



MANAGE Operational Risk. ACHIEVE Sustainable Operations.

Process Risk Management

The **OSSuite™ Process Risk Management (PRM) Module** is a comprehensive solution for assessing and managing risk while staying below acceptable risk thresholds. PRM enables users to evolve the level of risk assessment applied (i.e. HAZOP, Human Factors, Facility Siting, What-If, HAZID, FMEA, FMECA, JSA, and LOPA). Information from HAZOP is available for LOPA automatically based on Risk Level filtering.

Users can quickly re-validate the previous hazard reviews without recopying any records. In addition we offer smart Process Hazard Analyses (PHA) cutting study time in half while greatly enhancing the quality of the study. Clients who license our Change Management (MOC), Incident Management and Alarm Management modules can enable this smart PHA capability. We offer an offline PHA capability with synchronization back to OSSuite™ for remote work.

Once the risk assessment is complete, recommendations can be managed in our MOC, Corrective Action (CAPA), Compliance/Task Manager, and Work Management modules. Users can also add simple Action Items within PRM. OSSuite™ supports conducting of risk assessments (PHAs) within the Change Management module.

Clients can leverage our LOPA functionality to take credit for Independent Protective functions that feed our visualization module to ensure that you have the proper level of engineering and administrative safeguards while assessing changes to threats in real-time. PRM is a comprehensive risk management solution that allows users to create their own risk ranking matrix, while incorporating customized content (i.e. HAZOP guidewords, human factors checklists, facility siting checklists). PRM is part of our safety lifecycle management that includes integration with Engineered Safeguards (Safety Instrumented Systems) and Alarm Manager.

The screenshot displays the OSSuite Process Risk Management interface. The top window shows a study list with columns for Node #, Description, Cause, Component, Damage Mechanism, Consequence, Cat, S, UI, LR, ML, MR, Home, and Safeguard. The bottom window shows a detailed risk matrix with Likelihood (L) on the vertical axis and Severity (S) on the horizontal axis. The matrix cells are color-coded from green (low risk) to red (high risk).

Likelihood (L)	Description	Severity (S)					
		Incidental	Minor	Moderate	Major	Severe	Catastrophic
Bleby	Consequence can reasonably be expected to occur in life of facility	0	5	4	3	2	1
Occasional	Conditions may allow the consequence to occur at the facility during its lifetime, or the event has occurred within the Business Unit	7	6	5	4	3	2
Infrequent	Exceptional conditions may allow consequence to occur within the facility lifetime, or has occurred within the OPECO	8	7	6	5	4	3
Infinitely	Reasonable to expect that the consequence will not occur at this facility. Has occurred several times in industry, but not in OPECO	9	8	7	6	5	4
Remote	Has occurred once or twice within industry	10	9	8	7	6	5
Rare	Rare or unward of	10	10	9	8	7	6

Severity Category	Incidental		Minor		Moderate		Major		Severe		Catastrophic	
	Workforce	Public	Workforce	Public	Workforce	Public	Workforce	Public	Workforce	Public	Workforce	Public
Injury	Workforce: Minor injury such as a first aid. Public: No impact		Workforce: One or more injuries, not severe. Public: One or more minor injuries such as a first aid.		Workforce: One or more severe injuries including permanently disabling injuries. Public: One or more injuries, not severe.		Workforce: [1-4] Fatalities Public: One or more severe injuries including permanently disabling injuries.		Workforce: Multiple fatalities (3-50) Public: Multiple fatalities (3-50)		Workforce: Multiple fatalities (3-50) Public: Multiple fatalities	
Health	Workforce: One or more injuries, not severe. Public: One or more minor injuries such as a first aid.		Workforce: Mild to moderate illness or affect both acute treatment and/or functional impairment but is medically manageable. Public: Illness or adverse effects with mild Rx.		Workforce: Serious illness or severe adverse health effect requiring a high level of medical treatment or management. Public: Illness or adverse effects with mild Rx.		Workforce [1-4]: Serious illness or chronic exposure leading to fatality or significant life shortening effects. Public: Serious illness or severe adverse health.		Workforce [5-50]: Serious illness or chronic exposure leading to fatality or significant life shortening effects. Public [1-50]: Serious illness or chronic exposure		Workforce [50]: Serious illness or chronic exposure leading to fatality or significant life shortening effects. Public [100]: Serious illness or chronic exposure	

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