

THE CASE FOR PIPE LINING

Advantages and benefits of in-pipe lining technology

By Amanda Strouse



The epoxy is blown through the pipe system to create an even coat, which will cure (aka: dry) and create a protective liner.



Technicians push the Nu Drain epoxy through the structural liner. Once completed, the liner can be inserted into a pipe line to create a protective liner.

They are used every time someone washes their hands, uses the restroom, disposes a substance in the laboratory, or cleans dishes in the cafeteria. Drains are used constantly in hospitals to exterminate all types of waste and chemicals.

The regular maintenance and cleaning of these crucial drain lines often go over-looked until there is a problem. Common drain pipe system failures include, but are not limited to: leaks, water stains, mold, slow drains, and backups. These failures occur due to aged pipes, corrosive waste, and debris buildup. Even routine cleaning of a hospital's drain systems cannot prevent inevitable pipe system problems, because plastic and metal pipes have a limited lifespan.

The traditional fix for pipe system aging and failure is a repipe; a replacement process that can typically cost excess dollars and time for facility maintenance staff. Walls, floors, and ceilings have to be torn apart, equipment needs to be moved, and pipe systems are nonfunctional. After, different crews need to put the walls, floors, and ceilings back together. In a medical setting, this process can be disruptive to normal operations.

An alternative to pipe repairs is a technology called in-place pipe lining; a solution that allows hospitals to install protective pipe liners in various pipe systems without having to dig up the pipes for access or replacement. In addition to being time-efficient, inexpensive, non-invasive, non-destructive, and eco-friendly, pipe lining greatly extends the useful life of the pipe system without causing interruption to patients or medical staff.

When the Sudbury Regional Hospital in Sudbury, Ontario, opened a new wing and laboratory a few years ago, it was designed with copper drain pipes. The hospital's management knew that corrosive chemicals that would be flushed down the drains would cause instantaneous problems, so a pipe lining solution was found.

More than half of a mile of 2"-wide copper drain pipes were lined in-place. This pipe lining process prevented the need for any destruction to the newly built hospital wing. The copper drain pipes were lined with a protective epoxy coating that inhibits

chemicals from touching the copper metal. A traditional repipe would have closed the new hospital wing for several more weeks or months. With pipe lining technology, however, the hospital was able to move ahead faster.

Earlier this year, a 7-story medical and commercial building in Ottawa, Ontario, which includes an established private Laser Vision Correction Centre, experienced restroom drain systems leaks and other failures. The building management knew that a long-term fix had to be found, but most importantly, a fix that would cause as little disruption as possible.

The building's 20-year-old copper drain pipes eroded, due to age. These pipes run behind marble walls, which the customer wanted to preserve. With innovative pipe lining technology, the pipe system was cleaned and lined in-place, without causing any destruction to the marble walls or bathrooms. The job was completed without any inconvenience to the building's tenants, visitors, or normal operations.

In-place pipe lining technology is highly versatile and can be applied to all sorts of pipe systems, including drinking water, HVAC, storm drains, dialysis drain pipes, electrical conduit and fire suppression systems. This inside infrastructure solution can provide priceless benefits to hospitals and medical facilities, such as saving lives because equipment does not need to be turned off and surgical rooms do not need to be closed down while the work is performed. ■

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