Pipe bursting adds to portfolio

NO-DIG down under BRISBANE BOOTH no. 21

Interflow's strong reputation may have been built on their range of pipe rehabilitation solutions, but the company has recognised the need to add pipe bursting to its portfolio.

A history with spirally wound pipe solutions

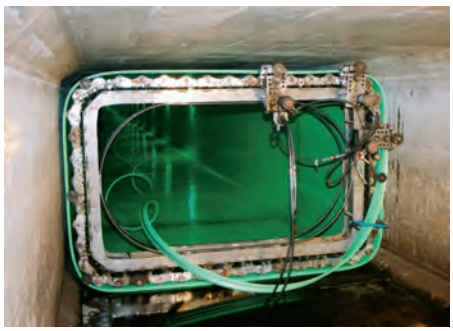
Interflow has a 20 year history with spirally wound pipe solutions for the rehabilitation of underground sewer and stormwater structures. The installation method involves feeding profiled strips through a winding machine, which forms the profile into a pipe. The pipe diameter is determined by the size of the winding machine, and by changing the size of the equipment any number of different diameters can be achieved. The profile strips are interlocked at its edges by the machinery.

Rotaloc – One of Interflow's innovative spirally wound systems.

Spirally wound systems have many benefits over other relining methods, including faster installation speed, reduced reliance on bypass pumping, smaller site footprint and a lower impact on the surrounding community and environment.

Interflow has continued to evolve its spiral wound portfolio with the recent development of a lining profile which can accommodate bends in pipe alignment. In addition, the company has gained access to the revolutionary SPR system, a product for use in non-circular cross sections.

The versatility of these systems enables pipes to be lined in a large number of sizes, shapes and configurations. It is estimated that over 95 per cent of all pipes are capable of being lined with these spiral wound systems.



SPR is able to renew non-circular pipes.

CIPP makes its appearance

In March 2010, Interflow launched its own CIPP product, Interline CIPP, to offer solutions in an increased number of circumstances. Over the past year, Interline CIPP has been used in more than 2 km of ovoid and other pipe renewal projects.

Installing Interflow's CIPP lining from an existing access chamber.

With the expansion of its spiral wound systems and the introduction of Interline CIPP, Interflow can now offer lining alternatives for the vast majority of situations.

But there are some pipe rehabilitation circumstances that neither spiral wound nor CIPP liners are able to carry out, such as upsizing or local collapses. It's for this reason that Interflow has acquired pipe bursting technology.

How pipe bursting fit in

Pipe bursting requires the excavation of a launch pit and a receiving pit. The hydraulic pipe pulling unit is positioned within the receiving pit and a steel cable is fed from the unit through the existing pipeline. The cable is then connected to a conical pipe bursting head at the launch pit. The pipe bursting head is attached to the new pipe and the head is winched from the launch pit towards the receiving pit.

Pipe bursting is able to increase capacity of undersized pipelines.

The hydraulic winch draws the bursting head through the existing pipe. As the bursting head progresses, the replacement pipe is advancing and displacing the old pipe. The process is complete once the bursting head and the attached new pipe reach the receiving pit.

Interflow's pipe bursting unit uses the technique known as rope bursting which is different to the more commonly used rod systems. One significant advantage

of this system is the increased worker safety provided as operators are not required to be within the pits during the pipe bursting.

Interflow is currently able to carry out pipe bursting operations for pipelines with diameters of 100–300 mm. The new pipe is able to be installed rapidly, however this is dependent on many factors such as subsoil conditions, the depth of pipeline and upsizing requirements.

Pipe bursting is an important pipe renewal option as it allows old pipelines with insufficient capacity to be increased. A pipeline may be considered undersized due to additional flow demand being placed on the network.

Why pipe bursting is so important

Pipe bursting may also be a viable option for situations where an existing pipeline has collapsed and large local excavation works are not considered feasible or cost-effective. Neither spirally wound pipe solutions nor CIPP methods are able to be used alone if sections of the pipe have collapsed.

Newly acquired pipe bursting unit enables Interflow to be the total solution provider for the pipe renewal market.

On many occasions, pipe bursting is a good alternative to large scale excavation works. Despite the fact that small pits are still required for the pipe bursting process, these pits are significantly smaller than the excavations associated with traditional civil pipe replacement projects.

It is by no means a new technology but Interflow has recognised there are situations which necessitate the use of pipe bursting. Many projects require different types of pipe rehabilitation. Assessing the most suitable method to undertake the work in advance can be challenging. With the expansion of its pipe renewal portfolio together with its vast expertise, Interflow is now able to fulfil complete pipe renewal packages and work closely with the asset owner to determine the most appropriate and optimal solution.

Interflow has already completed or secured pipe bursting projects in Victoria, New South Wales and Western Australia. The experience gained on these projects has enabled the company to enhance its standing as the one-stop shop for pipe renewal in the Australasian market.

For more information about Interflow's new pipe bursting capabilities, or to find out more about the full range of trenchless pipeline renewal services Interflow can provide, visit www.interflow.com.au