Trenchless Pipe Repair

Similar to all infrastructures, pipelines age over time, causing severe drainage problems if not addressed. To avoid the detrimental effects of a broken pipe line, continuous maintenance and inspection is necessary. You can hire the services of a reliable and cost-effective plumbing service to assist you with the maintenance, repair, or inspection of your pipes.

Depending on the type and intensity of damage sustained by your pipeline, coupled with the competency of the plumbing service you choose, a plethora of options can now be laid in front of you, to choose from. Many of the latest processes and technologies alleviate pipe line failures effectively, of which the most common is the trenchless pipe repair.

So, what is trenchless pipe lining? It is a restoration process of pipes through the use of no-dig technology, ensuring pipelines are back in action, in no time without burning a hole in your savings.

Putting aside conventional repairs, “INSERT COMPANY’S NAME” focuses on providing high-tech pipe restoration services assisted by trained plumbers and the latest machinery.

Benefits of Trenchless Repair

Increased Flow Capacity

Buildup of grease and dirt can cause the flow capacity of a pipe to decrease significantly, making it a major indicator of pipe deterioration. Additionally, cracks and random tree roots may break through the surface of the pipe, decreasing the flow further. Trenchless repair ensures the pipeline features smooth walls after the cleaning and installation process. Thus, by eliminating intrusive roots, clogs, and soil erosion, the flow of the sewer system improves greatly.

High Quality

Trenchless repairs do not entail the displacement of the previous pipe, especially if it is in bearable condition. The lining materials used for repairing pipe lines are manufactured resins and composites that are more durable, long lasting, and prevent leaks and blockages thanks to their tough nature.

Time, And Cost Effective

As pipes are not entirely taken out or put back in, the cost of service decreases. Additionally, the integration of high-tech systems when undertaking the job lowers the cost for us, which we can then pass on to you. With just two technicians, a few pieces of equipment and 4 – 5 days, the pipe can be fixed.

Since there is no digging and excavating involved, time is saved as are scarce resources such as labor and money.

Trenchless Repair Options

The trenchless repair doctrine offers different techniques that are used for pipe lining services while also being cost effective, environmentally friendly, and sturdy. If unsure which one is most suitable in your case, you can opt for a consultation or discuss the matter with our proficient technicians.

Cured-In-Place

The trenchless cured-in-place sewer repairing technique consists of a resin-saturated tube made of polyester. After an initial inspection, our technicians can evaluate whether the CIPP is the best method for your pipeline repair or not. This method ensures that the resin saturated tube is shot into the tube and inflated until it sticks to the original pipe's walls. It is then cured in place to form an internal lining devoid of cracks.

The process involves cleaning of the host pipe, through a process known as hydro jetting, and redirecting and removing roots growing near, around or through the pipe. A resin composite-lined tube is inflated after being inserted into the original pipe and is heated in place, to take on the solid structure of a pipe.

After installation, the material turns sturdy, giving the pipe line additional strength. However, this process is not ideal for excessively weakened pipes or those with gaping holes. This is because the previous pipe must have enough structural integrity to allow the inner lining to grip on to it.

Pipe Bursting

Pipe bursting method is used to break the existing pipe line while simultaneously pulling a new pipe into place. This method is mainly used for pipes that are excessively damaged, requiring complete pipe rehabilitation. When the new pipe is installed, you can rest assured that your infrastructure is now root intrusion-resistant.

The process requires physical access (also known as an entry point) to begin the repair. This requires the making of a two-by-four square-foot entrance at each end. Once the entry point has been made, the machine responsible for the insertion of the bursting head is set into place. Hydraulic power is to drag the bursting head, which is generally wider than the circumference of the pipe, through the pipe already there. The old pipe line breaks as the head is dragged through and the new pipe follows, setting itself in place.

Slip lining

As one of the oldest trenchless repair techniques, slip lining rehabilitates existing pipes by introducing a smaller 'carrier' pipe, into the main 'host' pipe. The most commonly used material for this method is high-density polyethylene.

The area between the two pipes is filled with a mixture of water, cement, and sand, allowing it to provide a set structural base and stop leakages. The process can be undertaken in two separate ways as per the requirements of our clients: continuous or segmental. To make sure the pipe has been set properly, our dedicated team of technicians set a schedule to ensure continuous filling, after intervals. The pipe can be inserted in different ways, depending on the material opted for and the length of the pipe.

Pull-In-Place

The pull-in-place pipe lining method is suitable for pipes with large holes and cracks. This method can cater to pipe repairs of 2-8” in diameter, which can be undertaken at 22, 45 and 90-degree angles. It is used to install horizontal liners and is not ideal for verticals stacks.

Moreover, the process requires less equipment during installation and is steamed into the pipe using hot temperatures. The liner, with epoxy-saturated material is then pulled into the place where required. When the new pipe is pulled in, it expands to the shape of the original, and fits with the host pipe. Two accessible points are needed for pulling the new pipe in place; one to feed the liner and the other one to pull the liner through. As a final step, the pipe is cured to stay in place until the liner dries.

Internal Pipe Coating

For people experiencing small cracks and cuts in their pipes, the internal pipe coating method provides an easy and cost-effective solution but should be undertaken by a trust-worthy and skilled professional plumbing service.

The process starts by cleaning and draining the pipes. High pressure washing of the pipes is undertaken with water at speeds of 3500 psi to 5000 psi to eliminate roots, grease, and mold or leftover water from within the pipeline. To seal the leaks and cracks, a thick epoxy coating is sprayed into the existing pipeline and left to dry.

Conclusion

Such no-dig pipe repair methods last our consumers years and years, ensuring clean and effective pipelines. “INSERT COMPANY’S NAME” provides unswerving plumbing solutions with the help of licensed plumbers. With a focus on customer service, and a 24/7 open service - COMPANY’S NAME understands that when it comes to providing a reliable service that gains market share over time, it is important to always see the situation from the client’s view.