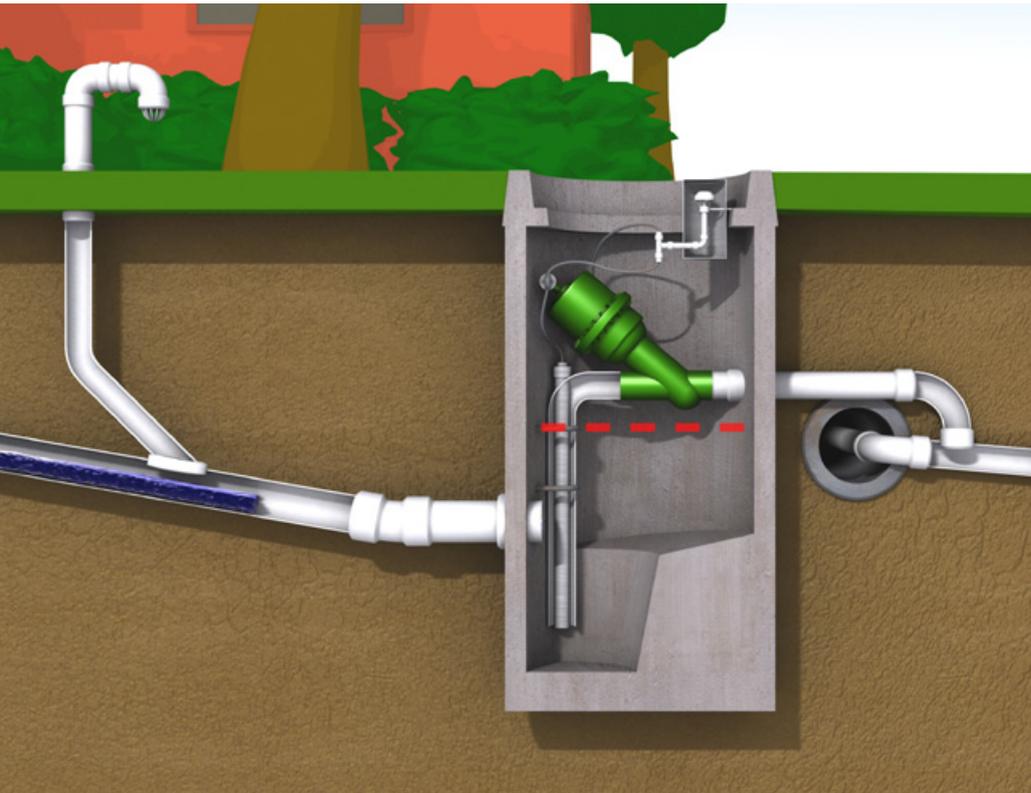


# Flovac Vacuum Sewer Systems



## Applications

Vacuum Systems are ideal for sewage reticulation systems where infiltration is a concern, flat areas with a high water table or areas with difficult ground conditions.

## Features

- ▶ Shallow trenching
- ▶ Lower cost installation
- ▶ Small diameter pipes
- ▶ Easy maintenance
- ▶ Environmentally friendly
- ▶ No infiltration, inflow or exfiltration
- ▶ Low initial capital costs
- ▶ No power required at the home

**Flovac vacuum systems are a cost-effective, environmentally friendly alternative to traditional gravity sewers and low pressure solutions, providing low maintenance, efficient and reliable sewage reticulation.**

Vacuum systems utilise a central pump station that creates a vacuum in the shallow pipe network. A series of valve pits collects the sewage from multiple homes and this sewage is propelled to the central pump station where it is transported to the Wastewater Treatment Plant for treatment.

Vacuum sewer systems have been accepted in over 40 countries since the 1960's as a low cost environmentally friendly method of transferring wastewater from houses to treatment plants.

# Flovac Vacuum Sewer Systems

## How It Works

The shallow, small diameter vacuum sewer lines in a Flovac System are under a vacuum of -50kPa to -70kPa created by the vacuum pumps located at the vacuum pump station.

Sewage flows by gravity from homes into a collection sump. When 40 litres accumulates in the sump, the vacuum interface valve automatically opens and differential air pressure propels the sewage from the sump into the vacuum main. Sewage flows through the vacuum lines and into the collection tank at the vacuum station. Sewage pumps transfer the sewage from the collection tank to the wastewater treatment facility. There are no electrical connections required at the home. Power is necessary only at the vacuum station.

## Cost savings

A vacuum system almost always costs less to install than a gravity flow system because the vacuum system uses small pipe in shallow, narrow trenches, and there are no manholes. Once installed, it continues to save money because the system eliminates inflow and infiltration. This is even more important if you are charged by the litre when treatment is by others.

## State-of-the-art Technology

Vacuum sewer systems are used all over the world and their use has risen dramatically over the past ten years. Many now view vacuum as the system of choice because initial costs and on-going operating expenses are low.

The system requires no manholes and eliminates exposure of operators to raw sewage. With minimal disruption to the surrounding environment during installation, the technology is also starting to gain world wide recognition for its low carbon footprint.



**FLOVAC SYSTEMS** are ideal for flat, coastal developments.



**INSTALLATION** Shallow trenches ensure low installation costs.

## Design Expertise

Flovac are experts in solving difficult wastewater engineering problems in unique geographic areas or in environmentally sensitive areas. All Flovac Vacuum Systems are designed to meet Australian and New Zealand Standards. Flovac works closely with engineering consultants and water authorities to cater for individual site-specific needs.

## Maintenance

Extremely low breakdown, callout and maintenance costs have made Flovac systems the industry leader in the 'whole of life' cost for sewerage systems. The valves have been designed to be extremely robust and therefore come with an unprecedented 10 year warranty.

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