

NORSOK STANDARD

SYSTEM REQUIREMENTS
FRESH WATER
SYSTEM NO. 53

P-SR-011
Rev. 1, December 1994

CONTENTS

1. FOREWORD	2
2. SCOPE	2
3. NORMATIVE REFERENCES	2
4. DEFINITIONS AND ABBREVIATIONS	2
4.1 Definitions	2
4.2 Abbreviations	2
5. FUNCTIONAL REQUIREMENTS	2
5.1 General	2
5.2 Products/Services	2
5.3 Equipment/Schematic	3
5.4 Performance	3
5.5 Regularity	3
5.6 Process/Ambient Conditions	4
5.7 Operational Requirements	4
5.8 Maintenance Requirements	4
5.9 Isolation and Sectioning	4
5.10 Layout Requirements	5
5.11 Interface Requirements	5
5.12 Commissioning Requirements	5

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

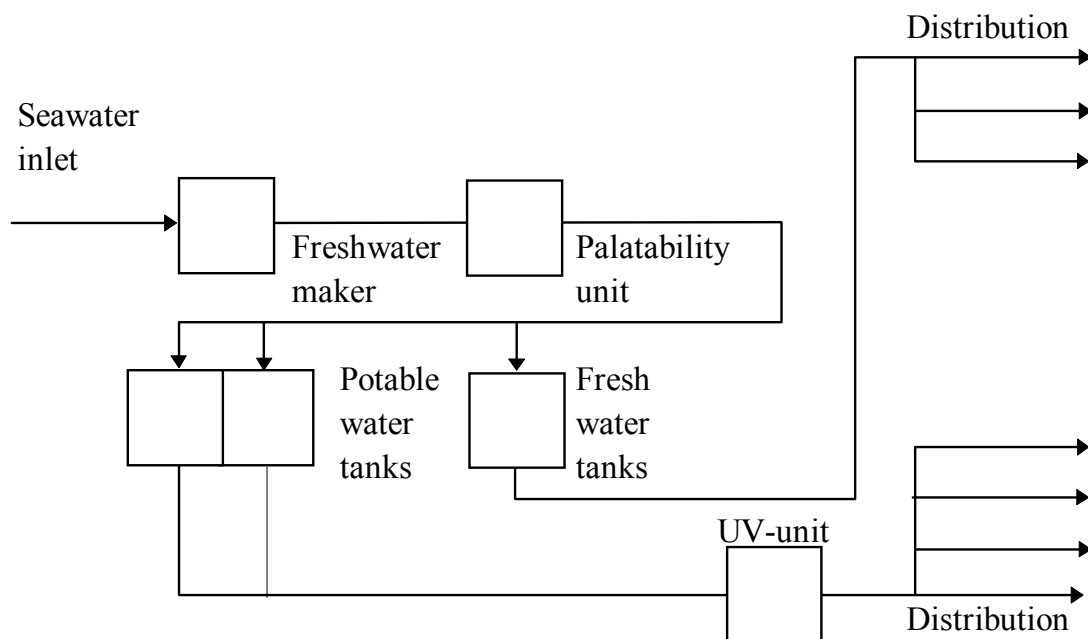
5.1 General

Produce, store and distribute fresh water to all users.

5.2 Products/Services

Fresh water is used as potable water and for supply of fresh water to the process utility and drilling systems.

5.3 Equipment/Schematic



5.4 Performance

5.4.1 System Capacity

Storage 4 days normal consumption

5.4.2 Chemical and microbiological treatment

As per authority regulations.

5.5 Regularity

5.5.1 Regularity

- 95 %
- (99 % for distribution of potable water)

5.5.2 Sparing

- x 50% potable water tanks, 1x 100% fresh water tank
- Pumps and UV sterilisers 2 x 100%.

5.6 Process/Ambient Conditions

System pressures (barg): 7 - 9
 System temperature (°C): Ambient

5.7 Operational Requirements

5.7.1 Control and Monitoring

Fresh water maker shall be controlled and monitored from local control panel. System monitoring in CCR shall be provided as follows:

OS/VDU Functions	P	T	L	F	A	Other
Storage Tanks			M		X	
Distribution System	M				X	
Common Alarm					X	UV and pumps (ON/OFF)

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

5.7.2 Palatability unit

Palatability vessel shall be sized for 6 month continuous operation. Arrangement for water bypass.

5.7.3 Disinfection unit

UV sterilisation. Hypochlorite shall be used for fresh water supplied by boat and for dosing upstream palatability unit.

5.8 Maintenance Requirements

Access to tank internals, heat exchanger, pumps and other vital components.
 Easy emptying and refill of palatability unit.

5.9 Isolation and Sectioning

Tank isolation shall be provided for individual tank inspection and cleaning.

5.10 Layout Requirements

- Hose couplings for boat supply shall be unique for service.
- Piping must have segments with no possibilities for stagnant liquid volumes

5.11 Interface Requirements

- Heating
- Seawater

5.12 Commissioning Requirements

None.