

Fire & Gas Technical Engineering References for Instrument and Fire & Gas Design Engineers

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[Means-of-escape.com is a Useful Site](#) - This 'On Line Fire Safety Magazine' has many good resources pertaining to fire safety.

[Fire and Gas Detection](#) - This article from the HSE (UK) covers Background of F&G Detection, Strategy objectives, Current knowledge of Detection Effectiveness, Areas of Uncertainty, Industry practice and Strategy.

[NFPA 329: Recommended Practice for Handling Releases of Flammable and Combustible Liquids and Gases, 2010 Edition](#) - This recommended practice provides appropriate methods for responding to fire and explosion hazards resulting from the release of a flammable or combustible liquid, gas, or vapor that could migrate to a subsurface structure. This document is available free in a read only format after you register with the NFPA.

[Explosion Hazard Assessment: A Study of the Feasibility and Benefits of Extending Current HSE Methodology to take Account of Blast Sheltering](#) - Dr C Catlin, Dr M Ivings, Mr S Myatt - Dr D Ingram, Prof D Causon, Dr L Qian - This study concerns the methodology used by MSDU, HSE in assessing Land Use Planning cases (LUP) near Hazardous Installations storing LPG and presenting a Vapour Cloud Explosion (VCE) hazard. The work is also relevant to all risk assessment and consequence models that are used to assess the hazard posed by blast.

[Simplified Approaches to Fire and Explosion Engineering](#) - Steve Walker, Brian Corr, Vincent Tam (BP), Justin Bucknell and Pat O'Connor - Recent and proposed large developments in deep water and the use of hub platforms with high throughputs in the Gulf of Mexico have raised awareness of the profile of fire and explosion safety assessments for new and existing installations. In response to these developments BP has developed new guidelines in Fire and Explosion Engineering described in this paper. The guidelines give useful, practical advice for the Structural and Process engineering disciplines at a level appropriate for direct use in a project environment. In view of the maturity of the subject matter the focus is on code based and simpler methods of analysis. The approach is compatible with API RP2A and recommends two levels of explosion design overpressures by analogy with earthquake assessment representing 'Design Level' and 'Ductility Level'

events. The 'Design Level' explosion tests the installation against more severe performance standards appropriate to the higher frequency events. Three levels of analysis are defined for use in fire and explosion assessment. These are, 'Screening Analysis', linear elastic 'Design Level' analysis and non-linear 'Ultimate Strength' analysis. Acceptable inputs to these levels of analysis are defined. The emphasis of this paper is on simple linear analysis methods for the evaluation of a structure during the first level of assessment. The Guidance is to be used as a basis document for the new proposed API RP on Fire and Blast - from [Logical Software](#)

The Fire Industry Association (FIA) is a not-for-profit trade association with the aim of promoting the professional status of the UK fire safety industry. The FIA's main objective is to promote the professional standards of the fire industry. They provide technical knowledge and advice to anyone who needs it regarding fire safety in the UK. This site is an excellent Fire Detection and Protection resource. It provides;

- [Technical Updates](#) - General technical information of interest. This includes consultation requests from UK Government on new or proposed legislation, public comment drafts of Standards, and comment drafts of FIA technical documents as well as the notification of publication of new standards and legislation.
- [Fact Files](#) - Fact Files are a collation of technical, legislative or procedural facts on a single subject or closely associated group.
- [Guidance Notes](#) - These are recommendations and interpretations by the FIA (written by Council, Committee, and Secretariat etc) to give help and guidance to members and non-members on technical subjects, legislative matters, FIA processes/procedures etc.
- [Codes of Practice](#) - These are 'how to' documents that are drafted and formatted in a similar fashion to a national standard by the FIA (written by Council, Committee, and Secretariat etc) to give help and guidance to members and non-members, primarily on technical subjects.