

NORSOK STANDARD

SYSTEM REQUIREMENTS **SEAWATER** SYSTEM NO. 50-00

P-SR-009
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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

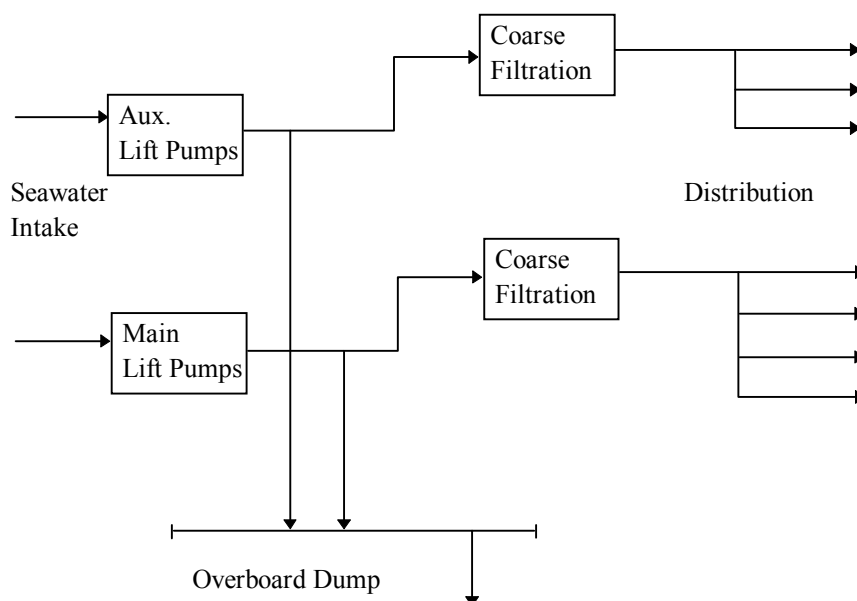
5.1 General

The system shall lift, disinfect and filter seawater for distribution to the various platform users.

5.2 Products/Services

Not Applicable

5.3 Equipment/Schematic



5.4 Performance

- System Capacity (m^3/hr)
- Seawater filtration (micron) 1000
- Discharge pressure (barg) @ elevation m.
- Free chlorine, residual (p.p.m. vol-mg/l) 0.3 - 1.0

5.5 Regularity

5.5.1 Regularity

99 %

5.5.2 Sparing

Sparing of pumps is recommended in order to ensure uninterrupted seawater supply. Coarse filters should be provided with bypass.

5.6 Process/Ambient Conditions

Supply to the system will be seawater preferably taken at minimum -50 m LAT.

5.7 Operational Requirements

5.7.1 Control and Monitoring

From local common panel and field instruments. Control and monitoring from CCR as follows:

OS/VDU Functions	P	T	L	F	A	Other
Main Pumps	C ¹⁾				X	¹⁾ Traditional pressure control or static head
Aux. Seawater Lift Pumps	C ²⁾				X	²⁾ Local Controller

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

5.7.2 Protection

Fixed speed pumps should be protected by mechanical minimum flow protection.

5.7.3 Standby

Standby pump shall start automatically upon trip of duty pump.

5.7.4 Shutdown

Facilities shall be provided to avoid "water hammer" effects on pressurization after shutdown.

5.8 Maintenance Requirements

All major parts shall be easily accessible for maintenance.

5.9 Isolation and Sectioning

Individual equipment items in parallel duty shall be equipped with the necessary valves for individual isolation for maintenance.

5.10 Layout Requirements

Space shall be provided to allow access for equipment maintenance/change out.

5.11 Interface Requirements

- Instrument Air.
- Sodium Hypochlorite (to be injected upstream coarse filters).

5.12 Commissioning Requirements

System shall be provided with high point vents and be sectionized? for early and easy commissioning.