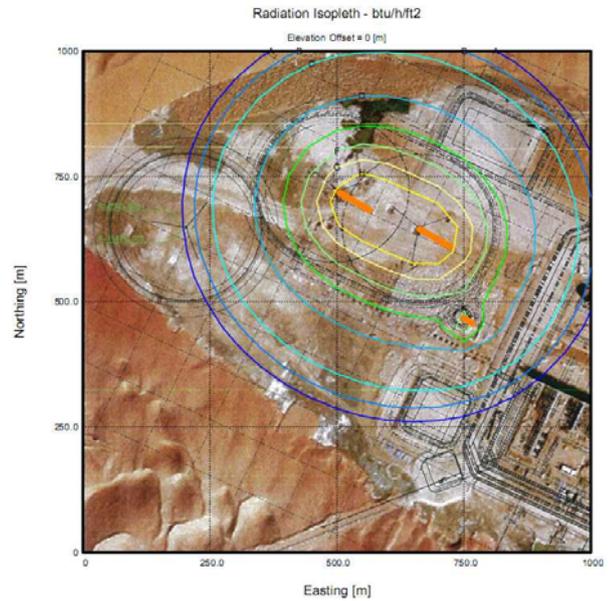


FLARESIM

For over 25 years FLARESIM has been assisting engineers in the design and evaluation of flare systems, both onshore and offshore. Accurate modelling of thermal radiation, temperature and noise footprints generated by flaring allows for safe design and evaluation of the Relief System.

Gas Dispersion calculations are also available in FLARESIM modelling both flame out scenarios and generated combustion pollutants.

FLARESIM has become an industry standard for Flare Radiation Analysis. Used by more than 250 companies worldwide ranging from Consultants, Flare System Vendors, Engineering & Construction and major Operating Companies.



Receptor Grid

Name: Ship Side - Portside

Display: Plot

Concentration Isoleth

Zoom

Export

Customise

Case Study

Name: Scenario Comparisons

Input Variables | Result Variables | Results | Plots | Descriptions

Select Variables and Cases for Bar Plot

Variables	Select
SD - 0deg - Wind Speed	<input type="checkbox"/>
Flare Tip 20 MMSCFD - Primary Mole Flow	<input type="checkbox"/>
Deck	<input checked="" type="checkbox"/>
Top Turret	<input checked="" type="checkbox"/>

Cases

Cases	Select
Case 0	<input checked="" type="checkbox"/>
Case 1	<input checked="" type="checkbox"/>
Case 2	<input checked="" type="checkbox"/>
Case 3	<input checked="" type="checkbox"/>
Case 4	<input checked="" type="checkbox"/>
Case 5	<input checked="" type="checkbox"/>
Case 6	<input checked="" type="checkbox"/>

Horizontal Chart

Export

Scenario Comparisons

Radiation - kJ/m²

Case 6
Case 4
Case 3
Case 2
Case 1
Case 0

Deck
Top Turret

Case Study

Name: Radiation vs. Distance From Stern

Input Variables | Result Variables | Results | Plots | Descriptions

Select Variables and Cases for Line Plot

Select X Variable	Select
From Stern	<input checked="" type="checkbox"/>
Limit	<input type="checkbox"/>
Calculated	<input type="checkbox"/>

Result Variable

Limit	Select
Limit	<input checked="" type="checkbox"/>
Calculated	<input checked="" type="checkbox"/>

Radiation vs. Distance From Stern

Radiation - kJ/m²

From Stern - m

Limit
Calculated

Status

11:55 - Loaded F:\Dropbox\Baba\Flaresim Sample.fsw
11:55 - Saved F:\Flaresim Sample.fsw

Warning: Tip Flare Tip 20 MMSCFD - Dispersion error - The jet to wind velocity ratio is less than 6.0. Use results carefully.
Info: Tip Flare Tip 20 MMSCFD - Dispersion - The edge of the jet is interacting with the ground at 6352 m.
Info: Tip HP Tip - Dispersion - The edge of the jet is interacting with the ground at 5818 m.
Warning: Tip Flare Tip 20 MMSCFD - Dispersion error - The calculated exit velocity is less than three times the wind velocity, model not valid.

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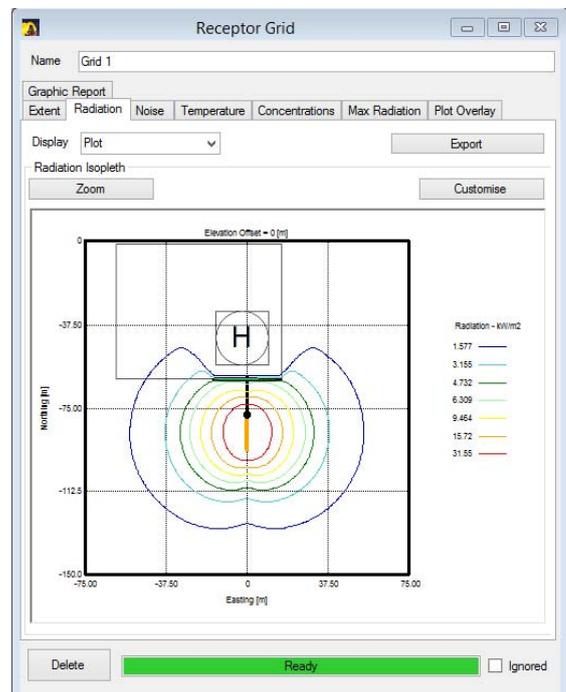
Kaydor, Paice Lane, Medstead, Alton, Hants GU34 5PT, UK

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Features

- Design or rating of flares for offshore platforms, gas plants, refineries and chemical plants.
- Modelling of a range of flares; pipe and sonic, steam or air assisted, well test burners or multiple burner arrangements
- Extensive choice of correlations to predict the fraction of heat radiated from flares.
- Wide range of thermal radiation models include standard API, McMurray multi-point methods (Point, Diffuse and Mixed), Brzustowski and Chamberlain (Shell Thornton method).
- Comprehensive 3D analysis with flexibility in specification of the location, orientation and inclination of multiple stacks and tips.
- Unique modelling ability of water curtains or solid radiation shields to reduce radiation and noise
- Multiple receptor grid modelling in 4 different planes provides isopleths of radiation, noise and surface temperature
- Jet dispersion calculations for flammable gas concentrations near the flare.
- Gaussian gas dispersion for unburnt gas and combustion products over longer distances.
- Case study feature to run models with varying data values allowing comparative studies of target criteria.
- Dynamic analysis calculates radiation, noise and surface temperatures with varying flow.
- Range of options, including user defined, for analysis of noise spectrum during flaring
- REFPROP properties package from NIST provides accurate prediction of fluid properties.
- Sterile area calculation of distance from a stack to a defined radiation or noise limit.
- Sizing of stack or boom length to meet radiation, noise or surface temperature limits at defined receptor points.
- KO Drum sizing or rating based on both liquid accumulation time and minimum droplet size carryover. GPSA and API settling velocity correlations are available.
- Radiation plots modelled with Wind Rose direction and speeds
- Easy to use overlay of calculated isopleths on plot plans or satellite pictures of the facility..
- Export of tables and isopleths to Excel , AutoCAD and other common formats.
- Data entry and reporting in a choice of units
- Flexible report generation with ability to produce a project Quality Assurance Report.



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