

Renewable Natural Gas Analysis

Fast Fact

Fast biogas analysis is critical for plant optimization.

An online mass spectrometer allows operations to cut costs, increase production, and maintain a safe working environment by monitoring multiple stages of RNG production. Live readings of the raw gas composition enable real-time process adjustments to maximize up-time and on-spec product gas yields. In addition, the analyzer can also be used to monitor odorization and provide automated updates of the BTU content of waste (tail) gas sent to the flare or thermal oxidizer. The mass spectrometer typically reports live updates of methane, carbon dioxide, air, non-methane organic compounds, siloxanes, and sulfur for increasing process efficiency, and for identifying leaks in the upstream off-gas supply lines.



Figure 1. The MAX300-RTG® Industrial Process Gas Analyzer.

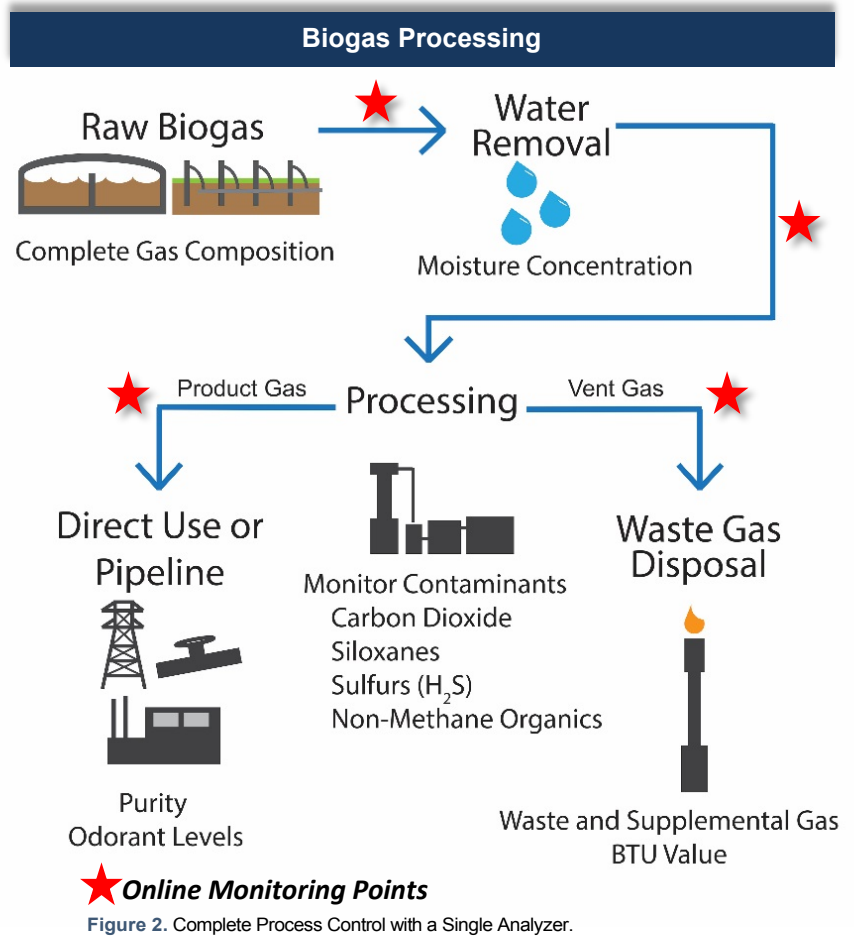


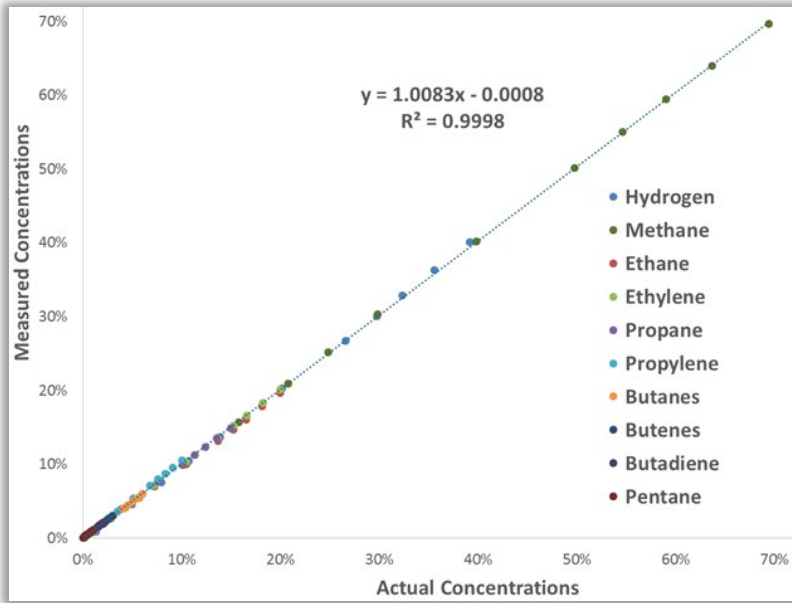
Figure 2. Complete Process Control with a Single Analyzer.

Renewable Natural Gas Applications



Figure 3. Faster Data for Better Process Control.

Accuracy and Flexibility



The MAX300-RTG measures various components of the renewable natural gas composition. The flexibility of the instrument allows for accurate percentage readings of methane and carbon dioxide, and ppm level contaminants such as hydrogen sulfide and siloxanes. The MAX300-RTG provides reliable updates for various parts of biogas processing, allowing for adjustments in real-time.

Control parameters, such as BTU value, Specific Gravity, and Wobbe Index, are instantly calculated and transmitted for use by the plant's process control system.

Figure 4. Accurate and Precise Measurements from High % to ppm Levels.