

KATALCO_{JM} PERFORMANCE improves safety

Quantified risk assessment

Our quantified risk assessment (QRA), developed and delivered by our alliance partner ABB, provides a numerical analysis of the impact of plant hazards on site personnel and the local public. The data generated provides confidence that hazards are being managed to internationally accepted risk levels for both employees and public alike. Where the impact needs to be reduced, the assessment provides a basis that enables the appropriate level of control to be implemented in the most cost effective way.

A preliminary view of process hazards may already be available through our process hazard review.

Major plant hazards come from toxic gas release, fire and explosions. Detailed consequence analysis of each source, including blast modelling, thermal radiation profiles for fires and the impact of concentrations of toxic gas from dispersion modelling, enables calculation of risk contours around the plant and individual items of equipment.

Individual risk contours are generated that show the risk to individuals working on the plant and to people living in the local area.

The QRA also assesses societal risk in terms of frequency-number (F-N) curves. These show events that potentially lead to multiple injuries or fatalities.

The results can be reviewed against local or internationally accepted risk levels for employees and public.

Where the risk is unacceptable further assessment can explore mitigation actions. This allows the cost and impact of different solutions to be assessed using cost-benefit analysis.

QRA ensures that the plant hazards are controlled to acceptable levels for employees and public and enables this to be achieved in the most cost effective way.

Figure 1: Risk contour plot

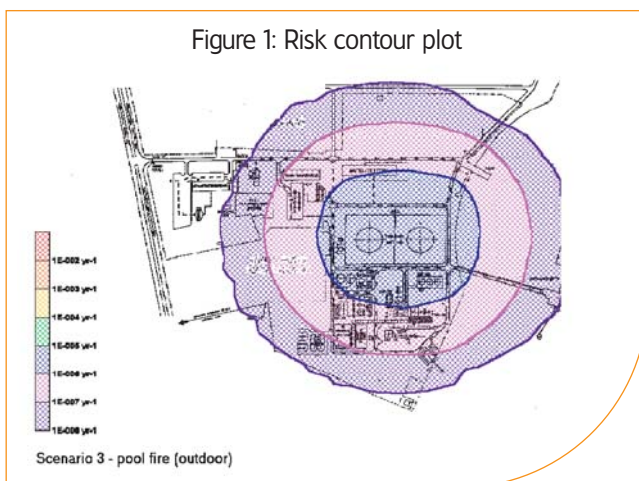
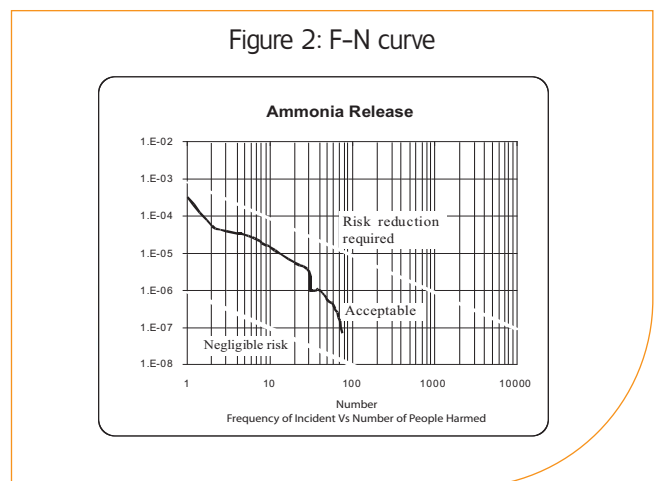


Figure 2: F-N curve



For more information about the Johnson Matthey Catalysts range of KATALCO_{JM} catalysts and associated services please contact your local representative, visit our website www.jm-catalysts.com or e-mail katalcoperformance@matthey.com

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