed hydraulic cylinders.

Background

Recently a 38-year-old man died when a hydraulic cylinder he was heating with an oxy acetylene torch exploded. The employee was heating a sealed hydraulic cylinder to remove a seized clevis pin at the bottom of the cylinder. Heat from the oxy acetylene torch may have overheated the residual hydraulic oil/vapours in the cylinder, which was partially emptied, causing a build-up of pressure resulting in the piston ram being ejected through the top of the cylinder smashing the bolted end cap, inflicting fatal injury.

Contributing factors

- The hydraulic cylinder contained residual hydraulic oil.
- The cylinder was sealed (not open to atmospheric pressure).
- Application of heat to the cylinder.

Action required

1. Do not use any heat-producing equipment such as oxy acetylene/gas torches and angle grinders on sealed hydraulic cylinders.
2. Remove hydraulic oil and thoroughly clean the cylinder before heating the cylinder.
3. Make sure the cylinder is open to atmospheric pressure.

Further information

Further information can be obtained from WorkSafe's Contact Centre on 1300 307 877 or by email safety@commerce.wa.gov.au.

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