

OVERVIEW

Waterline Renewal Technologies (WRT) is a leading provider of engineered products used in the trenchless rehabilitation of wastewater/stormwater infrastructure for municipal, commercial, industrial and residential applications and provides a unique portfolio of products and services through its brands APM Permaform, LMK Technologies, Perma-Liner Industries, LightRay and Pipe Lining Supply.

We provide trenchless rehabilitation of degraded infrastructure through differentiated products, technologies and services, to prevent inflow and infiltration of sewer systems and potable water pipelines.

WRT offers unique industry products through its core brands - APM Permaform, LMK Technologies, Perma-Liner Industries, LightRay and Pipe Lining Supply - to revolutionize the wastewater industry. The brands' experience in designing,

patenting and manufacturing trenchless technology continues to rise while producing products that are cost-effective solutions to rehabilitating, without excavation, existing sewer systems and potable water pipelines.

With a combined eighty-five years of global industry experience through its core brands, WRT continues to transform the wastewater industry through intentional platform development, designand execution, while being one of the most comprehensive sources of education and information in the industry.

WRT's pioneering approach to trenchless rehabilitation is changing how municipal, commercial, industrial and residential sectors repair their water and wastewater infrastructure. Our goal is nothing short of completely revolutionizing the water industry to get water to where it is needed, when it is needed, and to get the right quality of water to satisfy the specific demand.











Waterline Renewal Technologies[™]





MARKETS SERVED



- Structurally repair pipes for 50+ years
- Reduce system infiltration by sealing cracks and joints both with thermoset resin that migrates and gasket sealing technology
- Sealing out root intrusion



COMMERCIAL/INDUSTRIAL

- Rehabilitate pipes with minimal shut down, minimal to no excavation of concrete or any type of flooring and without relocation of expensive production equipment
- Structurally repair pipes for 50+ years
- Eliminate exfiltration
- Trenchless less environmentally disruptive than dig and replace



Decrease sewage treatment costs

combined sewer overflows (CSOs)

dig and replace

Elimination of sanitary sewer overflows (SSOs) and

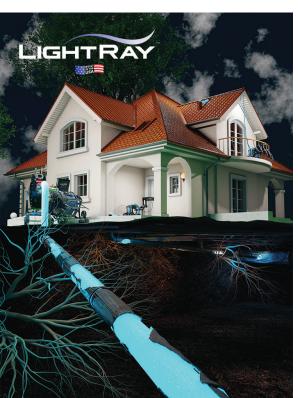
Trenchless - less environmentally disruptive than

- CIPP Trenchless solutions also eliminate the need to dig up or disturb landscaping or concrete structures such as sidewalks, driveways, curbs, gutters and streets
- Minimal restoration vs. dig and replace methods which can take several days, where restoration may never look the same











CONNECTION LINERS A one piece main-to-lateral CIPP connection liner that ensures a watertight system

LATERAL LINERS CIPP liners for lateral pipes composed of felt tubes impregnated with resin

ADDITIVES Liquid additives that prevent bacterial corrosion of concrete in highly corrosive sewer environments

SEALS Molded engineered hydrophilic gasket systems that provide verifiable non-leaking seals placed in strategic locations

LININGS Cementitious spray-on coatings for manholes, sanitary sewers, WWTPs, and stormwater pipes

MAINLINE LINERS CIPP liners for mainlines composed of felt tubes impregnated with resin

INSTALLATION EQUIPMENT Deep portfolio of equipment designed to effectively and efficiently rehabilitate sewer laterals,

meet the needs of installation crews in municipal and residential CIPP and spray-on coating applications

ASTM CERTIFICATIONS

The use of trenchless technology must also be accompanied by a commitment to sound science and adherence to established engineering standards. For the utility manager to achieve "as good as new pipe" performance from a trenchless CIPP rehabilitation project, the same standards of quality used for new construction must also be practiced and adhered to. ASTM, the international standards setting organization which is relied upon by utility owners and their engineers to develop specifications for trenchless technology, currently publishes several standards for trenchless CIPP sewer rehabilitation.

ASTM F2561 Standard Practice for Rehabilitation of a Service Lateral and Its Connection to the Main Using a One Piece Main and Lateral Cured-in-Place Liner (Connection Lining-T-Liner®)

ASTM F3240 Standard Practice for Installation of Seamless Molded Hydrophilic Gaskets (SMHG) for Long-Term Watertightness of Cured-in-Place Rehabilitation of Main and Lateral Pipelines (Insignia™ Gasket Sealing Technologies-End Seals, Hydro Hats, O-Rinas)

ASTM F2599 Standard Practice for The Sectional Repair of Damaged Pipe by Means of an Inverted Cured-In-Place Liner (Sectional Spot Repair)

ASTM F1216 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube (Lateral Lining)

ASTM F3097 Standard Practice for Installation of an Outside Sewer Service Cleanout through a Minimally Invasive Small Bore Vacuum Excavation (Cleanout System-VAC-A-TEE™)

ASTM F3033 Standard Practice for Installation of a Single-Sized, Cured-In-Place Liner Utilizing an Inflatable Bladder for Resurfacing Manhole Walls of Various Shapes and Sizes (Manholes-CIPMH)





