

UPGRADING BIOGAS TO RENEWABLE NATURAL GAS

Quadrogen's proprietary fast-cycle pressure swing adsorption (PSA) system is a market-leading technology for gas separation. At elevated pressures, different gases such as oxygen (O_2) , nitrogen (N_2) , carbon dioxide (CO_2) , and water are adsorbed to the kinetic media. During the exhaust steps, the pressure is then lowered and the adsorbed gases are released, allowing the kinetic media to regenerate itself for the next production cycle. When upgrading biogas from landfill, digester gas, or well gas, Quadrogen's PSA technology allows you to meet the stringent pipeline natural gas and vehicle fuel specifications.



QUADROGEN CHINOOK

for processing landfill or digester gas to produce pipeline natural gas

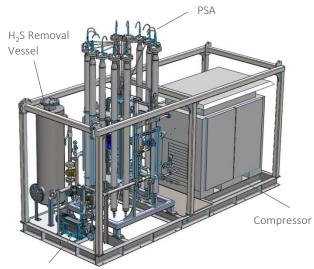
The Advantages of Quadrogen's PSA:

- Compact and skid mounted for ease of installation and integration
- Proven reliability for continuous robust operation
- Simple to operate with fast start-up and shutdowns
- Market leading performance for recovery rates up to 98%
- Low operating cost with minimal consumables and utilities



QUADROGEN CHUM

for processing small digester gas to produce compressed natural gas for vehicle fuel



Exhaust Vacuum Blower

CHUM PSA SKID



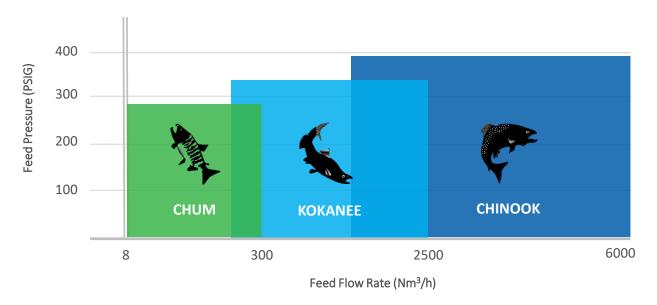






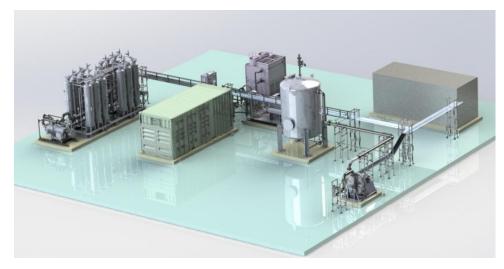


Product Range and Specification



Services

- Techno-economic Feasibility Studies
- Design Engineering Services
- PSA or Integrated Biogas Upgrading Solution Provider
- Installation, Commissioning, Operation, and Maintenance Services
- Troubleshooting and **Engineering support**



INTEGRATED BIOGAS UPGRADING PLANT

About Quadrogen

Quadrogen Power Systems, Inc. of Vancouver, British Columbia, Canada is a privately held clean-tech company that designs, builds and installs cost effective, high performance gas clean-up and upgrading solutions for the industrial and renewable energy sector. Quadrogen provides engineered solutions using its proprietary and non-proprietary technologies to create valuable products and chemicals, from biogases, industrial waste gases, and syngas. Quadrogen's novel technologies provide lowest cost of ownership by offering market-leading performances while improving system reliability for mission-critical applications.



