

Flare Details for General Refinery and Petrochemical Service

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Contents

Page

API Foreword	ii
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Design	8
4.1 Introduction	8
4.2 System design	10
4.3 Process definition	10
4.4 Types of flares	11
4.5 Flare burners	13
4.6 Mechanical design	13
4.7 Pilots	14
4.8 Pilot-ignition systems	16
4.9 Pilot-flame detection	16
4.10 Piping	17
4.11 Auxiliary components	17
5 Mechanical details — Elevated flares	18
5.1 Mechanical design — Design loads	18
5.2 Design details	21
5.3 Materials of construction	22
5.4 Welding	22
5.5 Inspection	23
5.6 Surface preparation and protection	23
5.7 Attachments	23
5.8 Aircraft warning lighting	24
5.9 Platforms and ladders	24
6 Mechanical details — Enclosed-flame flare	25
6.1 Combustion chamber	25
6.2 Burners	25
6.3 Burner piping	26
6.4 Pilots	26
6.5 Wind fence	27
6.6 Radiation shielding	27
Annex A (informative) Flare equipment overview	28
A.1 Types of flares and components	28
A.2 Fire burner	42
A.3 Pilots	53
A.4 Ignition equipment	58
A.5 Flame-detection equipment	68
A.6 Verification test	72
A.7 Purge-gas conservation seals	73
A.8 Knockout drums and liquid seals	75
A.9 Blowers and drivers	76
A.10 Blower staging and control equipment	80
A.11 Pressure-staging equipment	84
A.12 Flow and pressure sensing equipment	88
Annex B (informative) Components of multi-burner staged flare equipment	90
B.1 Burners	90

B.2	Pilots	91
B.3	Ignition equipment.....	91
B.4	Flame-detection equipment	91
B.5	Buoyancy and velocity seals	91
B.6	Manifolds	92
B.7	Operations	92
B.8	Maintenance	92
B.9	Troubleshooting.....	92
Annex C	(informative) Enclosed-flame flares	93
C.1	Purpose.....	93
C.2	General description	93
C.3	Operating considerations for enclosed-flame flares	100
C.4	Maintenance	104
C.5	Troubleshooting.....	105
Annex D	(informative) Instructions for flare data sheets	106
D.1	Introduction	107
D.2	General information forms — Instructions	108
D.3	Elevated-flare forms — Instructions	114
D.4	Enclosed-flare forms — Instructions	116
Annex E	(informative) Flare data sheets	118
E.1	SI units	118
E.2	USC units	136
Bibliography	154

Foreword

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ISO 25457 was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 6, *Processing equipment and systems*.

Introduction

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Petroleum, petrochemical and natural gas industries — Flare details for general refinery and petrochemical service

1 Scope

This International Standard specifies requirements and provides guidance for the selection, design, specification, operation and maintenance of flares and related combustion and mechanical components used in pressure-relieving and vapour-depressurizing systems for petroleum, petrochemical and natural gas industries.

Although this International Standard is primarily intended for new flares and related equipment, it is also possible to use it to evaluate existing flare facilities.

Annexes A, B and C provide further guidance and best practices for the selection, specification and mechanical details for flares and on the design, operation and maintenance of flare combustion and related equipment.

Annex D explains how to use the data sheets provided in Annex E, it is intended that these data sheets be used to communicate and record design information.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods*

ISO 2408:2004, *Steel wire ropes for general purposes — Minimum requirements*

ISO 8501-1:2007, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after removal of previous coatings*

ISO 10684, *Fasteners — Hot dip galvanized coatings*

ISO 13705:2006, *Petroleum, petrochemical and natural gas industries — Fired heaters for general refinery service*

ISO 15156 (all parts), *Petroleum and natural gas industries — Materials for use in H₂S-containing environments in oil and gas production*

ISO 23231, *Petroleum, petrochemical and natural gas industries — Pressure-relieving and depressuring systems*

EN 1092-1:2007, *Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 1: Steel flanges*