

NORSOK STANDARD

SYSTEM REQUIREMENTS
INERT GAS
SYSTEM NO. 64

P-SR-015
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1. FOREWORD

This standard has been developed by the NORSOK Standardisation Work Group.

2. SCOPE

3. NORMATIVE REFERENCES

NORSOK Standard

P-CR-001 Process Design .

4. DEFINITIONS AND ABBREVIATIONS

4.1 Definitions

4.2 Abbreviations

5. FUNCTIONAL REQUIREMENTS

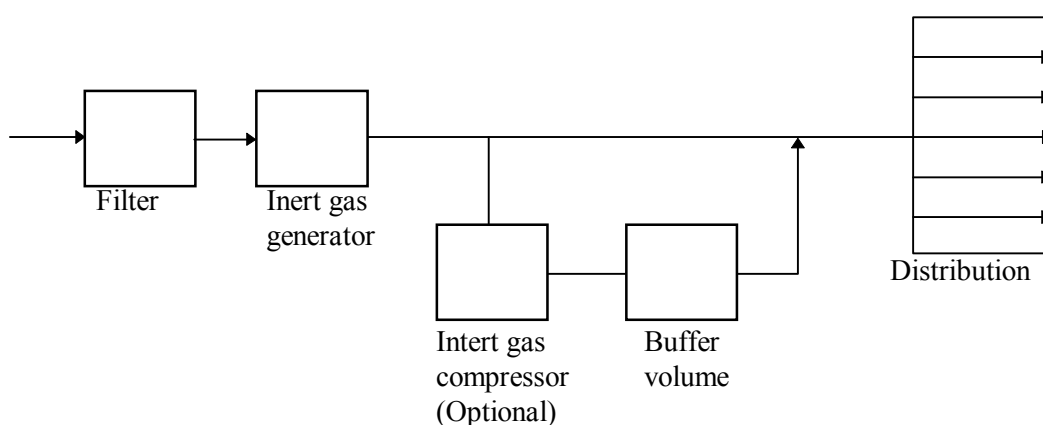
5.1 General

The inert gas generator shall deliver inflammable, filtered inert gas mixture with low oxygen content at a specified pressure and temperatures.

5.2 Products/Services

Inert gas is used for blanketing and purging of atmospheric tanks, and for purging of equipment and systems before maintenance.

5.3 Equipment/Schematic



5.4 Performance

System Capacity
Storage capacity
Product Quality

Inert content: Min. 97% vol
(at 30-50% turn-up: Min. 95%)
Water dewpoint : Min -20 °C

Operating Life

Expected drop in performance shall be less than:
0 - 2 years of operation - no drop
2 - 8 years of operation - 1.5 % drop per year

5.5 Regularity

5.5.1 Regularity

95 %.

5.5.2 Sparing

Single train, backup by bottlebattery or buffer volume.

5.6 Process/Ambient Conditions

Inlet pressure 8-10 bara
Inlet temperature 30-50 °C

5.7 Operational Requirements

5.7.1 Control and Monitoring

The package shall be controlled and monitored from local control panels. System monitoring shall be available on OS/VDU in CCR as follows:

OS/VDU Functions	P	T	L	F	A	Other
Inert Gas Package					X	Common
Distribution	M				X	
Oxygen Content					X	

P = Pressure/Discharge Pressure, T = Temperature, L = Level, F = Flow,
A = Alarm, M = Monitoring, X= Alarm available as required

5.7.2 Availability

Low priority users shall in case of low system pressure (high oxygen content), be automatically shut-off, favouring high priority users. If oxygen content is higher than 5%, the generated inert gas shall be sent to atmosphere (safe area)

5.8 Maintenance Requirements

Manifolding around the nitrogen generators shall be positioned to allow maximum access and facilitate removal of membrane elements.

5.9 Isolation and Sectioning

Isolation valves shall be provided in the distribution system to block off non-critical users and maintain critical delivery.

5.10 Layout Requirements

Nitrogen storage/back-up shall be in the utility area. Major users, like flare system purge, shall have dedicated line, while smaller users can be served by branch lines from ring distribution.

5.11 Interface Requirements

Compressed air.

5.12 Commissioning Requirements

None.