Datasheet
Filter Separator

Project: KYMEA Meter Station
Document Number: 8122-DAT-0004

Revision History

Description	Revision	Date	By	Approved
Issued for Review	A	3-Mar-25	JS	BM
Issued for Bid	B	15-May-25	JS	AR

Approvals

	By:	Date:
Initiator	BH	01/21/25
Process	N/A	
Mechanical	JS	03/03/25
Civil	N/A	
Electrical	N/A	
Instrumentation	N/A	
Project Eng.	AR	5/15/25
Project Mgr.	BM	03/04/25

Reference Documents

Purchase Specification: Filters Separators, Rev 1.30, 10/09/2020

OP-CC-GS-COAT-001 General Coating Specifications, Revision 3.20, 05/31/2024

TGT Design Standard: Meter Station, EC-DS-007,Rev 1.20, 05/17/2024

EnSiteUSA P&ID

Attachment A - Gas Compositions

Location: Madisonville, Kentucky Lat 37.318287°, Long -87.529971°

Identification Tag FS-101 Requisition No: _____

Project: KYMEA Meter Station Project No. _____

Prepared By: BH Approved By: BM

Date: 03/04/2025 Revision: A Revised Date: _____

Procurement Point:

Rob Leesman, VP of Market Analytics
rleesman@kymea.org
Kentucky Municipal Energy Agency (KYMEA)
1700 Eastpoint Parkway Ste.220
Louisville, KY 40223

Ship To:

KYMEA Energy Center I
Attn: Stan Conn
1957 AC Slaton Rd.
Madisonville, KY 42431

Gas Design Conditions:

Flow: Normal 10.6 MMSCFD @ 965 psig & 100 ° F

Min Flow	75	SCFH
Max Flow	26,940	lbm/hr

Operating Pressure: Operating Temperature:

Min/Max 0/965 psig Min/Max -20/110 ° F

Design pressure: 1142 psig (118% MAOP)

Maximum Noise at 3 ft: 85 dB

Performance:

Remove 99.9% of all entrained solids 0.3 microns and larger at all flow conditions.

Remove 99.9% of all liquids 1 micron and larger at all flow conditions.

Maximum of 2.0 psi pressure drop through the filter separator.

Insulation:

Insulate and heat trace the lower liquid level sump, the level gauges, level controllers, dump valves and drain lines to below frost depth –**Required**

The complete lower sump section shall be in an insulated enclosure with heat and drain lines insulated and heat traced to below frost depth – **Required**

Gas Analysis (Mole %) (Fill in parameters below or attach analysis to this specification)**:**

BTU	
Specific Gravity	.58-.62
Gas Analysis (Mole %)	
C1 Methane	See Attachment A
C2 Ethane	
C3 Propane	
IC4 Iso-Butane	
NC4 Normal Butane	
IC5 Iso-Pentane	
NC5 Normal Pentane	
C6 Hexane	
CO2 Carbon Dioxide	
N2 Nitrogen	
H2O Water	

Notes:

1) Vendor to provide level accessories, including bridle, gauge, and sensor.
2) Vendor to size and provide relief valve. Relief valve duty requirements and relief valve actual capacity calculations must be provided in the Documentation package from the vendor.

Vendor Furnished Information:

Total Liquid Storage Capacity (gal.) _____

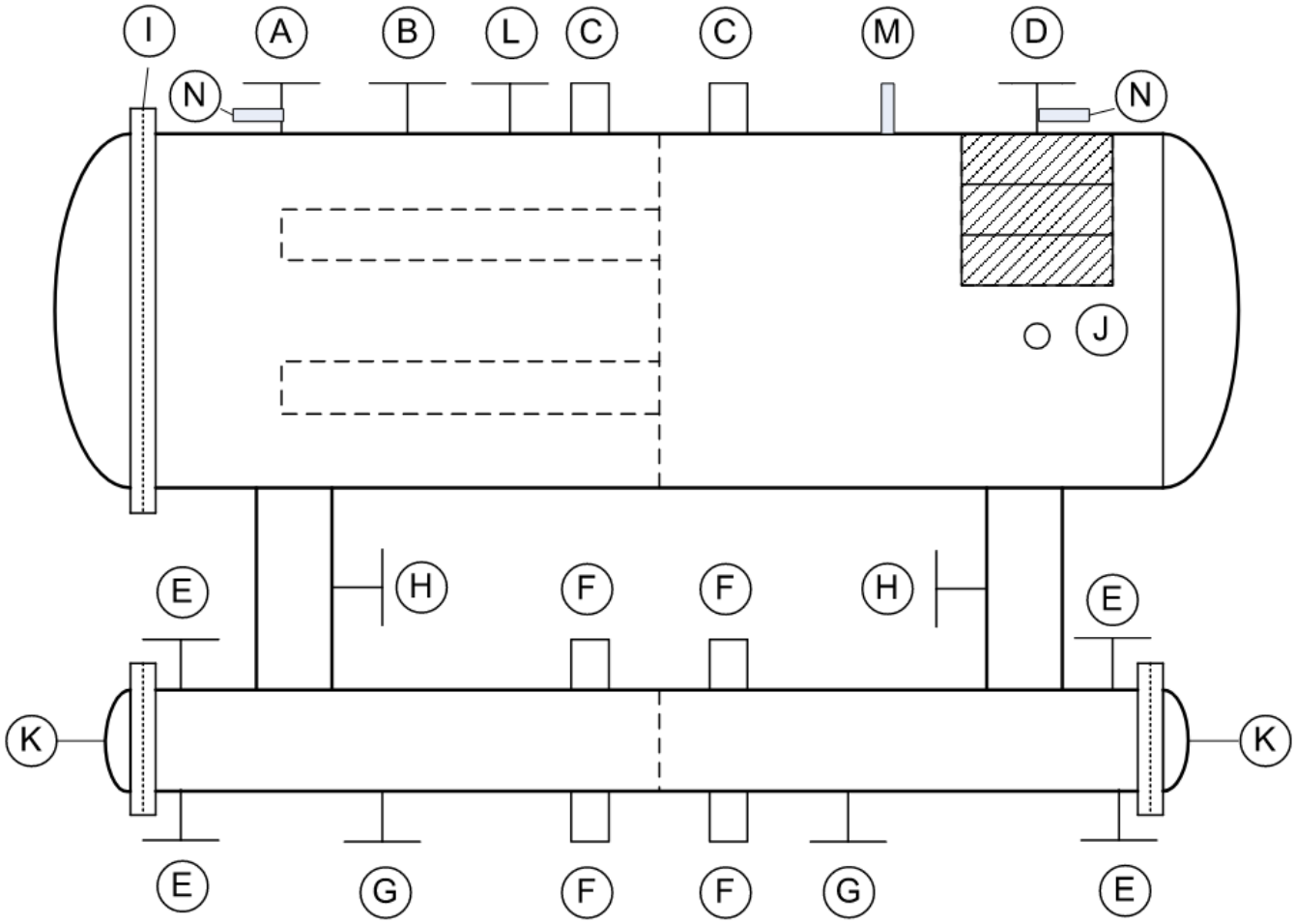
Total Solid Capacity (Cu-Ft. or Lbs.) _____

Design Pressure (MAWP)_____psig
Design Temperature Min_____° F to Max_____° F
Corrosion Allowances: Vessel:_____inches, Internals: _____ inches
Support Earthquake Zone:_____ or □NA

Horizontal Separator Openings

(To be completed by vendor unless specified. See also Vessel Diagram)

Nozzle	Service	No.	Size (in)	Rating	Type	Nozzle Projection
A	Inlet	1	6	600#	RF FLG	
B	Relief Valve					
C	Pressure Differential					
D	Outlet	1	6	600#	RF FLG	
E	Level Control Bridle					
F	Level Gauge					
G	Liquid Drain					
H	Bridle, Level, Sensor					
I	Filter Access/Closure					
J						
K	Sump					
L	Blowdown/Vent					
M	Pressure Gauge					
N	Test Connections	2	1	600#	RF FLG	



Vessel Diagram