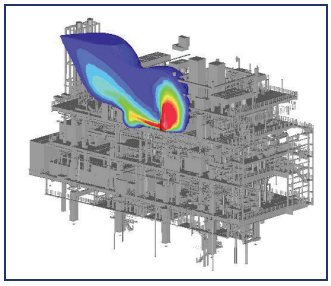
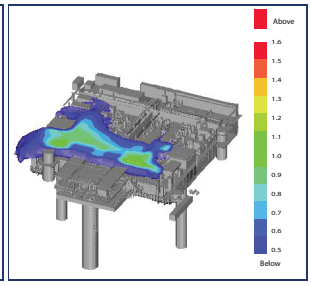
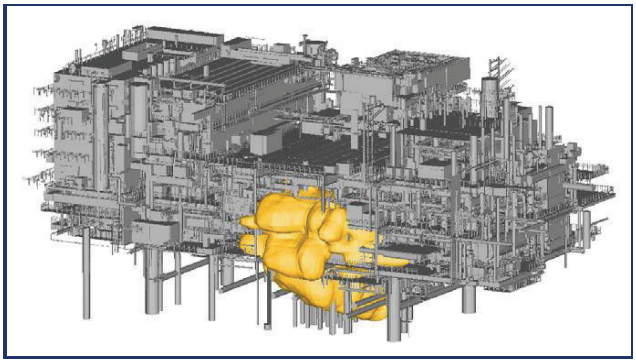
Safety and Productivity. Delivered.

Quantitative Risk Assessments (QRAs) for Offshore Assets

Have the major hazards present on that offshore facility been thoroughly evaluated and addressed?
Working in an offshore environment comes with inherent risks. The better these risks are understood, the more effective the efforts will be at minimizing them. United Safety can provide QRAs for any oil platforms, Floating Production Storage and Offloading (FPSO) units, and other offshore assets.







How we can help

United Safety can provide QRAs designed for offshore assets including gas dispersion and explosion Computational Fluid Dynamics (CFD) modeling. These models utilize the industry-leading FLACS CFD software which is backed by extensive experimental validation and is the preferred modeling software by many international Oil and Gas companies and other engineering design firms. Our QRAs meet the most stringent government regulations and multiple industry standards including ISO 19901, ISO 13702, NORSOK Z-013 and are also accepted by US organizations such as BSEE, BOEMRE and OSHA.

Typical applications of Offshore QRAs include:

- Quantifying Individual Risk Per Annum (IRPA) and Potential Loss of Life (PLL) from:
  - o Fire & Explosion Risk Analysis (FERA)
  - o Helicopter transportation risk
  - o Dropped object risk
  - o Marine vessel collision risk
  - o Occupational hazards
- Determining if total risk is As Low As Reasonably Practical (ALARP)
- Ability to analyze either:
  - o Maximum credible worst case scenarios; or
  - o Full probabilistic analyses
- Identifying key areas of risk reduction
- Evaluating effectiveness of safeguards (if modeled) including:
  - o Fire water systems
  - o Blast walls
  - o Ventilation systems
  - o Inert gas injection
  - o Depressurization systems