



Diamond User Code 3: Pressure Systems



Hazards



Release of fluid at high pressure
Explosion or Implosion
Noise
Hazardous Substances



Risks

Experimental risk assessment must identify the use of pressure systems and employ suitable control measures for the risks specific to the experiment

Controls

- Components must be correctly rated for the pressure and be able to withstand the maximum available pressure
- The experimental setup must be checked visually before use
- Components which may fragment or eject during use must be guarded
- Pressures must not exceed those stated for the system
- Substances used in the pressure system must be compatible with the materials the system is constructed from
- The assembled system must be leak tested at the experimental pressure with non hazardous substances, prior to first use
- The system must be protected against overpressure with suitable relief devices and must relieve and vent to a safe place
- Joints must be secured mechanically, glues and adhesives may not be used to secure components under pressure
- Custom systems must not allow circumvention of a safety relief device.
- Suitable PPE must be worn when the system is pressurised – safety glasses (EN166.F)

Contact

If you have any questions regarding safety arrangements or risk assessment, contact the SHE group.

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