CHEMICAL CASE STUDY - MAJOR PETROCHEMICAL COMPANY, UK

Safety assurance using PEL

PEL provides a quick and reliable solution to pressure relief calculations.

To enable maintenance to be carried on an essential butane pipeline the line was purged with nitrogen. This was done using a nitrogen rig. The client used ABB’s PEL software to check the safety provision of the equipment used in the maintenance activities.

“Using PEL on this project meant that maintenance work could be carried out with the confidence that our relief system was fit for purpose.”

Logistics Development Manager,
Major Petrochemical Company

Solution

In order to carry out the maintenance on the line the client hired a nitrogen rig from a 3rd party, however they needed to provide their own relief valve. They used PEL’s VisualAdrian program to calculate the flows and pressures that would be present in the pipework in order to assess the size of pipework and safety valve needed.

Using PEL saved the engineers from doing hand calculations, which are prone to errors. It also speeded up the approval process as only the inputs needed to be checked, rather than all the individual calculations.
Benefits
- Assurance that safety provision is fit for purpose during essential maintenance
- A quick and reliable answer
- Opportunities for human error in calculations reduced
- Speeds up approval process as only inputs need to be checked
- An audit trail to back up / justify decisions