

THE ADVANTAGES OF ZINC METALLIZING

In A Word . . . Longevity

Proven Long Term Protection: A sealed, zinc metallized coating can realistically provide 30 years of corrosion protection in rural environments and 15 to 25 years in urban and coastal areas. Severe atmospheric conditions will not rust steel protected by a zinc metallized coating.

Versatility: Coating thickness can be varied. This is important because the protection achieved is directly proportional to the weight of a zinc metallized coating. Severe atmospheric conditions and longer life require an increased coating thickness. The thickness can also vary on different areas of the same structure, such as troublesome flange edges, giving needed extra protection. Applied zinc metallized coatings will not mudcrack, run or sag when applied over .006" thickness.

No Drying/Curing Time: A zinc metallized coating bonds instantly allowing for immediate application of wash primers and sealers. Because there is no drying time, additional labor costs, lengthy setup times and constant maintenance scaffolding costs are reduced or eliminated.

No Size Limitation: Whether the job is in your shop or in the field, there is no limit to the size of the structure to be coated with Zinc.

No Warpage: The surface being coated remains at ambient temperatures. Therefore, a zinc metallized coating does not distort the shape of the steel, nor will it affect its metallurgical structure. Weld embrittlement, overtempering and steel strength losses are not a concern when metallizing with zinc.

No VOC's: In today's concerns for the environment, the coating industry is interested in protecting the infrastructure without damaging the environment around it. A zinc metallized coating is inorganic and does not contain volatile compounds that can harm the environment.

THE LIFE EXPECTANCY OF A ZINC METALLIZED COATING

The corrosion protection of zinc metallizing is documented in a report sponsored by the American Welding Society Subcommittee on Metallizing. This report summarizes the periodic evaluations of more than 4,000 test panels which were exposed to varied environments, at eight different test sites during a 19 year period. The most significant conclusion was "Many of the zinc metallized coatings looked as though they would continue to succeed for another 19 years".

Type of environment, proper surface preparation, thickness of coating, use of sealers and/or topcoat, and the nature of the structure are equally important elements when considering Metallizing. Each job must be treated individually, as requirements for protection may differ.

There are hundreds of case histories relating to the longevity of zinc metallized coatings on steel. Bridge structures, interiors of potable water tanks, pipelines and dam locks show, in some cases, over 30 years of service without major repair.

The British Standards Institute sites sealed zinc metallized coatings to last 20 years or more in salt splash zones, the harshest environment for coating systems.