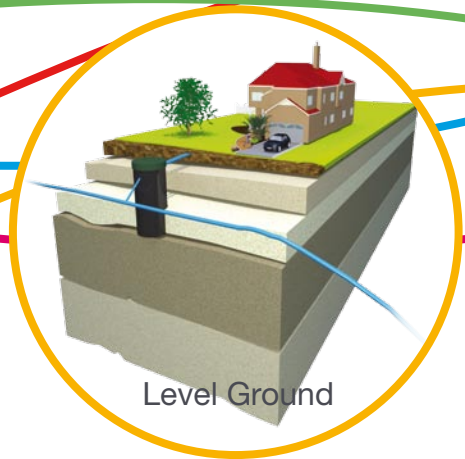


# PSS for Residential Developments





# Reduce your Sewer Costs and Increase your profits

## What is the Mono ECO Pressure Sewer System (PSS)?

The Mono ECO Sewer System allows the developer to sewer anywhere at up to half the cost of conventional gravity sewers.

Unlike Conventional sewers, The Mono ECO Sewer System defies gravity by following the contour of the land. They are quick to install, cost efficient and extremely reliable.

Residential and Industrial estates located in coastal areas with high water tables, areas of undulating terrain, isolated flatlands, rock, acid sulphate soils and sensitive areas can all be sewered effectively without the need for deep trenches, costly pump stations and large diameter pipes.

## When do you use Pressure Sewer?

- Hilly or undulating terrain
- Areas with significant underlying rock formations
- Standard flat sites or larger acreages
- Sites with high water table
- Areas remote from existing infrastructure
- Low density housing areas
- Area where avoiding infiltration and inflow is critical
- To avoid numerous & expensive intermediate pumping stations
- Cash flow sensitive developments and projects
- Acid sulphate soils

## Pressure Sewer System (PSS) - How does it work?

A Pressure Sewer System (PSS) consists of a network of small diameter pipes installed in shallow, narrow trenches (much like a water pipe network), and powered by grinder pumps installed in each property. Depending on local factors each unit will typically serve one property, with larger units available to serve multiple dwellings in strata type developments and larger commercial applications.

Homeowner operations of the system are no different from a typical gravity system, simply flush and forget.

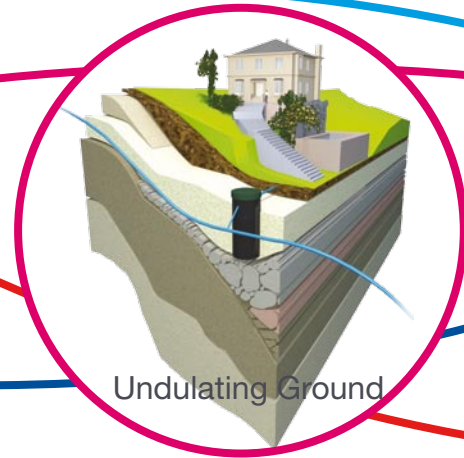
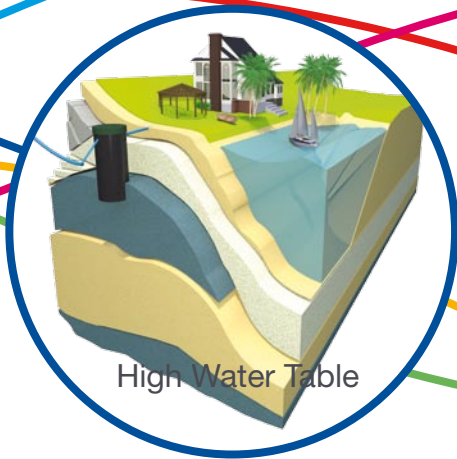
Each grinder pump will macerate the solids into a fine slurry and discharge into the small diameter pipes. The pressure created from the Mono pump will transport the fluid through sealed pipes typically up to 8 kilometres in distance to a treatment plant or another connecting sewer system. Longer pumping distances can be achieved by incorporating small booster pumps within the street mains

## How Pressure Sewer reduces the cost of developments

Incorporating a gravity sewer system into a large scale development usually requires all major pump stations and large size transfer mains to be installed during the first stage of the development.

The construction of a pressure sewer scheme can be broken down into 3 stages namely; Street Main Installation, Supply, and Installation of the unit.

- **Street Main Installation** - The Mono ECO (PSS) requires only small diameter pipes (starting at 50mm) to be installed within the road reserve, usually within a common trench along with other services. No expensive pump stations or manholes are required
- **Supply of the grinder pump** - The Mono pump is supplied only when construction of the residence is completed. Significant cash flow benefits can be achieved for the developer particularly over a staged development
- **Alternate Supply** - The Mono ECO (PSS) can provide developers with the option to pass on the cost of the supply of the unit to the homeowner directly
- **Installation of the unit** - The installation of the unit is paid for by the homeowner. Costs are comparable versus connection to a traditional gravity system.



## What are the advantages of using a Mono ECO Pressure Sewer System?

The Mono ECO range of pressure sewer packages offer many advantages in terms of construction time and methods as well as saving the developer up to 50% of the entire sewer infrastructure costs.

Mono ECO Pressure Sewer Systems offer developers the following benefits.

- **Cost Effective** - Mono (PSS) offers improved cash flow benefits throughout all staged developments
- **Versatility** - Enables sewer systems to be installed in virtually any terrain
- **Communication & Telemetry** – enables an invisible sewer system for homeowners. Our control panels are telemetry enabled and can be connected to almost any communications interface including internet and 3G. Operation of an entire network can be performed from a touch of a button
- **Eliminates large pump stations** - The pressure created from the Mono pump will transport the fluid through sealed pipes typically up to 8 kilometers in distance to a treatment plant or another connecting sewer system eliminating the need for large pump stations
- **Product excellence** - The complete Mono ECO PSS package is supplied fully assembled and tested both mechanically and hydraulically to ensure both the integrity of system components and the operational performance of the system
- **Australian designed, manufactured & supplied** - The Mono ECO pressure sewer system is the leader in pressure sewer solutions and is manufactured in Australia. As a result our products offer proven reliability as well as protecting your profit margins with costs not affected by changes in the value of the Australian dollar
- **Network & Design Flexibility** - Superior flow and pressure enables flexibility and further potential cost savings
- **Excellence Through Design** - Unique 'dry well chamber' for reduced installation costs as well as ongoing safety
- **Environmentally Friendly** - pressure sewer networks are completely sealed and eliminate any possibility for leakage of contaminated liquid into the environment. This makes them the ideal sewer choice for any coastal, environmentally sensitive or area with high water table.
- **Maintenance** - zero scheduled maintenance required
- **Aesthetics** - Low impact on gardens & surrounding environments

What can NOV Mono offer?

- the only Australian made pressure sewer system
- peace of mind - the only WSAA appraised pressure sewer system
- local supply and support which is flexible to meet your requirements
- operations & maintenance capabilities for the life of the system
- a strong heritage extending over 55 years in the waste water industry

Want to find out more?

Contact your local **Mono Pumps office**, email [ozsales@monopumps.com](mailto:ozsales@monopumps.com) or visit us at [www.monopumps.com](http://www.monopumps.com)

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