

NORSOK STANDARD

SYSTEM REQUIREMENTS
COMPRESSED AIR
SYSTEM NO. 63

P-SR-014
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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

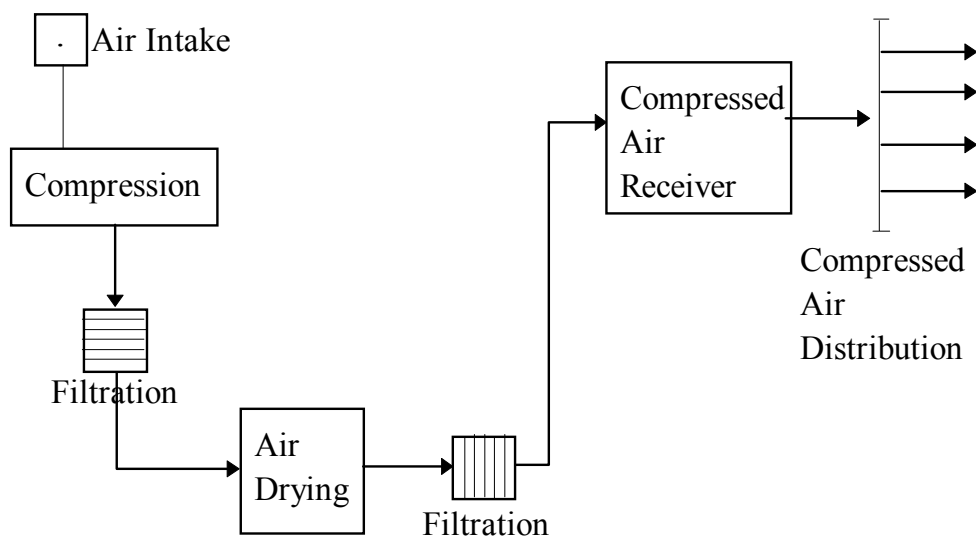
5.1 General

Deliver compressed, cooled, filtered and dried oil-free air for use as plant and instrument air.

5.2 Products/Services

Not Applicable.

5.3 Equipment/Schematic



5.4 Performance

- System Capacity Sm^3/hr
- Delivery Pressure 8 barg
- Max. Water Dewpoint $-40\text{ }^\circ\text{C}$
- Filtration (max. particle size) 2 micron

5.5 Regularity

5.5.1 Regularity

99 %

5.5.2 Training/sparing

- Air compressor unit, 2 x 100 % or 3 x 50 %
- Air dryer unit, 2 x 100 %
- Air receiver, 1 x 100 %
- Sparing shall be provided on main item level, e.g. compressor unit.

5.6 Process/Ambient Conditions

System will be located in sheltered unheated area.

5.7 Operational Requirements

5.7.1 Control and monitoring

The system shall be fully controlled and monitored from a local control panel. Monitoring shall be available in CCR as follows:

- | | |
|-------------------------|---|
| • Compressor Package | Common alarm |
| • Distribution Pressure | Alarm and monitoring of pressure |
| • Availability | Low priority users (e.g. plant air) shall, in case of low system pressure, automatically be shut off favouring high priority users (e.g. instrument air, inert gas feed). |

5.8 Maintenance Requirements

- Space shall be provided for maintenance of all equipment on the unit.
- Compressor/drivers shall be possible to remove/replace.

5.9 Isolation and Sectioning

Valves shall be located to enable maintenance on system main units, and on distribution system to enable modifications/extensions to the system during operation.

5.10 Layout Requirements

All units grouped together.

5.11 Interface Requirements

Cooling medium/seawater.

Electric power shall normally be from main power system. As a minimum one compressor shall be able to run on emergency power.

5.12 Commissioning Requirements

None.