



MolecularGate™ Quote Form/Questionnaire

1. Customer Information

Customer Name (contract holder)*	
Customer Name (end customer)*	
Site Location *	

2. Technical Contact

Name*	
Company*	
Position*	
Phone*	
Email*	

3. General Information

	Standard if applicable	
Elevation (ft.)*	1000	
Barometric Pressure (PSIA) ¹	14.2	
Minimum Temperature (F)*	0	
Maximum Temperature (F)*	100	
Seismic Zone (A, B, C, D, E)*	C	
Wind loading (MPH)*	90	
Noise limits (dB)*	90 dB @ 10 ft.	

¹Look up at: http://www.engineeringtoolbox.com/air-altitude-pressure-d_462.html

4. Feed Gas Specification

Gas source (Digester, Landfill, Other)*	
Wet or Dehydrated source gas?*	
Pressure at Guild inlet (PSIG)*	
Gas compressed at source?	
Temperature at source (F)	
Flow, Dry Basis (SCFM) ²	
Flow, Wet Basis (SCFM) ²	
Pressure, Temperature, Composition, or Flow variations expected? (instantaneous, daily, seasonal, lifetime)	

² Need to provide flow on either wet or dry basis, we can calculate the other.

5. Feed Gas Composition*

Methane (CH4) (vol %)	
Carbon Dioxide (CO2) (vol %)	
Nitrogen (N2) (vol %)	
Oxygen (O2) (vol %)	
Water (H2O) (vol %)	
Hydrogen Sulfide (H2S) (PPM)	
Other	

Ethane	
Propane	
Butane	
Pentane	
C6+	
Other	
Other	

6. Product Gas Specification (Attach full product specification if available)

	Standard if applicable	
Where is product gas going?	Pipeline	
If gas to pipeline, what is distance to interconnect?		
Pressure at Guild Outlet (PSIG)*	90	
Temperature (F)*	40-120	
Flow (SCFM)		
Can destination handle Pressure, Temperature, Composition, Flow variations? (range of variations, length of variation?)	Instantaneous flow variation of +/- 20 % of average flow Temperature between 40 and 120°F Composition will swing with cycle. The use of an averaging bottle is highly recommended.	
What conditions trigger Shut-In? (e.g. instantaneous out of spec, average over XX minutes, other)		

7. Product Gas Composition*

	Standard if applicable	
CH4 (vol %)		
CO2 (vol %)	< 2%	
N2 (vol %)	< 4%	
Total inerts (O2 + CO2 + N2) (vol %)	< 5%	
O2 (vol %)	< 0.2%	
H2O (vol %)	< 7 lbs./ MMSCF (150 PPM)	
Ethane		
Propane		
Butane		
Pentane		

C6+		
Other		

8. General Requirement Questions

- A. Does the system need to be designed for a corrosive environment (high atmospheric H₂S)? This is not standard and will add to the cost of the system. This is commonly required for municipal waste water treatment plants.

- B. Does the customer require a turndown below 25% (typical) of design? Power savings in turndown is not typical below 50%.

- C. Where is the tail gas going (TOX, Flare)? Can it handle some flow and BTU variations?

- D. What is the customer doing to dispose of condensate? What is the consequence if gas escapes into the condensate system? On digesters it is common to return condensate to the digester. Typically a below grade sump is needed for disposal from the low pressure inlet knockout.

- E. Is air cooling sufficient for this location (yes, if ambient is 100F or less)? If no, does customer have cooling water or chiller circuit available?

- F. What is upstream and how is it to be controlled? How do we transition to Guild equipment?

- G. Is power available? If so, at what voltage, frequency, amperage?

- H. Is compressed instrument air available? If so, at what pressure, flow, and dewpoint?

- I. Is there a local use for low BTU fuel? If yes, is there a minimum BTU/ft³ required and what is the quantity of MM BTU/hr?

9. Project Development Questions

- A. Is this an approved and funded project or are you still in the development phase?
- B. If in development, when do you estimate it will be fully funded?
- C. What date do you plan to award the contract?
- D. What is the date you are targeting for delivery of the system?

10. Comments

Date:

“*” Indicates Required Information

Guild Associates would be pleased to provide a performance and cost estimate for your process conditions. To obtain a budgetary quotation, please complete the form above and return as an email attachment to info@moleculargate.com.