



Airvac

Vacuum Technology Systems

Innovative Solution for a Cleaner Environment

A brand of
Aqseptence Group

The Airvac® Advantage

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

Longevity

Airvac vacuum sewer systems have provided efficient and affordable sewer service to communities all around the world since 1972. More than 1,000 Airvac systems and over 125,000 vacuum valves have been installed in 35 countries and more than half of the states in the U.S.



Operator Friendly

An Airvac vacuum sewer system is completely sealed from the vacuum station to the vacuum mains to the valve pit. Confined spaces, typical of other systems, are not an issue with vacuum. Operating personnel are not exposed to raw sewage or to hydrogen sulphide gas.



System Automation

Airvac's SMART System does more than monitor the vacuum system; it makes automatic adjustments in real time to control the behavior of the system. Imbalances, due to a variety of reasons, can be overcome with SMART system resulting in a more efficient system.



Cost Savings

Airvac vacuum sewers use small diameter pipes installed in narrow, shallow trenches which reduces excavation, dewatering and surface restoration. Airvac sewers' vertical and horizontal flexibility allows for underground utility conflicts to be avoided preventing expensive 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% compared to gravity or low-pressure systems.

Inexpensive to Maintain

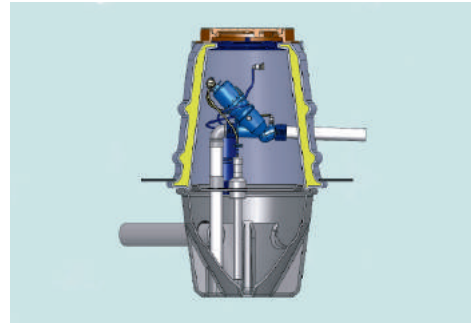
High operation and maintenance costs associated with many older vacuum systems are now a thing of the past. Continuing improvements in vacuum technology has resulted in much lower O&M costs that are in line with, or in many cases, lower than gravity sewers. State of the art oil-less vacuum pumps coupled with the introduction of new products such as SMART system and High Performance (HP) Controller resulted in a further reduction in O&M costs and more efficient systems.

Where Does It Apply?

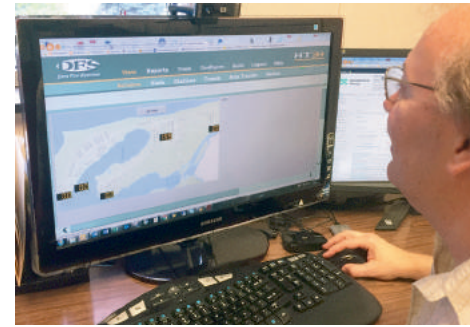
Vacuum sewer systems are ideal for communities where failing septic systems are causing pollution and for new developments where cost savings as well as the protection of environmentally sensitive areas are a concern. The more difficult the sub-surface conditions are, such as high groundwater, unstable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



NEW! 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.



NEW! Airvac's Cold Weather Valve Pit contains an insulated lid insert and an insulation layer within the pit wall and is available for areas where extended periods of lower temperatures are expected.



NEW! The Airvac wireless SMART system monitors and controls the behavior of the vacuum system by making automatic adjustments to optimize system performance that results in a more efficient system and lower O&M.

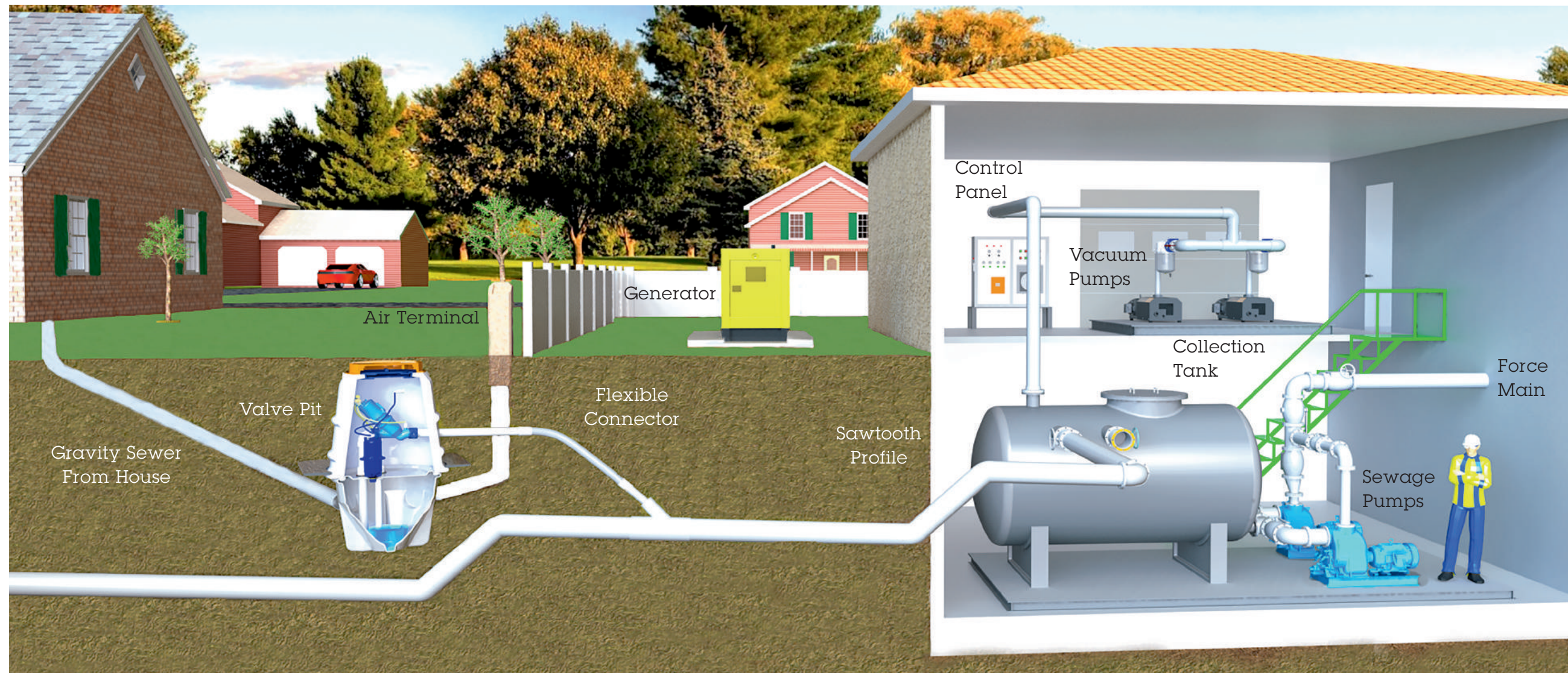


NEW! Airvac station packages come with a variety of options, including a complete vacuum station housed in a shipping container for those who need an inexpensive solution for a small project or initial phases of a development.



Clint Hawn
Vice President
Vacuum Technology Systems

"As the world leader in vacuum sewer technology, Aqseptence Group's #1 priority is to provide our clients with the tools and resources required to operate and maintain their systems as efficiently and effectively as possible. The next generation of intelligent Airvac vacuum sewer systems will include a technology that is capable of monitoring the behavior of the system in real time and then automatically making the necessary modifications. Since 1969, we have led the effort of modernizing vacuum sewer technology and now we are implementing concepts which years ago were unthinkable. These achievements are not possible without a passionate team, which is dedicated to serving our clients every need. From our team to yours...we look forward to assisting you with your wastewater needs."



A traditional gravity line carries wastewater from the customer to an Airvac valve pit package.

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.

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.

Wastewater enters the collection tank and fills to a predetermined level. Sewage pumps transfer the contents to the treatment plant via a force main.

Vacuum pumps cycle on and off as needed to maintain a constant level of vacuum on the entire collection system.

Airvac® and vacuum sewers can help you with your project.

Municipalities

- Eliminate health hazards due to failing septic systems
- Reliable and economical service for your customers
- Minimal surface disruption to your community
- 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 extended to future construction phases
- Sealed system protects environmentally sensitive areas
- Shallow main lines mean easier installation and expansion with less surface disruption
- Eliminate multiple lift stations- fewer lots needed for lift stations means additional lots available for sale



What our clients say about Airvac:



Richard Foster
President
Baymark Construction
Cape Charles, VA

"I recommend developers take a look at the Airvac system. It can save you time and money and improve quality."



Carl Gaskill, P.E.
Vice President
Fralinger Engineering
Bridgeton, NJ

"We searched for decades for a cost-effective option for septic replacement. We found a solution with Airvac vacuum sewers."



Donald Eckler, P.E.
President
Eckler Engineering, Inc.
Coral Springs, FL

"Airvac's involvement from preliminary design through system start-up was integral in making this 'difficult to sewer' area a success."



Joe Musgrave
Superintendent Field Operations
Kirk Brothers Company, Inc.
Alvada, OH

"Field conditions constantly change and Airvac's experience and advice allows my crews to make field adjustments in a matter of minutes."



Marshall Read
Wastewater Collection
Division Crew Chief
Ocean Shores, WA

"In flatland conditions like we have, with a high groundwater table, vacuum sewers are by far the best alternative of all sewer systems. Maintenance on vacuum sewers is very easy, even after 20 years."

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