

## BURIED PIPE & CULVERT REPAIR PRODUCTS:

# StrongPIPE® Steel Composite Liner (SCL)



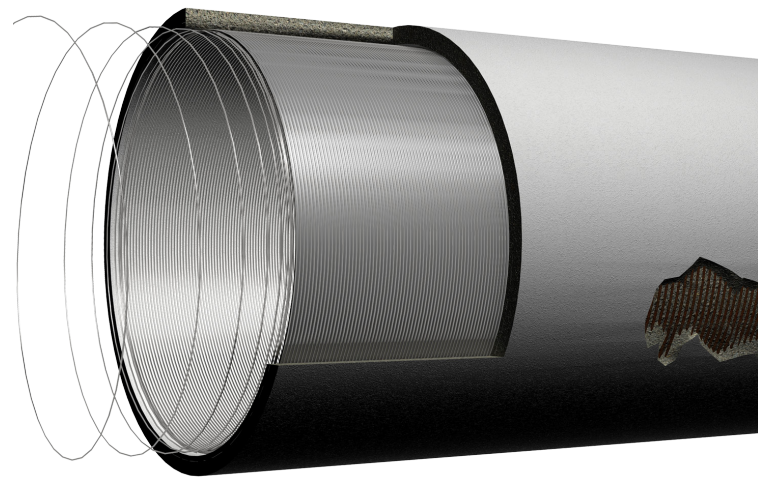
*StrongPIPE® SCL (Steel Composite Liner) is a patented trenchless solution for renewal of large diameter pipelines.*

Developed to provide an economical close-fit lining option for extended runs of large diameter pipe, this unique composite system is made up of layers of reinforcing steel wire and fiber-reinforced polymer (FRP) to provide fully structural repairs and upgrades to pipe segments.

The StrongPIPE® system is applicable to all types of pipelines and is installed internally for pipe diameters of 48 inches and larger.

StrongPIPE® SCL is a proprietary solution which combines the benefits of steel reinforcement with FRP to create a high value trenchless repair system for large diameter pipe. Custom designed for each application, StrongPIPE® SCL combines layers of reinforcing steel and FRP to create a fully structural strengthening system for restoration of damaged/weakened large diameter pressure pipe. StrongPIPE® SCL utilizes a continuously wound steel reinforcement that forms a composite liner inside the existing pipe.

StrongPIPE® SCL provides pipeline owners and consultants an innovative and economical solution to deliver a 50-year Class IV renewal for large-diameter pipelines.

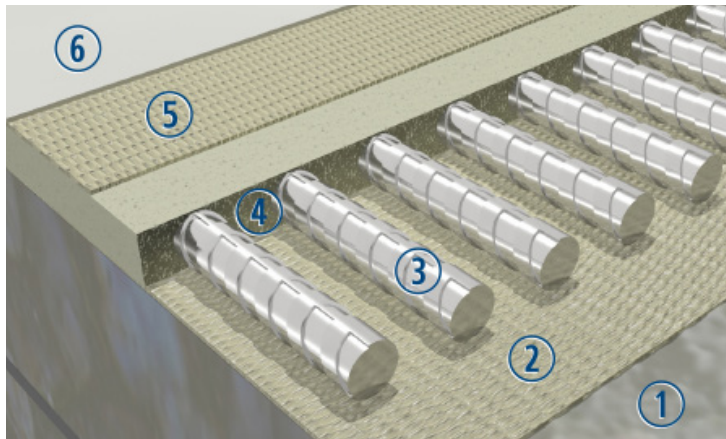


## StrongPIPE® SCL Features:

- AWWA Class IV fully structural repair system – custom designed to address all internal pressure and external loads
- Close-fit, low profile lining system (typically 3/8-inch to 1-inch)
- Lower installed cost for long runs compared to other rehabilitation alternatives
- Long term lifecycle extension of pipeline assets
- Extended reaches or segmental repairs of pipe
- Restores full functional capacity of distressed, degraded or damaged pipelines
- Upgrades the structural capacity of an existing pipe allowing increased operating pressure
- No excavation needed – access through standard manholes
- Minimal downtime and impact to operations



## Product System Details:



- ① Existing Pipe
- ② 1st Longitudinal Fiber Reinforced Polymer (FRP) Ply
- ③ Steel Tensile Reinforcement
- ④ Polymer or Concrete Encapsulation
- ⑤ 2nd Longitudinal FRP Ply
- ⑥ Durability Topcoat

## Product System Options:

With two system options available, StrongPIPE® SCL is customized to meet project needs, as determined by operating parameters, hydraulic performance, and construction requirements.

- **Polymer:** StrongPIPE® SCL – Polymer consists of a base layer of V-Wrap FRP with steel wire embedded in polymer materials finished with a top layer of V-Wrap FRP. The polymer build minimizes overall system thickness and impact on hydraulics performance.
- **Concrete:** StrongPIPE® SCL – Concrete consists of a base layer of V-Wrap FRP with steel wire embedded in concrete materials finished with a top layer of V-Wrap FRP. The concrete build minimizes the overall cost of the system for pipelines with more hydraulic flexibility.