

# Insituform® CIPP

*Affordable, reliable and non-disruptive solutions for sewer pipe reconstruction*

WASTEWATER



**Insituform®**  
Global Pipeline Protection®

## Our trenchless solution

The Insituform® process can be used to rehabilitate sanitary sewers, storm sewers and force mains. Insituform® cured-in-place pipe (CIPP) is a jointless, seamless, pipe-within-a-pipe with the capability to rehabilitate pipes ranging in diameter from 6 to 96 inches.

## Insituform® CIPP addresses your top concerns:

**Infiltration reduction.** Water entering your sewer system through cracks, holes and joint failures can overload your treatment facilities, especially during wet weather. Insituform® CIPP can significantly reduce this infiltration. In dry climates, roots find the sewer system an attractive source of water and nutrients. Entering through pipe defects, roots create blockages and overflows. Insituform® CIPP contains your flow within the pipe while keeping external water and roots out.

**Structural integrity.** Insituform® CIPP restores structural integrity to your damaged sewer pipes. The design models used, independent test results and over 35 years of service all confirm that Insituform® CIPP is a structural product with a 100-year design life.

**Increased flow capacity.** Insituform® CIPP provides the least cross-sectional reduction of all methods used to rehabilitate pipes. There are no joints or seams that can separate over time and the smooth, jointless interior provides excellent abrasion resistance and typically improves flow capacity.

**Affordability.** The Insituform® CIPP process is usually less expensive than conventional dig and replace methods of sewer repair. When you consider the lost business revenues, traffic congestion and social costs associated with other methods, your savings are immeasurable.

**Installation flexibility.** Insituform offers flexibility in both the method of installation and the cure process. Insituform® CIPP can be inverted with either air or water, or pulled into place. The cure can be done with steam or hot water. All processes are consistent with nationally recognized standards and Insituform's own ISO-certified quality control program. Since each job is unique, we apply the most cost effective, technically optimal solution to solve your pipeline rehabilitation problem.

## Insituform® CIPP is the best choice for trenchless rehabilitation.

### Insituform superior processes

Since inventing CIPP over 40 years ago, Insituform has developed the highest quality manufacturing and installation systems in the trenchless industry.

As a vertically integrated company, we take responsibility for R&D, manufacturing, installation and service. Our systems are designed to produce consistency and high performance in our products and services.

### Manufacturing

Insituform's patented manufacturing techniques ensure that our tubes are constructed for optimal long-term performance. During the manufacturing process, each tube goes through 25 separate quality checks.

### Wet out

Insituform's patented vacuum impregnation process ensures that Insituform® CIPP achieves the required strength,

enables wet out of any length, diameter or thickness and allows a faster wet out in less space, saving on time and cost.

Insituform's wet out facilities utilize environmentally friendly methods and equipment. In fact, Insituform has been recognized by the United States' Environmental Protection Agency for efforts at its various wet out facilities to protect the environment.

### Installation

Every Insituform installation is completed using our own safety-certified crews who follow strict safety procedures and documented work practices in accordance with the company's ISO: 9000 certified quality program. Each crew is equipped with highly specialized equipment, backup resources and engineering support.

Insituform's advanced installation methods include air invert steam cure (AISC), which reduces energy usage on a job site by approximately 95 percent.

## The Insituform® CIPP Installation Process



### Step 1:

A resin-saturated, coated felt tube is inverted (shown) or pulled into a damaged pipe.



### Step 2:

Hot water or steam is used to cure the resin and form a tight-fitting, jointless and corrosion-resistant replacement pipe.



### Step 3:

Service laterals are restored internally with robotically controlled cutting devices and the rehabilitated pipe is inspected by closed-circuit TV.

### The Insituform® CIPP Technical Envelope

Diameter Range	6 in. – 96 in.
pH Range	.5 – 10.5
Effluent Temperature	up to 140° F
Pipe Condition — Fully Deteriorated	Yes
Pipe Condition — Partially Deteriorated	Yes
Bends	Yes
Offset Joints	Yes
Diameter Changes	Yes, without manhole access
Thickness Changes	Yes, without manhole access
Typical Shot Length	200 ft.– 1000 ft.
Host Pipe Shape	All Shapes
Host Pipe Material	All Materials

*This table refers to general purpose municipal sewer CIPP projects. Insituform can provide products that extend beyond these parameters through our engineering group. Please contact your local representative at 800-234-2992 for assistance with applications extending beyond this technical envelope.*



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Insituform Technologies, Inc.  
17988 Edison Avenue, St. Louis, MO 63005  
www.insituform.com 800-234-2992