

THE PIPELINE

IRONCLAD FACTS FROM DIPRA

Bonded Coatings vs Polyethylene Encasement

Polyethylene encasement of ductile iron pipe is the most effective and cost-efficient method of corrosion control. Compared to bonded coatings, polyethylene encasement offers exceptional value, ease of installation and convenience while providing an unequalled and reliable means of corrosion control against aggressive soils.

Advantages of using polyethylene encasement:

- It's effective and economical—and much easier to install than bonded coatings. The cost of both material and installation is only pennies per foot in most sizes.
- It works. It has been used for decades on hundreds of millions of feet of iron pipe with outstanding results. Hundreds of inspections of polyethylene-encased cast and ductile iron pipe, including installations from 40 to 50 years in service show that properly installed, polyethylene encasement provides effective, economical corrosion control.
- Installation is painless. Polyethylene encasement does not require special shipping, handling, or packaging. Installation occurs on site, so the risk of damage is minimal. The application of bonded coatings requires difficult surface preparations that can result in damage to the pipe surface.
- It doesn't accelerate corrosion. Bonded coatings result in the formation of concentration cells at "holidays," or damage to the coating, where corrosion rates are greater than would occur on uncoated pipe. No such concentration cells occur with polyethylene encasement.
- It's simple. Once installed, polyethylene encasement is a passive system that does not require ongoing maintenance or monitoring.
- It's versatile. While one has the option of providing cathodic protection for polyethylene encased ductile iron pipe, it is a requirement for pipes with bonded coatings.
- Polyethylene encasement is the only method of supplemental corrosion protection for ductile iron pipe that is standardized by the American Water Works Association.



For details about polyethylene encasement, ductile iron pipe, or the Ductile Iron Pipe Research Association visit www.IronForAmerica.com