

ABOUT DNV

DNV is an independent assurance and risk management provider, operating in more than 100 countries, with the purpose of safeguarding life, property, and the environment. As a trusted voice for many of the world's most successful organizations, we help seize opportunities and tackle the risks arising from global transformations. We use our broad experience and deep expertise to advance safety and sustainable performance, set industry standards, and inspire and invent solutions.

IN THE ENERGY INDUSTRY

We provide assurance to the entire energy value chain through our advisory, monitoring, verification, and certification services. As the world's leading resource of independent energy experts and technical advisors, we help industries and governments to navigate the many complex, interrelated transitions taking place globally and regionally, in the energy industry. We are committed to realizing the goals of the Paris Agreement, and support our customers to transition faster to a deeply decarbonized energy system.



Learn more:
dnv.com/training

Disclaimer

All information is correct to the best of our knowledge. Contributions by external authors do not necessarily reflect the views of the editors and DNV AS.

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VIRTUAL REALITY

Immersive major accident hazard training for your workforce

OUR SERVICES



Virtual Reality

Immersive major accident hazard training for your workforce

DNV has developed a Virtual Reality system for major accident hazard training that can be delivered in your office, or at the plant site. Virtual Reality immerses the user in a 3D environment in which they experience major accident hazards in a way that reinforces learning.

Hydrocarbon releases continue to pose a major threat to the oil and gas industry and Operators rightly spend significant time and effort to train their workforce to prevent them. DNV Spadeadam Research and Testing in Cumbria delivers hazard awareness training, which educates delegates on the hazards of hydrocarbon releases by allowing them to experience full-scale fire and explosion tests representative of what could happen on a process plant.

DNV's Virtual Reality provides a powerful addition to hazard awareness training for those requiring a refresher following a course at Spadeadam or those too remote from the site to visit. In the Virtual Reality, users walk through scenarios representative of hydrocarbon release events; giving full engagement and understanding of the circumstances that led to the event and allowing reflection on the lessons learned and critical decisions made that led to the hazard. Users also learn from high impact 360° videos of pool fires, jet fires, explosions and more, shot live at Spadeadam.

Scenarios may also be customised for your organisation to enable employees to learn valuable post-event lessons.

Licence and Hardware

DNV licences the software for use in training. Installation is straightforward and the hardware requirements are similar to comparable gaming applications. In addition to the computer, a virtual reality headset, hand controllers and pair of location sensors are required. It can be used in any space of at least 2m x 2m.

“The Virtual Reality system helps ensure our teams retain awareness of major hazards and guards against complacency. It places them in a realistic, virtual environment that demonstrates the significant impact that a lapse in process safety can have”.

Senior Manager - Assurance and Integrity, CNOOC International, Aberdeen.

→ Training

The Virtual Reality System can be used on its own, or combined with other more traditional training approaches to give a memorable course covering topics such as:

- Hazard Awareness
- Hazard Identification
- Risk Assessment
- Operational Risk Assessment (for deviations)
- Knowledge of Safety and Environmental Critical Elements
- Lessons learned from incidents
- Induction.

