

NORSOK STANDARD

SYSTEM REQUIREMENTS
CHEMICAL INJECTION
SYSTEM NO. 42-30

P-SR-018
Rev. 1, December 1994

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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

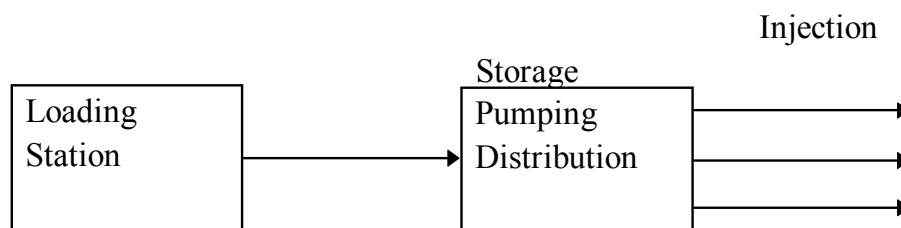
5.1 General

Storage, distribution and injection of chemicals to platform systems.

5.2 Products/Services

Not Applicable.

5.3 Equipment/Schematic



5.4 Performance

5.4.1 Hydrocarbon Systems

Fluid	Oper. Mode	Inj. Rate (1/hr)-range	Dosage Rate (p.p.m. vol.)	Inj. Press./Max.Syst.Press.	Storage Req.ment
	C/I			(ANSI Class)	m ³ /days of consumption
Corr. Inhibitor 1 1.) 3.)			3-30	600#1.)/1500#4.)	7 days
Corr. Inhibitor 2 2.)			3-30	300#	7 days
Emulsion Breaker 3.)			1-20	1500#	7 days
Anti-foam 1.)			1-10	600#	7 days
Scale Inhibitor 4.)			10-40	1500#	7 days
Wax Inhibitor 2.)			50-200	300#	7 days

5.4.2 Non-Hydrocarbon Systems

Operating Mode: C= Continuous, I= Intermittent

Fluid	Oper. Mode	Inj. Rate (1/hr)-range	Dosage Rate ... (p.p.m. vol.)	Inj. Press./Max.Syst.Press.	Storage Req.ment
	C/I			(ANSI Class)	m ³ /days of consumption
Corr. Inhibitor 5.)			5-20	150#	7 days
Polyelectrolyte			5-20	150#	7 days
Anti-foam			2-10	150#	7 days
Scale Inhibitor 6.)	I		5-20	150#	4 m ³
Biocide 5.)	I		200-1000	150#	4 m ³
Oxygen Scavenger			5-10	150#	7 days

Notes: 1.) Process 2.) Pipelines 3.) Upstream Well Chokes
4.) Wells 5.) Seawtr. 6.) WI to Wells

5.5 Regularity

5.5.1 Regularity

85 %.

5.5.2 Sparing

No sparing.

5.6 Process/Ambient Conditions

Unit(s) will be installed in sheltered, unheated area.

Chemicals will be supplied in transportation (tote) tanks (4 m³) or drums.

5.7 Operational Requirements

- Local control and monitoring with unit alarm only brought back to control room.
- Each fluid to have separate piping/hoses from loading station with unique quick connector couplings.
- Facilities shall be provided to maintain fluid pumpability at ambient conditions.
- All chemical storage tanks, injection pumps and loading station shall have drip trays to collect spillage.
- Facility for calibration of flow to/from each head to be provided.

5.8 Maintenance Requirements

The system shall be designed such that normal maintenance work can be performed on the injection system for one chemical without interfering with the operation of the injection system for the other chemicals.

5.9 Isolation and Sectioning

Facilities shall be provided to avoid overpressuring of the sections of the processing systems where these fluids are injected when shut-down of the processing system occur.

For injection into hydrocarbon systems or systems under high pressure, check valves shall be fitted as close to the injection point as possible.

5.10 Layout Requirements

Piping / hoses from loading station shall be self-draining to avoid pockets and liquid traps.

5.11 Interface Requirements

Table with types of quick connector couplings to be used for each fluid is attached.

5.12 Commissioning Requirements

None.