



starline®

# CIPL: A PROVEN MAIN RENEWAL TECHNIQUE

## INCREASES MAIN CAPACITY

As opposed to a point repair, lining is a proven main renewal technique that renews a main throughout its full length. It effectively seals service stubs and any areas of localized corrosion/graphitization. Not dependent on the existing condition of any joints which are always unknown, it provides thrust restraint to joints near offsets and/or where joints have deteriorated due to corrosion over time. The process is ideal for renewing long lengths of piping with multiple bends. Using internal structural reinforcement sleeves provides greatly expanded capabilities for renewing drip pots and traversing over abandoned large diameter takeoffs (tees, crosses, etc.). The process actually increases main capacity by reducing pressure drop and prevents escaping gas due to main breaks and/or third party damage.

## EFFECTIVE FOR NDE

Supplemented through the use of special non-destructive testing equipment, host pipe integrity evaluations can be conducted before and immediately after a main has been lined. The host pipe can be periodically monitored over specified time intervals to evaluate host pipe integrity by measuring wall loss due to corrosion, graphitization and cracking over time.

## BACKED BY \$15M RESEARCH

An unprecedented amount of extensive independent third party testing data (completed by NYSEARCH and co founded by US DOT PHMSA. [Research & Development Program: Technology Transfer, Demonstrations and Post-Mortem Testing of Cast Iron and Steel Pipe Lined with Cured-in-Place Pipe Liners \(dot.gov\)](https://www.researchanddevelopmentprogram.com/technology-transfer-demonstrations-and-post-mortem-testing-of-cast-iron-and-steel-pipe-lined-with-cured-in-place-pipe-liners)). This research conducted since the 1990s confirms an over 100 year old life. Subsequent to validating a 100 year + old life, lined in-service test specimens extracted from the ground were successfully subjected to a 90 psig pressure test. No competing technologies have successfully completed such a rigorous testing regiment over the 30 years this technology has been successfully utilized. CIPL is the only trenchless renewal technique that has a dedicated ASTM (F2207) for gas installations ensuring success and longevity.

## IDEAL FOR DIFFICULT TO ACCESS AREAS

Ideal applications include those facilities difficult to access highway crossings, RR crossings, exposed bridge crossings, river crossings, golf courses, heavily trafficked areas, newly paved areas. Also ideal for mains containing multiple bends, offsets and fittings. CIPL is effectively creating a new pipe, while increasing pipeline flow capacity and reducing pressure drop.

## INNOVATION QUALITY TRUST

Progressive Pipeline Management is a full service contractor and team of highly skilled infrastructure renewal specialists. The company has been committed to improving the safety and longevity of pipeline infrastructure since it started in 2002. PPM's primary expertise is in trenchless technologies to restore aging, damaged or leaking underground infrastructure, including pipelines of all types and sizes. PPM is the North American licensee in the US for the Starline Cured-in-Place-Lining (CIPL) technology for rehabilitating pressure pipelines of all types. The cutting-edge technology is backed by years of research and testing data, and proven to extend the life of a pipeline by more than 100 years.

