

Valley[®] Corrosion Solutions

RELIABLE | DURABLE | PRECISE | ADVANCED | RESPONSIVE



VALLEY 

The Leader in Precision Irrigation.

Valley® PolySpan®

Corrosive Water

Groundwater quality is changing across the country and shortening the lifespan of center pivots by corroding pipelines. Water containing chlorides and sulfates can corrode galvanized pipe, and water with high or low pH levels can decrease pipe lifespan even more. In addition, many growers are using wastewater and process water for irrigating, and applying crop protection chemicals or soil amendment products through their pivots.

All these corrosive conditions are leading growers like you to investigate pipeline materials that are more resistant to corrosion than galvanized pipe.

Valley PolySpan works everywhere, all the time

Here at Valley®, we've tested many corrosion solutions, including aluminum, stainless steel, weathering steel, and a variety of paints, linings, and other coatings. From that research, we know that Valley PolySpan® is the best corrosion solution for any water condition.

PolySpan resists corrosive elements in irrigation water. There's no limit on pH, sulfates, chlorides, softness, saltiness, or farm chemicals. It's an excellent choice for growers who apply chemicals and fertilizers through irrigation water. And unlike other so-called corrosion-resistant pipe, PolySpan is an inert material, so you don't have to worry if those chemicals are harming your pipeline.

Valley is so confident in PolySpan's performance that we offer a 20-year, pro-rated corrosion warranty with full replacement for the first 10 years or 30,000 hours (whichever occurs first).*

PolySpan is the best investment you can make for your farm and your future.

If you're not sure what chemicals are in your irrigation water, contact your local Valley dealer for a FREE water sample test!

*Warranty applies in USA and Canada only. Does not include freight, labor, or hardware. Ask your Valley dealer for a copy of the Corrosion Warranty.



SCAN



to watch a video about how PolySpan can increase the life of your machine

What is PolySpan?

PolySpan starts with a steel pipe that is welded and hot-dip galvanized. Then our High Density Polyethylene (HDPE) liner is installed into the pipe. The ends are hot-formed onto the flange and through small retention holes in the flange to create a highly-durable HDPE pipe gasket that also locks the liner into the pipe. Finally, self-locking, glass-reinforced nylon couplers are installed by skilled Valley technicians. Since 2005, PolySpan has been manufactured in Valley, Nebraska, USA, at the same factory where we make the Valley gearbox.



Benefits to you:

- Polyspan is an inert material, making it ideal for chemigation, fertigation, and corrosive water
- No leaking – wide-gasket, self-locking couplers ensure a water-tight seal
- Long-lasting – the first machine, installed in Utah in 1992, is still operating
- All structural components – from pivot pipe to last pipe – are lined and poly protected
- Not affected by abrasion from sand or sediment in irrigation water
- Highly resistant to sunlight and humidity
- Same weight as a galvanized span when filled with water

Available on Valley pivots, towables, and linears:

- 7000 and 8000 series machines
- Span lengths ranging from 115' to the industry-leading 225'
- 6 5/8" and 8 5/8" pipe to accommodate a range of machine lengths and flow rates
- Compatible with Valley Precision Corner® and Valley Bender30™, so you can maximize your irrigated acres, even if you have corrosive water
- Re-piping available for older Valley 8000, 7000, and 6000 series machines. Re-piped machines backed by the same industry-leading warranty as new PolySpan machines.

Choose the Best Pipeline for Your Application

When water quality changes, we've seen galvanized, weathering steel, aluminum, and even stainless pipe corrode. PolySpan is completely resistant to these changes and protects the significant investment you're making in an irrigation machine.

Other so-called corrosion resistant pipelines are sensitive to a number of corrosive elements commonly found in irrigation water. More importantly, some combinations of these elements will result in more accelerated corrosion rates.

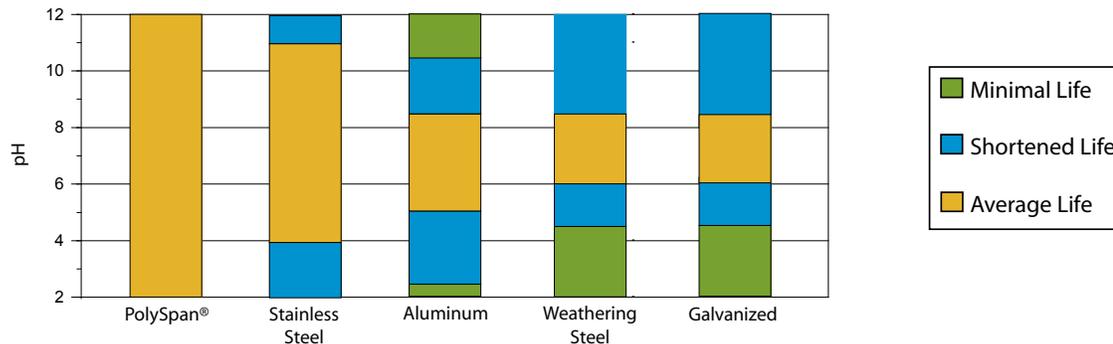
Weathering steel is only slightly more corrosion resistant in irrigation applications than plain carbon steel. It is sensitive to humid subtropical climates where the protective patina may never stabilize so it continues to corrode. Painting reduces the corrosion resistance of weathering steel as well. Even the smallest defect in the paint is an opportunity for corrosion failure.

Stainless steel is sensitive to levels of chlorides above 40 ppm and sulfates greater than 100 ppm. It is also sensitive to highly basic or acidic water (pH greater than 11 or less than 4). It is not recommended for soft water and can be incompatible with certain farm chemicals such as soil remediation products.

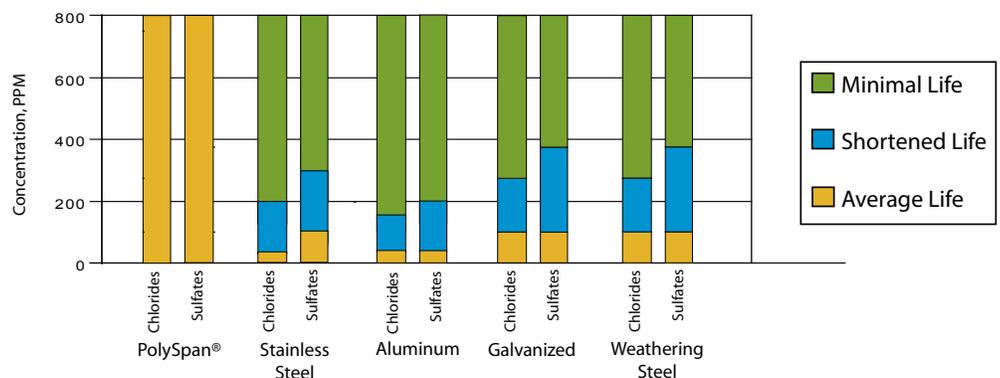
Aluminum is sensitive to levels of chlorides and sulfates above 50 ppm, pH greater than 8.2 or less than 5.0, crop production chemicals containing high levels of sulfur or copper, fertigation products such as phosphoric acid, and soil remediation products using sulfuric acid.

Only PolySpan is resistant to all of these factors, as you can see in the charts below.

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.



See your local authorized Valley dealer for complete details.



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 specifications at any time without incurring obligations.