



Process Safety: Risk Analyses

Are you looking for an independent organisation to carry out risk analyses for your company, in order to ensure a safe and statutory-conformant installation, whereby we jointly look for the most reliable solution for your design? In that case, Vinçotte is undoubtedly your partner.

Your tailor-made solution

Do you want to map the existing risks of your current process installation?

Are you going to be constructing a new installation?

Do you want to make major changes?

Do you want to carry out a review/gap analysis of an existing risk analysis for an existing or new installation?

Vinçotte would be happy to conduct the following risk analyses in collaboration with you, according to the type of project:

- HAZOP (HAZard and OPerability study)
HAZOP is a failure analysis used all over the world, wherein a workgroup of experts systematically try to detect and evaluate all the undesirable events that occur during a process. HAZOP allows one to systematically analyse the reliability of the quality of systems, in which usage parameters (flow rate, temperature, pressure, among others) play a crucial role.
- SWIFT (Structured What If Technique)
A structured brainstorming session to determine various risks within or outside a (simple) process (installation) based on checklists on which the team will ask What If questions before conducting the risk analysis (faster version of FMEA)
- FTA (fault tree analysis)
Fault tree analysis can handle extremely complex (multiple) failures
- FMEA (Failure Mode and Effect Analysis)
Primarily applicable to development of complex systems: (product) designs or process design
- LOPA (Layers Of Protection Analysis as per IEC 61511, Annex F)
- SIL (Safety Integrity Level as per IEC 61508)
- Bowtie (Bow Tie analyses)
- ...

Your result

The risk analysis provides the most objective risk image possible, of your installation. We also provide you with a report to be used as a working document for the protection and improvement of your chemical process installation. We also provide you a single point of contact for all your questions. We provide you with tailor-made advice since our teams always consist of experts with specific knowledge of your project. (Process Chemistry, Pressure Equipment Directive, Machinery Directive, fire prevention, prevention consultants, etc., standard specialists, etc.). We are the bridge between you and the other departments within Vinçotte; inspection agencies, certification, etc. for all types of applications. For this, we will help you with the greatest speed possible, and will assist you throughout the project.

Please note

The following elements should certainly be discussed before commencing the risk analysis:

- P&IDs (Piping and instrumentation diagram), flow diagrams, flow charts
- Basic information: design, process parameters and product information
- Your competent team: a number (more than 1) of persons with adequate experience and background within the specific project.

Norms and Standards

If these are present, specific standards can be applied. Gap analyses will be conducted on installations in accordance with existing standards.

In which situation?

Our service is primarily relevant for owners/operators, designers (engineering offices), suppliers and installers of process equipment.