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# **FLUIDYN-PANFIRE**

### HEAT FLUX AND RADIATION

## SOLID AND LIQUID FIRES

## User friendly integrated tool for consultancy firms and industries

- Calculation of threshold effects following a solid or liquid fire
- 3D modelling of heat radiation from one or more sources
- ✓ Considers the 3D geometry of the warehouses and mitigation measures
  (firewalls, water curtains...) for simulations.
- Contour plots of the areas affected by heat radiation and comparison with statutory thresholds.
- ★ HAZOP and HAZARD studies, warehouse configuration, design, and optimization of preventive and protective solutions...

#### 3D Simulation of any type of fire scenarios

**FLUIDYN-PANFIRE** integrates various models to calculate the heat flux, adaptable to different scenarios:

- Solid, dry bulk or rack,
- Pool fires in retention bunds,
- Fires inside buildings...

**FLUIDYN-PANFIRE** is based on the NFPA, GESIP (Blue guide), INERIS and TNO (Yellow book) protocols and includes software methodology equivalent to that of FLUMILOG. Statutory regulations for solid combustible products (1510, 1511, 1530, 1532, 2662, 2663) and flammable liquids (4331, 4734) are taken into account.

The user may define the site interactively, by specifying the location of the storage and stock characteristics, the firewall and sprinkler locations and if necessary, the topography.

The results are presented in the form of 3D plots of iso-surfaces, concentration contours and sections to study the effects of heat radiation.





