

# IPLUS INFUSION®

*Insituform's next generation, trenchless sewer rehabilitation solutions*



## iPlus Infusion®: next generation CIPP

The iPlus Infusion® lining system is Insituform's next generation, small-diameter cured-in-place pipe (CIPP) solution. Enhancements to manufacturing and installation allow us to deliver this higher quality and less disruptive solution.

The iPlus Infusion® system is a seamless, jointless pipe-within-a-pipe that can be used to rehabilitate deteriorating small-diameter sanitary and storm sewers without digging or disruption. The product consistently meets or exceeds the physical properties set forth in ASTM F1743.

## Manufacturing and Installation

The iPlus Infusion® tube is assembled in an Insituform ISO 9001:2008 certified manufacturing facility employing the manufacturing processes and equipment used to construct traditional Insituform® CIPP products. This ensures the tubes are manufactured with the same attention to detail and high standards of quality our customers have come to expect from decades of conventional CIPP tube manufacturing.

A pull-in process is used to install the tube into the host pipe, reducing stress on the tube. It can be installed in pipelines with diameters from 6 to 12 inches and in lengths up to 750 feet.

The iPlus Infusion® installation process has the smallest jobsite footprint and the shortest installation cycle time of any of the Insituform® CIPP processes.



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## Environmental Benefits

CIPP is inherently environmentally friendly, but we have raised the bar by applying green engineering concepts to the design of the iPlus Infusion® system. An enhanced wetout or resin impregnation process helps us reduce waste.

Using steam instead of water to cure the resin reduces energy use by approximately 95 percent. Less equipment on the jobsite requires less energy and lower emissions.

## iPlus Infusion® enhances the proven Insituform® CIPP process and 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. The iPlus Infusion® system significantly reduces this infiltration.

### Structural Integrity

The iPlus Infusion® tube restores structural integrity to your damaged sewer pipes and has a design life of 100 years.

### Increased Flow Capacity

The smooth, jointless interior of our product improves flow capacity, despite the cross-sectional reduction. There are no joints or seams that can separate over time.

## iPlus Infusion® Benefits

- Steam cure uses less water, virtually eliminating the discharge of process water into sewers
- Shorter installation cycle produces less disruption and minimizes service outages
- Coating on both sides protects the tube during installation and ensures a high-quality end product
- Reduced equipment results in a quieter, less disruptive job site and minimal traffic disruption
- Pull-in installation process reduces stress on the tube
- Pressurized wet out fully saturates tube providing optimal physical characteristics

## iPlus Infusion® Benefits



### Step 1:

The iPlus Infusion® tubes are wet out using a patented resin impregnation system that fully saturates the tube with thermosetting resin.



### Step 2:

The resin-saturated tube is pulled into a damaged pipe.



### Step 3:

Air is used to inflate the tube and steam is used to cure the resin forming a tight-fitting, jointless and corrosion-resistant replacement pipe.



### Step 4:

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

## The iPlus Infusion® Technical Envelope

The iPlus Infusion® Technical Envelope*	
Diameter range	6 in. – 12 in.
pH range	0.5 – 10.5
Effluent temperature	140° F
Pipe condition — fully deteriorated	Yes
Pipe condition — partially deteriorated	Yes
Bends	No
Offset joints	Yes
Maximum shot length	750 feet
Host pipe material	All (excludes truss pipe)



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Insituform Technologies, LLC  
 17988 Edison Avenue  
 St. Louis, MO 63005  
 800.234.2992  
 www.insituform.com