

NORSOK STANDARD

SYSTEM REQUIREMENTS

FUEL GAS

SYSTEM NO. 45-10/20

P-SR-017

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

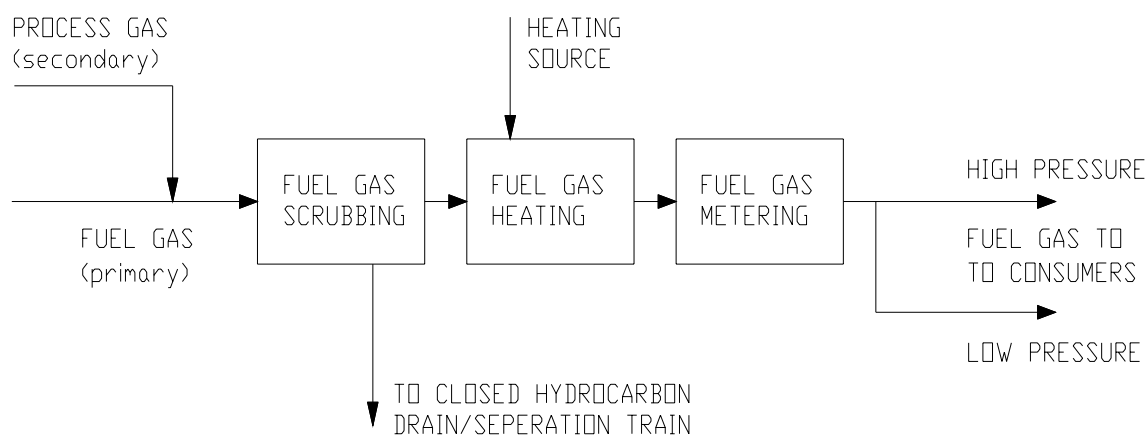
5.1 General

System capable of conditioning process gas to fuel gas specifications primarily for turbines and heaters.

5.2 Products/Services

Fuel gas supply to turbines, heaters, stripping gas, pilot gas nad purge gas.

5.3 Equipment/Schematic



5.4 Performance

5.4.1 System Capacity

5.4.2 Product Quality

Fuel Gas superheated to consumer requirements.

5.4.3 Particles

5.4.4 Fuel gas quality

Pressure:	High Pressure barg ^{*)}	Low pressure barg ^{*)}
Temperature above		
a) HC dewpoint:	25 °C	10 °C
b) H ₂ O dewpoint:	20 °C	10 °C

^{*)} This can vary depending on consumer requirement.

5.5 Regularity

5.5.1 Regularity

99 %.

5.5.2 Sparing

One train.

5.6 Process/Ambient Conditions

Equipment will be located in a sheltered unheated area.

Gas supply: Process Gas (primary) Process Gas (secondary)

Pressure:

Temperature:

HC dewpoint:

H₂O dewpoint:

Gas composition for primary and secondary process gas source is attached.

5.7 Operational Requirements

5.7.1 Control and Monitoring

Performance shall be controlled and monitored from CCR, as shown below:

OS/VDU Functions	P	T	L	F	A	Other
Inlet header	C					
Fuel gas scrubber			C		L ¹⁾	¹⁾ On high level
Fuel gas heater (when required)		C ²⁾			T ²⁾	²⁾ Differential temperature
Fuel gas meter (fiscal)	M	M		M		
LP Fuel gas header	C					

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

5.7.2 Sampling

Sampling point downstream fuel gas heater shall be provided.

5.7.3 Heat tracing

If required, to critical consumers only (eg. gas turbines).

5.8 Maintenance Requirements

All major parts shall be easily accessible.

5.9 Isolation and Sectioning

Isolation valves shall be installed on main gas supply header, LP Fuel Gas header and on all fuel gas supply lines to consumers.

Heater to have block valves and bypass valve.

5.10 Layout Requirements

Line from scrubbing unit to heater to slope back to scrubbing unit.

5.11 Interface Requirements

Electrical/Heating source: Required to superheat the gas to specified value.

Process gas.

Hydrocarbon closed drain system/separation train.

5.12 Commissioning Requirements

None.