

Pipeline Solutions for Corrosive Conditions



Facing tough choices?

Shortened machine life?

*Adding products for crop
or soil management?*

- RELIABLE
- DURABLE
- PRECISE
- EASY-TO-USE
- RESPONSIVE



Unique Conditions Require Specific Solutions

Supply and Demand

In certain areas, water that was once known to be clean and non-corrosive is increasingly becoming more corrosive. Some producers are using less desirable sources - waste water, process water and corrosive water. Other producers are adding crop protection chemicals or soil ammendment products. Under these conditions, corrosion of standard galvanized steel can occur at varying rates.

Corrosive Factors

There are several characteristics that may lead to water being corrosive:

- Acidic (low pH)
- Alkaline (high pH)
- Corrosive chemicals (chlorides, sulfates, other salts)
- Soft water (low mineral content)
- Some chemical additives for crop management



Valley® Expertise

All materials except Valley® PolySpan® liners are susceptible to corrosion failure. Depending upon the water quality, corrosion failure can occur in a few years or it may take several decades. The industry standard galvanized pipe pioneered by Valmont is still acceptable for most applications but may not meet expectations under certain water conditions. Even in areas where galvanized products have been successful in the past, changes in water quality or management practices can lead to reduced life. **The only reliable method for determining water quality as it relates to the pipeline is to have your Valley dealer obtain a water sample for analysis and provide you with an estimate of your pipeline life.**



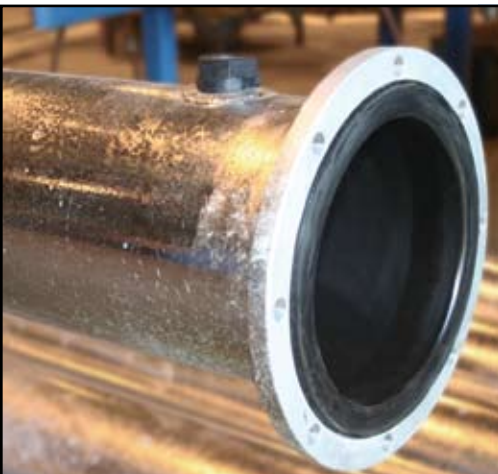
At Valmont, we are committed to help you find solutions, not just sell you equipment. Our application experts work with Valley dealers to identify the best solution for your needs. Choosing the correct Valley product will provide the best long-term value. We continuously study and test new products and processes, increasing our knowledge and improving our products.

Valley Choices

Type of Water	PolySpan®*	Stainless Steel	Weathering Steel	Cathodic Anode	Galvanized Steel
Soft Water (low in carbonate, bicarbonate, calcium and magnesium)	★★★★★	★★★	★★★	★	★
Salty Water (high in total dissolved solids and electroconductivity)	★★★★★	★★★★	★	★★★★	★
Acidic or Alkaline Water (pH less than 6.2 or higher than 8.5)	★★★★★	★★★			
High concentrations of chlorides and/or sulfates	★★★★★	★★★		★★	

* Patented

Pipeline Solutions



POLYSPAN®

PolySpan® - High Density Polyethylene (HDPE) Liner - Introduced by Valmont in 1992 to help resist the effects of acidic, alkaline, corrosive, and saline water. Utilizes a 3/4" outlet fitting, the strongest in the industry. No stainless steel used to connect spans, which can be corroded by chlorides and sulfates in the water.

Versatility - Available with Valley® pivots, towables, and linears (6 5/8" & 8 5/8" pipe sizes). Eight span length choices up to a maximum of 205'. Also available in model 6000 series spans.

INDUSTRY BEST! 20/10 Year Pipeline Corrosion Limited Warranty* - 20 year prorated pipeline corrosion warranty starting on delivery date with full pipeline replacement during the first 10 years or 30,000 hours (whichever occurs first). Does not include freight, labor, or hardware.



WEATHERING STEEL

Galvanized Weathering Steel - Extends pipeline life in soft water conditions only. Requires water analysis to determine suitability.

Versatility - Available with Valley pivots and corner machines (6 5/8" & 8 5/8" pipe sizes).

Galvanized Coating and Stainless Steel Couplers - Added corrosion protection for longer life.

20 Year Prorated Pipeline Corrosion Limited Warranty* - Does not include freight, labor, or hardware.



STAINLESS STEEL

304 Stainless Steel - Extends pipeline life for a limited range of corrosive conditions. (Not recommended for water with high chlorides.)

Versatility - Available with Valley pivots and towables (6 5/8" & 8 5/8" pipe sizes). Eight span length choices up to a maximum of 205'.

20/7 Year Pipeline Corrosion Limited Warranty* - 20 year prorated pipeline warranty starting on delivery date with complete pipeline replacement during the first seven years or 21,000 hours (whichever occurs first). Does not include freight, labor, or hardware.



CATHODIC ANODE

Sacrificial Magnesium Anode in Galvanized Pipeline - Extends pipeline life in salty water conditions.

Versatility - Available with all Valley equipment; pivots, towables, linears, and corners. Anodes can be replaced.

Adaptable - Amount of protection (number of anodes) can be customized for your installation.

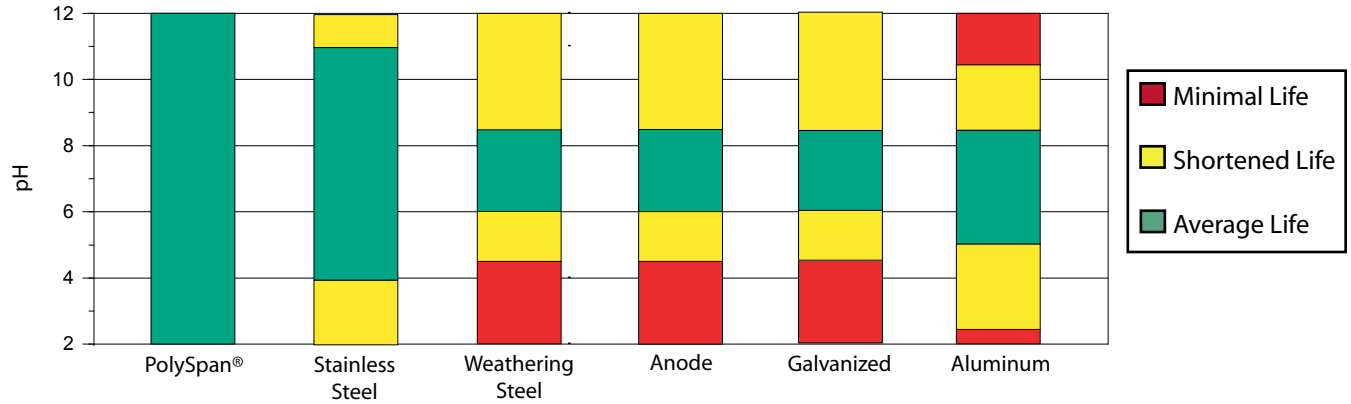
20 Year Prorated Pipeline Corrosion Limited Warranty* - Does not include freight, labor, or hardware.

*Warranty applies to USA & Canada only. Ask your Valley dealer for a copy of the Corrosion Warranty.

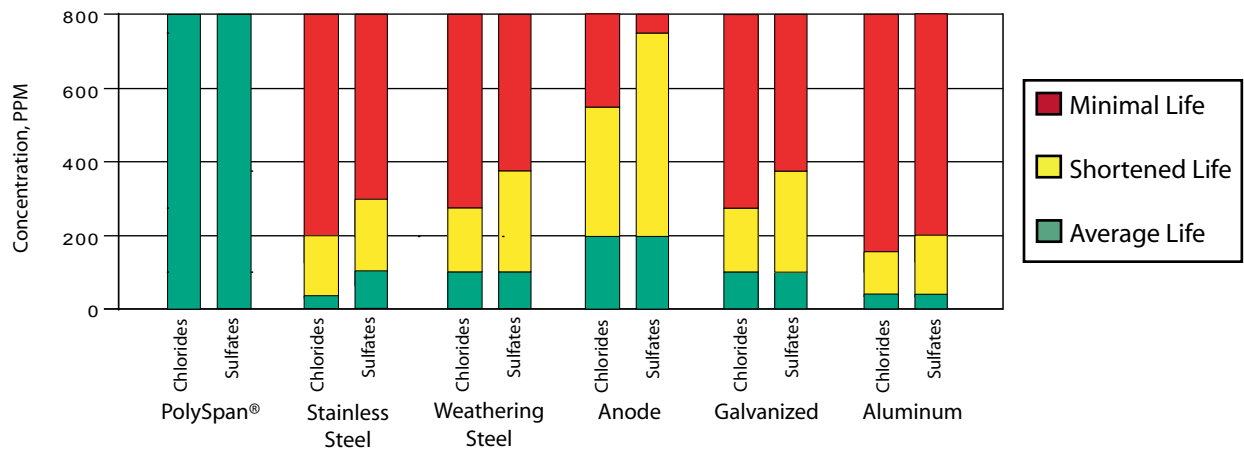
Choosing the Best Pipeline for Your Application

Material Selection Guidelines

pH Guidelines for Pipeline Life



Chloride & Sulfate Concentration Guidelines for Pipeline Life



pH, chlorides, and sulfates are not a complete indication of corrosion potential. Other corrosive elements may affect the life of all materials listed. **Your dealer will provide a water analysis to help determine the best solution for your particular situation.**



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See your local authorized Valley Dealer:

Valmont Irrigation has a policy of continuous product improvement and development. As a result, certain changes in standard equipment, options, price, etc., may have occurred after the publication of this brochure. Some photographs and specifications may not be identical to current production. Your local Valley dealer is your best source for up-to-date information. Valmont Irrigation reserves the right to change product design and specification at any time without incurring obligations.

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