

We maintain safe isolation

- We use isolation plans for the specific task, based on up-to-date information.
- We raise isolation concerns before the task starts and challenge when isolation plans cannot be executed.
- We check for residual pressure or process material before breaking containment.
- We monitor the integrity of isolations regularly and stop to reassess when change could affect an isolation integrity.
- We confirm leak-tightness before, during , and after reinstating equipment



Release of high - pressure steam from flange during maintenance resulting in life changing injury

- During work to a steam turbine, a pipe fitter and apprentice were dismantling a flange on a 6" high pressure steam line.
 - The line had been isolated but the isolation procedure and safeguards failed, causing the line to become pressurised with high pressure steam.
- This caused the flange to spring open and eject condensate and steam over two men, causing life changing injuries to both men.



How was the fundamental breached / applicable?

- The main steam isolation valve had been passing. During previous work on the equipment, this had been controlled by a constant bleed to prevent an increase in pressure.
- During a delay to the workscope (waiting for parts) the bleed had been closed, resulting in the pipework pressurising up to mains steam pressure (80 Bar) over a period of time.
- On restarting the work, the isolation certificate and isolation point still existed but the isolation was not proved by opening the bleed valve.



- Does your isolation have passing valves? How would you know?
- What precautions do you take on the first breaking of containment?
- How do you ensure that the system has no pressure before breaking containment?
- How do you verify that an isolation is still suitable following a delay to the task?

PROCESS SAFETY FUNDAMENTALS



