DIN EN ISO 13702:2024-06 (E)

Oil and gas industries - Control and mitigation of fires and explosions on offshore production installations - Requirements and guidelines (ISO 13702:2024); English version EN ISO 13702:2024

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**