



Operational Excellence Services

**Health · Safety · Environment
(HSE)**

HSE Risk Management



Contact Us

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Access to Our Homepage

 <https://www.jgc.com/en/business/epc/operation-maintenance/service/>

HSE Risk Management

Do you have any of these issues?

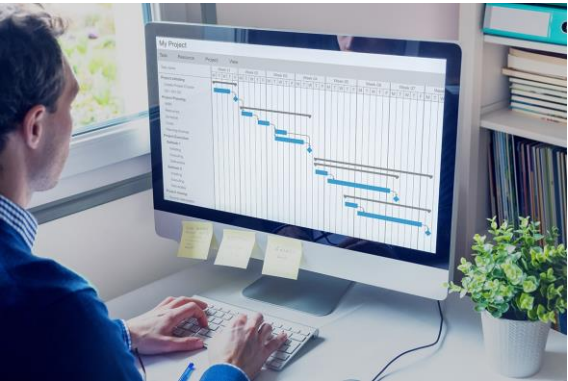
- ☹ **Formalizing facility safety**
- ☹ **Revalidation of facility safety**
- ☹ **Process and operational safety concerns**
- ☹ **High insurance fees**

HSE Risk Management Solutions

- Formal Safety Assessment
 - Quantitative Risk Analysis (QRA)
 - Hazard Identification (HAZID)
 - Hazard and Operability Studies (HAZOP)
 - Layer of Protection Analysis (LOPA)
 - Bowtie Analysis
- Consequence Analysis, CFD Modeling
- Operational Hazard Assessment/Reduction Study
- HSE Management System Review

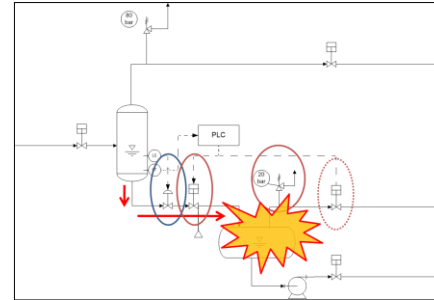
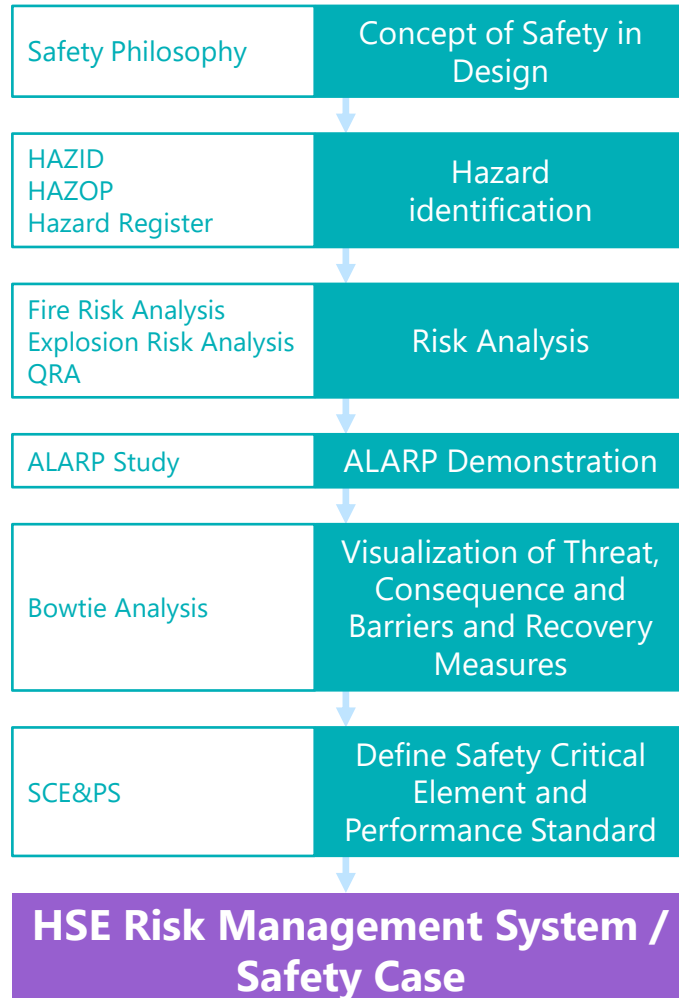
Hazard Assessment		Potential Hazards		Previous Hazards (Incidents/Near Misses)
		General	Process	
Hazard Identification		HAZID	HAZOP	OHR *
Risk Assessment	Qualitative	HAZID	HAZOP	OHR *
	Semi-Quantitative	LOPA		
	Quantitative	Consequence Analysis / QRA		

* OHR : Operational Hazard Reduction Study



Combination of Desk-top Study and Workshop

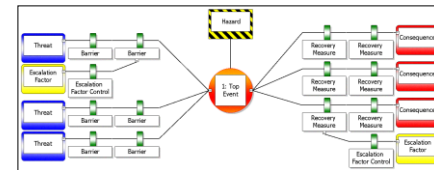
Workflow & Results



Hazard Identification in P&ID



QRA



Bowtie Diagram

Our Strengths

- **Professional Safety, Process, Control, Mechanical, Operation and Maintenance Teams**
- **Top global experience of EPC** execution and Consultation
Plant types - Refinery, Gas Processing, LNG, Chemical
Plant locations – Onshore, Offshore
Clients – IOC, NOC
- **Huge record of HAZID/HAZOP/LOPA/QRA** and Operational Hazard Reduction
- **CFD Analysis Specialist** for detail simulation

Our Experiences

20+
Cases

20+ HAZOP revalidation, OHR, and HSEMS development

500+
Cases

500+ Process safety plant design