Put Some Armor On It

ArmorTek™ Advanced Coating System

Epoxy-coated cast and ductile iron valves are great. Robust. Strong. Can handle a variety of applications.

But when epoxy coating is breached, iron exposed to water corrodes and in some cases the water chemistry is just right for bacteria that can accelerate corrosion, known as microbial-induced corrosion (MIC).

Sounds like your valves need better defense. That’s why Watts has added ArmorTek technology to our ductile iron backflows. Our advanced technology provides three layers of protection that combine to create an effective barrier against corrosion.

Three-Pronged Corrosion Protection Solution

1: Anti-corrosion primer
An advanced primer contains an electrochemical corrosion inhibitor that will significantly slow the spread of corrosion should the metal substrate become exposed from wear or impact.

2: Microbial inhibitor
ArmorTek’s exclusive formulation prohibits the growth of the bacteria that cause MIC, further slowing the spread of corrosion and limiting the growth of tubercles that can clog or foul downstream equipment.

3: Robust topcoat
ArmorTek’s top layer is specially designed to bond to the primer below, providing a high strength barrier between the iron substrate and water.
Field-proven Protection

In an area where the water was tested to have low chlorine levels and significant MIC activity, a municipality was experiencing accelerated corrosion and failure of a valve that experienced low, infrequent flow. After only 14 months, a valve with standard epoxy coating was filled with corrosion indicative of MIC activity. The valve was swapped with one using ArmorTek technology, and after 16 months corrosion was extremely limited.

Lab-tested Results

We sent two valve covers to an independent lab, who scribed them with a grinder to expose the base iron to a VERY corrosive salt fog environment for 10,000 hours. Each valve was then evaluated to see how corrosion “creeped,” or how far to the sides of the scribe the corrosion had spread. The study concluded that the standard coating creeped at a rate over 14 times* that of the ArmorTek coating. They also determined that the ArmorTek coating had appr. 6x less surface rusting**.

*Utilizing ASTM D1654 Method 1 for evaluation of Degree of Corrosion
** Utilizing ASTM 610 evaluation for Degree of Rusting
Watts Family of Brands

Watts designs, manufactures, and sells an extensive line of flow control, water safety, water filtration & treatment, drainage, and PEX plumbing products.

The Watts family of companies provides a single source for solutions used to safely convey, conserve, and manage water.

Making Watts your single source for plumbing-related solutions will streamline your operations, save you money, and reduce the variety of repair parts needed for maintenance.