



Airvac

The **world leader** in vacuum sewer collection technology.

# Innovative Solutions for a Cleaner Environment

A brand of  
Aqseptence Group



# The Airvac Advantage

Substantial reduction of O&M costs are achieved by innovative products and system automation.

## Longevity

Airvac vacuum sewer collection systems have provided efficient and affordable sewer service to communities all around the world since 1972. There are more than 400 Airvac vacuum systems in the Americas, and nearly 1,000 systems installed worldwide including North America, South America, Europe, Africa, Middle East, Asia, and Australia.



## Operator Friendly

An Airvac vacuum sewer collection system is completely sealed from the valve pit to the vacuum station. Operating personnel are not exposed to raw sewage or hydrogen sulphide gas. Operators experience less noise and heat reduction at the vacuum pump stations. This provides them with a more safe and comfortable work environment.



## System Automation

Airvac's S.M.A.R.T. System does more than monitor the vacuum system. Potential problems are not only identified but adjustments are made automatically to correct them. System imbalances can be quickly overcome, resulting in a more efficient system, fewer callouts, and lower power bills.



## Cost Savings

Airvac vacuum sewer collection systems use smaller diameter pipes installed in narrow, shallow trenches, reducing excavation, dewatering and surface restoration. The vertical and horizontal flexibility of the system allows for underground utility conflicts to be avoided, preventing cost overruns. Additional cost savings result when multiple lift stations are replaced by one vacuum station. Overall, the cost savings potential of using an Airvac system can be as great as 60% when compared to gravity or low-pressure systems.

## Maintenance

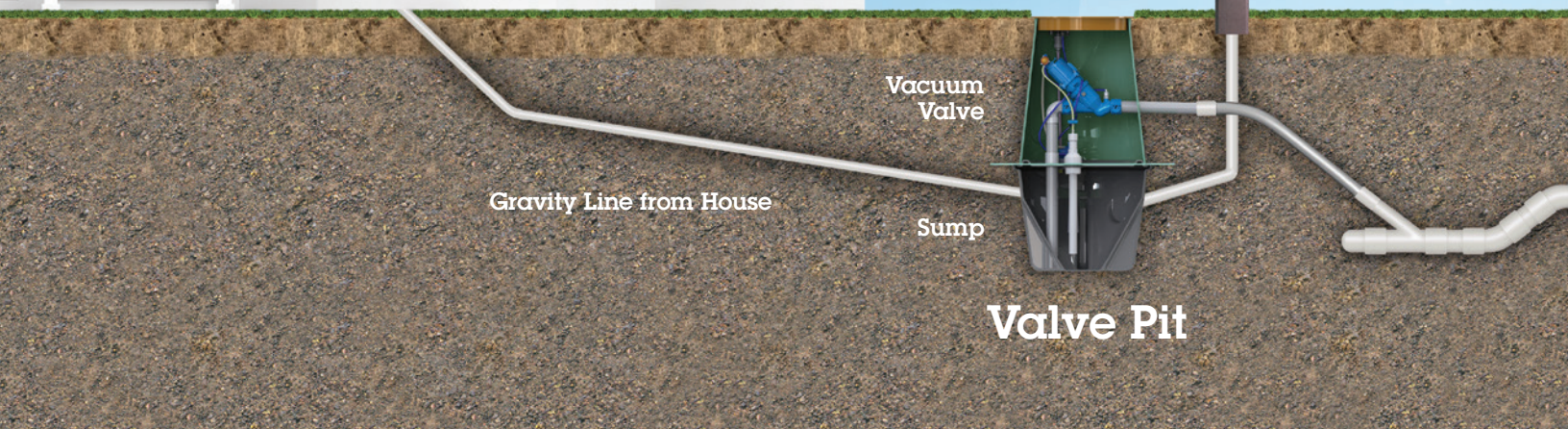
Continuing improvements in vacuum technology produce lower operation and maintenance costs. State of the art, oil-less, vacuum pumps coupled with Airvac's patent pending program logic, Modulation, can reduce power usage up to 35%. The modulation sequence controls the speed of the vacuum pumps to maintain a tighter vacuum range and speeds up and slows down depending on the demand of the vacuum system.

## Applications

Vacuum sewer collection systems are ideal for communities where failing septic systems are causing pollution and for new developments where protection of environmentally sensitive areas are a concern. The more difficult the sub-surface conditions are, such as high groundwater, unstable soils, or rock, the more likely a vacuum system is to be the right solution. Having completed projects in every imaginable environment, Airvac can customize its product to meet any customer need.



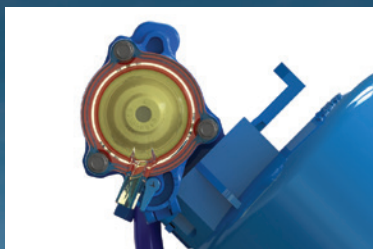
The new patent pending Airvac pressure activated Sump Breather is characterized by its simple operation and its flexible diaphragm. It not only protects the controller from moisture and water, it also eliminates the need for a high sewage sump float for monitoring.



## How an Airvac Vacuum Sewer Collection System Works

- 1 A traditional **gravity line** carries wastewater from the customer to an Airvac **valve pit** package.
- 2 The Airvac **vacuum valve** opens when 10 gallons of sewage collects in the sump and then differential pressure propels the contents into the **vacuum main**.
- 3 Wastewater travels at 15 to 18 fps in the **vacuum main**, which is laid in a sawtooth fashion to insure adequate vacuum levels at the end of each line.

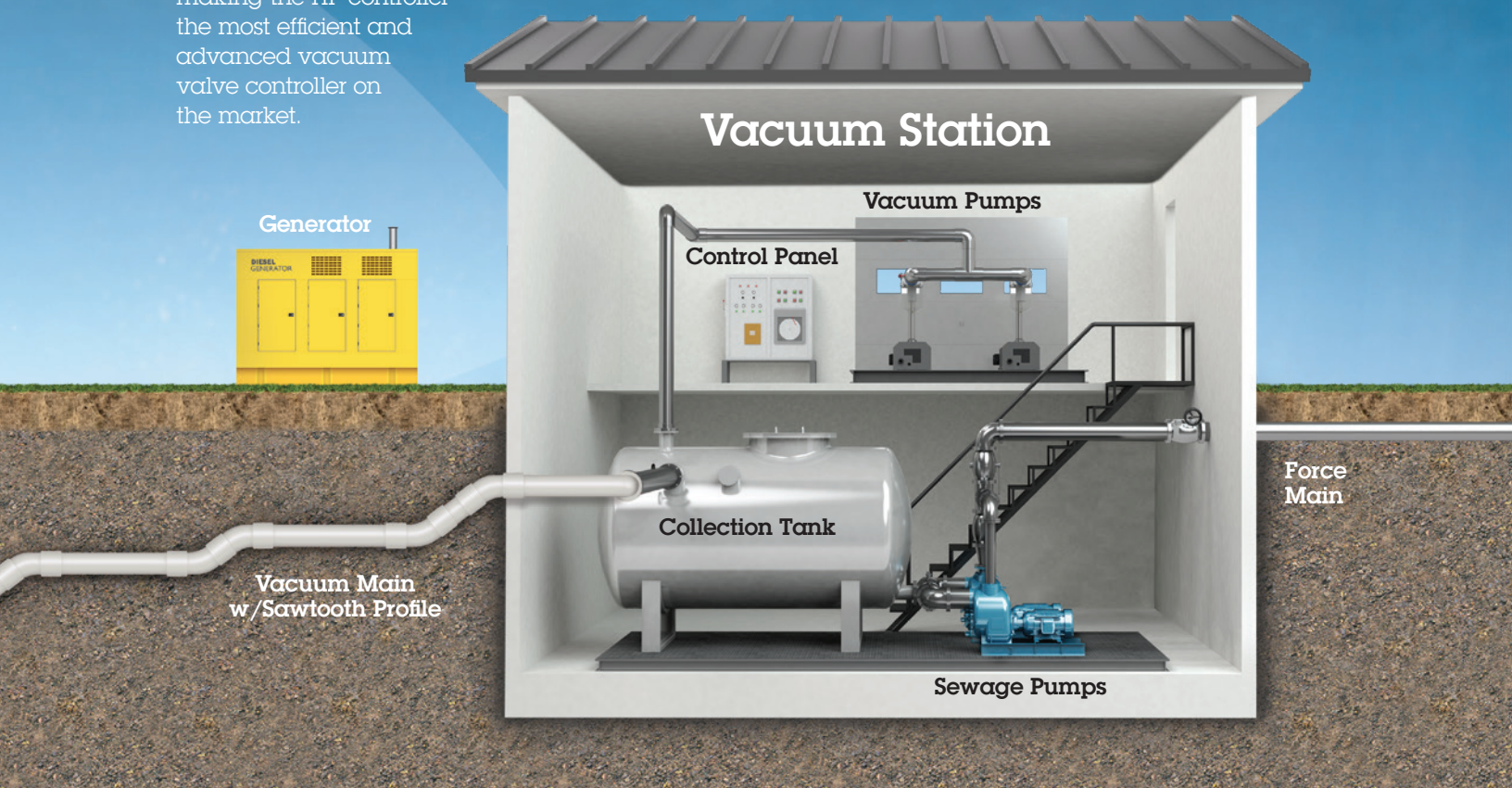




Airvac's High Performance (HP) Controller is water tolerant, has fewer parts, and is inexpensive to rebuild making the HP controller the most efficient and advanced vacuum valve controller on the market.



The Airvac wireless S.M.A.R.T. system monitors and controls the behavior of the vacuum system by making automatic adjustments to optimize system performance. This results in a more efficient system and lower O&M.



**Our completely closed vacuum sewer collection system prevents infiltration and inflow of groundwater from the valve pit to the vacuum station, protecting waterways from exfiltrating wastewater.**

- 4 Vacuum pumps** cycle on and off as needed to maintain a constant level of vacuum on the entire collection system.
- 5 Wastewater** enters the **collection tank** and fills to a predetermined level.
- 6 Sewage pumps** transfer the contents to the treatment plant via a force main.

# Discover the many advantages an Airvac vacuum sewer collection system can offer.

## Municipalities

- Eliminate health hazards due to failing septic systems
- Reliable and economical service
- Shallow main lines mean easier installation and expansion with minimal surface disruption
- Low O&M costs and long life of components
- 24/7 system troubleshooting hotline
- Significant cost savings
- Operator friendly



## Consulting Engineers

- Educational services designed to ease owner concerns
- Master planning and system layout assistance
- Design assistance
- Construction inspection services
- System start-up support



## Developers

- Significant cost savings
- Service easily extends to future construction phases
- Sealed system protects environmentally sensitive areas
- Eliminate multiple lift stations - fewer lots needed for lift stations means additional lots available for sale





# Airvac offers multiple services to keep your system running at optimal performance.

## O&M Services

On-Site Airvac Trained Technicians operate your system 24/7, 365 days a year.

## Annual Service Agreements

Customized service levels based on your needs for service by a Factory Certified Airvac Technician. Options include hours of coverage, response time, and any applicable parts discounts.

## Block Hour Services

Choose the amount of hours pre-paid to utilize at your discretion at your site.

## System Site Surveys

One day in-depth analysis of your system: evaluation of performance of the vacuum system (vacuum station & valve pits) and documented recommendations of operational improvement measures.

## Regional Training Classes

Held at your site with focus on operator training and review of current parts and technology.

## PM Services

Offered as Annual, Bi-Annual or Quarterly. Complete documented evaluation, adjustment, and recommendations for operation, repair or replacement of components. (Parts excluded)

## Quarterly Service Package Specials

(Contact Airvac Service Department for details).

## Airvac App

Contains troubleshooting videos, product data sheets, and other useful tools. Available for all mobile devices in the App Store or Google play. (free of charge)

## Operator School

Offered monthly in Rochester, IN (free of charge).

## Natural Disaster Prep Program

Minimize potential issues or downtime due to major weather events. Our documented preventative maintenance procedures were specifically created for preparing your system and your staff for these critical times.

Let's discuss your solution!

**1-800-AIRVAC9** or visit **airvac.com**

**We provide FREE cost estimates & system layouts.**



**Airvac**

**A brand of  
Aqseptence Group**

4217 N Old US Highway 31, Rochester, IN 46975  
airvac.com  
Phone: 1 574-223-3980  
eMail: info.airvac@aqseptence.com

AV007.1-US-en-REV0921  
Airvac® is a registered trademark of Aqseptence Group, Inc.  
Copyright © Aqseptence Group, Inc. 2021