

ISO 13702:2024-03 (E)

Oil and gas industries - Control and mitigation of fires and explosions on offshore production installations - Requirements and guidelines

Contents	Page
Foreword.....	v
Introduction.....	vii
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Abbreviated terms.....	5
5 Fire and explosion evaluation and risk management.....	6
5.1 Management system.....	6
5.2 Risk assessment and the risk management framework.....	6
5.3 Risk assessment process.....	6
5.4 Hazard identification.....	6
5.5 Risk analysis.....	7
5.6 Risk evaluation.....	7
5.7 Risk treatment.....	7
5.7.1 General.....	7
5.7.2 Prioritization of risk treatment measures.....	8
5.8 Risk treatment in the context of offshore oil and gas operations.....	8
5.8.1 General.....	8
5.8.2 Design loads.....	10
5.8.3 Fire and explosion strategy and performance standards.....	10
5.8.4 Verification.....	11
6 Installation layout.....	11
6.1 Objectives.....	11
6.2 Functional requirements.....	11
7 Emergency shutdown systems and blowdown.....	12
7.1 Objective.....	12
7.2 Functional requirements.....	12
8 Control of ignition.....	13
8.1 Objective.....	13
8.2 Functional requirements.....	13
9 Control of spills.....	13
9.1 Objective.....	13
9.2 Functional requirements.....	13
10 Emergency power systems.....	13
10.1 Objective.....	13
10.2 Functional requirements.....	14
11 Fire and gas (F&G) detection systems.....	14
11.1 Objectives.....	14
11.2 Functional requirements.....	14
12 Active fire protection.....	15
12.1 Objectives.....	15
12.2 Functional requirements.....	15

13	Passive fire protection	16
	13.1 Objective.....	16
	13.2 Functional requirements.....	16
14	Explosion mitigation and protection measures	17
	14.1 Objective.....	17
	14.2 Functional requirements.....	17
15	Response to fires and explosions	17
	15.1 Objective.....	17
	15.2 Functional requirements.....	17
16	Inspection, testing, and maintenance	18
	16.1 Objective.....	18
	16.2 Functional requirements.....	18
	Annex A (informative) Typical fire and explosion hazardous events	20
	Annex B (informative) Guidelines to the control and mitigation of fires and explosions	25
	Annex C (informative) Typical examples of design requirements for large integrated offshore installations	52
	Bibliography	63