S23 – Toolbox Talk Pressure Systems – Pneumatic & Hydraulic

Pressure systems tend to be either pneumatic (compressed air) or hydraulic (water or oil). The principal causes of incidents are:

- → Poor equipment and/or system design
- → Poor maintenance of equipment
- → An unsafe system of work
- → Operator error and/or poor training/supervision
- → Poor installation, and
- → Inadequate repairs or modifications.

The high pressures and temperatures associated with hydraulics make hose and fitting selection and maintenance especially critical. If done incorrectly, the risk of injury is high. The main hazards are:

- → Impact from the blast of an explosion or release of compressed liquid or gas
- → Impact from parts of equipment that fall or any flying debris
- → Contact with the released liquid or gas, such as steam, and
- → Fire resulting from the escape of flammable liquids or gases.

General Rules

- → Only work on pressure systems if you are trained, competent and authorised to do so
- Do not operate any pressure system unless you are sure it has been inspected and tested in accordance with all company procedures; if you are in any doubt contact your supervisor
- → Always visually inspect the equipment before use. Record the inspection and report any obvious defects to your supervisor
- → Always isolate the system and release the pressure before maintenance or equipment change is undertaken
- → Never use any air hoses which are provided with wire rope or chain couplings unless the couplings are securely connected
- → Compressed air should not be used for cleaning purposes unless the following control measures are in place:
 - → The air line is fitted with a proprietary trigger valve
 - → Goggles and dust masks are worn at all times
 - → All available steps are taken to avoid air borne dust, ie dampening down if possible.





- → Ensure all other personnel are not permitted within the area
- → The air line is not used to blow dust from any part of the body or clothing
- → When inflating a tyre, always ensure it is housed within a tyre cage
- → Ensure there is at least six feet of air line between the clip-on chuck and the pressure gauge control.

Training register

Date	
Name of attendee	Signature

