Introducing the next generation of Polyethylene Encasement, V-Bio™.

Polyethylene Encasement (polywrap) was first used in 1958 and since that time has been used to protect millions of feet of gray and ductile iron pipe. It is the most economical and successful method of corrosion control for ductile iron pipe. Standard Polyethylene Encasement works by depleting the oxygen in the water under the wrap and over time the initial corrosion dissipates to a negligible corrosion rate. V-Bio contains both a corrosion inhibitor to eliminate this initial corrosion rate, and also contains a biocide to address any corrosion causing bacteria which may be present in uniquely severe corrosion environments. This innovative and unique method of corrosion control is covered by three patents.

V-Bio Polyethylene Encasement inhibits and stops the initial growth of corrosion cells caused by anaerobic bacteria under the polywrap with a proven antimicrobial biocide. The biocide is part of a 3 layer co-extruded linear low density polyethylene (LLDPE) film that features an inside surface that is infused with a proprietary blend of an anti-microbial biocide to mitigate microbiologically influenced corrosion (“MIC”) and a volatile corrosion inhibitor (“VCI”) to control galvanic corrosion. The biocide and corrosion inhibitor are incorporated into the inner layer of LLDPE film at the time of manufacture and are integral to the film. This process, together with the added protection offered by two additional outer layers of special LLDPE film, ensure long life of the protection system. With three types of corrosion protection fused into one, it is truly the next generation of Polyethylene Encasement.

V-Bio builds upon a proven method of corrosion control - Polyethylene Encasement - that has been protecting iron pipe from aggressive soils since it was first installed in 1958 making it a significant advancement in corrosion protection for ductile iron pipe.

V-Bio Polyethylene Encasement meets all requirements of the American National Standards Institute and the American Water Works Association (ANSI/AWWA C105/A21.5) standard for Polyethylene Encasement and also meets or exceeds the standards for ASTM A674 and ISO 8180.
Conventional Polyethylene Encasement film technology provides for corrosion control of ductile iron pipe systems by creating an environment where initial moisture will deoxygenate over time. As this deoxygenation occurs, the corrosion rates will migrate downward toward what is considered acceptable rates.

V-Bio revolutionizes Polyethylene Encasement film technology eliminating the initial corrosion rate normally associated with standard Polyethylene Encasement systems and provides for lower corrosion rates over time.