



# Valmont Irrigation Machines

Worldwide



The hundreds of thousands of Valmont Irrigation center pivots and linear machines sold over the past 40 years are a testament to the superior, durable corrosion protection offered by utilizing hot-dip galvanized steel. Now considered the industry standard for protecting pivot irrigation equipment against corrosion, galvanized steel protects these vital farming tools from costly and damaging corrosion caused by constant exposure to every climate condition on the planet – beating sun, falling rain, freezing snow – as well as the water moored within.

In generations past, approximately 3,000 Valmont Irrigation machines were painted for corrosion protection. As farmers began to demand a longer lasting corrosion protection solution for their corroding irrigation pipes, Valmont turned to hot-dip galvanized steel in 1968 to protect their pipelines from the damaging effects of rust. The maintenance-free durability of the new piping quickly taught the farmers the value of hot-dip galvanized steel, and they desired more parts to be galvanized to receive the same protection.

The surrounding infrastructure quickly followed. Since 1990, all rims that drive the unit have been galvanized, and, most recently, the final component – the swivel – is being galvanized to bring it to standard with the other galvanized parts. In forty years, over 175,000 dependable, durable, hot-dip galvanized irrigation systems have sold across the globe. Many of these machines, some forty years old, continue to operate corrosion free, untouched as the day they were put afield.

To demonstrate the lifetime achievement of the hot-dip galvanized coating on these structures, a Valley center pivot, sold in April of 1977 was inspected. The table below shows the zinc coating thickness after 33 years. This puts into perspective the even, continued protection provided by hot-dip galvanized steel. The decades-old machine is still operational, and the piping, supporting structure, and unit legs are in excellent condition. No area of galvanized steel has been compromised, and there is no evidence of corrosion. The zinc patina on the piece is mature and

intact, and has taken on the familiar, attractive matte gray appearance. This natural zinc patina blends in with the rural environment and is considered to benefit the landscape by many end customers.

The utilization of the 100% natural zinc coating also reflects the earth-friendly intent of the irrigation machine. What better way to take advantage of zinc's sustainable characteristics than with a product designed to maximize food production while conserving water? The zinc in hot-dip galvanized steel is infinitely recyclable and essential for life, while the unbeatable corrosion protection means no energy or materials will be wasted on routine touch-up and maintenance required by other corrosion protection systems.

Standing up to decades of abuse from constant exposure to nature's fury and the very water coursing throughout the machine, Valley irrigation equipment is built and galvanized to withstand the toughest circumstances. The unparalleled corrosion protection of hot-dip galvanized steel will allow this equipment and its counterparts to keep operating, uninterrupted and corrosion-free for another 30+ years for farmers the world over.

Valmont Irrigation System Produced 1977, Tested 2009:						
Sample Area	Readings (mils)					Average
Pipeline	3.9	4.1	3.9	4.0	3.9	3.9
Angle Supports	3.5	3.3	3.4	3.3	3.2	3.3
Leg Supports	3.5	3.5	3.2	3.9	3.9	3.5

**Galvanizer**  
Valmont Coatings -Valley Galvanizing

**Specifier**  
Valmont Industries, Inc.

**Additional**  
Michelle Stolte  
Keith Knudsen  
Richard Berkland

lifetime achievement