

ISO 10418:2019 (E)

Petroleum and natural gas industries — Offshore production installations — Process safety systems

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms, definitions and abbreviated terms
3.1	Terms and definitions
3.2	Abbreviated terms
4	Symbols and identification for protection devices
4.1	Objectives
4.2	Functional requirements
5	Safety analysis concepts
5.1	Objectives
5.2	General functional requirements
5.3	Functional requirements for analysis using structured review techniques
6	Process safety system design
6.1	Objectives
6.2	Functional requirements
Annex A	(informative) Support systems
A.1	General
A.2	Guidance for emergency support systems
A.2.1	Purpose
A.2.2	Functions of the ESS
A.2.3	General approach
A.2.3.1	General
A.2.3.2	Fire and gas detection
A.2.3.3	Safety integrity level approach
A.3	Blowdown and discharging gas to atmosphere
A.3.1	Purpose
A.3.2	Description
A.3.3	Design considerations
Annex B	(informative) Toxic gases
B.1	General
B.2	Installation, operation, and testing of fixed detection systems
B.3	Systems for discharging H ₂ S and SO ₂ to atmosphere