

CUSTOMIZABLE BIOGAS SOLUTIONS

Universal Blower Pac has been engineering and manufacturing Biogas Blower Systems since 1986.

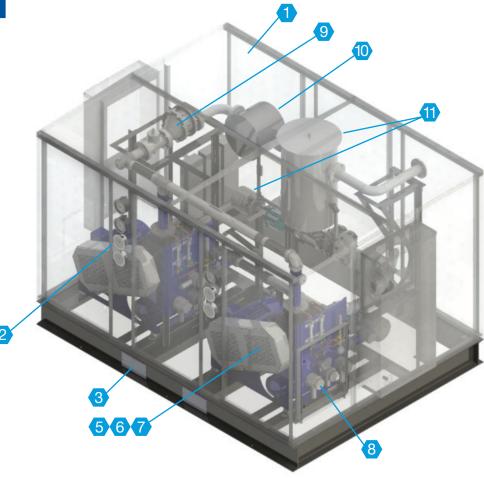
More wastewater treatment and power generation plants around the world recognize biogas, landfill, and natural gases as valuable sources of energy that offer both financial and environmental benefits. UBP designs these specialty blower systems to move the extracted biogas effectively and safely through the process.

Typical biogas blower applications include gas boosting for a plant cogeneration system, boosting for gas conditioning, gas conveyance to a flare, recirculation for mixing, and odor control. *UBP* uniquely offers a wide choice of biogas technologies to provide a solution that best fits your application and budget.

| YOUR PAIN | OUR SOLUTION |
|--|--|
| >> Biogas blower system manufacturers only offer one technology | >> MULTIPLE BIOGAS TECHNOLOGIES OFFERED sliding vane, multi-stage centrifugal, positive displacement, regenerative, and high efficiency screw compressors |
| >> Biogas blower system manufacturers typically don't allow a variety of engineering configurations to meet exact demands | >> NUMEROUS ENGINEERING OPTIONS range from simplistic designs based on our EXPII, to compact designs with enclosure (3C-PAC), or direct drive to full custom |
| >> Many Biogas blower system manufacturers don't offer beyond standard designs or charge heavy fees for custom engineering | >> UBP IS THE LEADER IN AFFORDABLE CUSTOM BLOWER SYSTEM ENGINEERING and keeps costs low due to our UBPstandardFLEX approach |

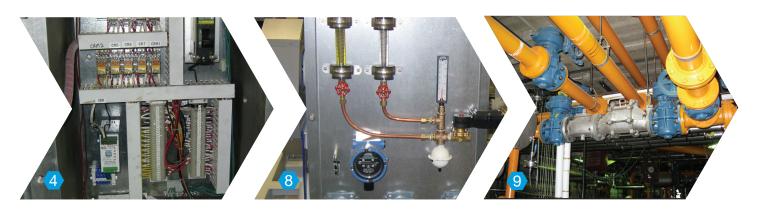
ENGINEERED FOR SAFETY PRIORITY #1

Universal Blower Pac values safety as the primary concern when engineering biogas blower systems as these gases are flammable, potentially explosive, and pose an asphyxiation risk. Our systems feature proper seals to prevent gas escape and are equipped with safety measures to prevent conditions where gas release or air intake could occur throughout vacuum or other pressure conditions. We ensure that all electrical and mechanical equipment is rated suitable for explosive environments. UBP engineers take great care to help identify any potential sources of combustion near the system and design around them.



- 1.>> Full enclosure suitable for indoor or outdoor installation
- Stainless Steel Instrumentation located for ease of operation. Pressure, temperature and vacuum indicator
- 3. >> **Anti-Vibration galvannealed steel base** with forklift slots for easy installation
- 4. >> Explosion-proof controls
- Specialty materials and coatings for corrosion protection are available
- 6. >> Explosion-proof motor

- 7.>> V-Belt or direct drive with antistatic (spark proof) guards
- 8. >> **Water injection and Cooling system** keeps operating temperatures to acceptable levels
- 9. >> **Flame trap and arrestor** prevent propagation of flame through gas lines
- 10. >> Inline filter
- 11. >> Moisture Control with accumulators and drip traps remove condensate before and after compression
- 12. >> **Gas Detector** prevents exposure to plant personnel



EXP II AND 3C-PAC BIOGAS DESIGNS

EXPII BIOGAS AND SPECIAL GASES SYSTEM

This pre-engineered, fast delivery system offers a large range of explosion-proof gas blower and motor combinations with quality features at an affordable cost.

- >> Explosion-proof motor and gas blower with mechanical seals
- >> Corrgard for rotor protection
- >> Stainless steel instrumentation
- >> Heavy anti-vibration steel base
- >> V-belt or direct drive design with base and anti-spark guard
- >> Stainless steel flex joints
- >> Stainless steel suction and discharge silencers



3C-PAC BIOGAS AND SPECIAL GASES SYSTEM

This pre-engineered, compact full enclosure system offers a large range of explosion-proof gas blower and motor combinations as well with easy maintenance access from the front and back.

- >> Explosion-proof motor and gas blower with mechanical seals
- >> Corrgard for rotor protection
- >> Stainless steel instrumentation
- >> Heavy anti-vibration steel base
- >> V-belt with base and anti-spark guard
- >> Stainless steel flex joints
- >> Separate ATEX acoustic cooling fan
- >> Full enclosure with removable panels suitable for outdoor installation

ADDITIONAL OPTIONS:

- >> Stainless steel suction
- >> Safety relief valve
- >> Discharge silencers and piping
- >> Forced lubrication system



- >> Gas conditioning equipment
- >> PLC control

UBPstandardFLEX

UBPstandardFLEX provides you with all the benefits of a standard, pre-engineered system with FLEXibility to better suit your applications and needs. Your FLEXibility starts up front with a team of Sales Engineers to help find a solution to your pain. The standardFLEX options for our Biogas Systems include: sliding vane, multi-stage centrifugal, positive displacement, regenerative, and high efficiency screw compressors, sound enclosure as well as the ability to customize other UBP products for biogas use. Email sales@universalblowerpac.com to find HOW standard costs meet high performance!

FLEXibility offered in the Biogas Systems:







CALL THE ONLY SALES ENGINEERS IN THE INDUSTRY TO FIND HOW STANDARD COSTS MEET CUSTOMIZABLE FEATURES.



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