

Hot-Dip Galvanized Steel



Providing Maintenance-Free Corrosion Protection of equipment for generations

- **No maintenance costs**
- **Aesthetically pleasing**, consistent appearance for decades
- **100% recyclability** at end-of service life
- **Safe** structural steel, chassis, and deckings
- **Sustainable** lasting 25 years

What is Hot-Dip Galvanizing

A coating of naturally occurring zinc metallurgically bonded to steel that protects steel from corrosion for decades with no maintenance.

How Does it Work?

Zinc is not sensitive to corrosion: it protects itself by developing a patina that gives it an exceptional long life span (40 years in an aggressive urban environment to 100 years in a protected rural environment). It requires no maintenance, no necessity to have a coating or varnish. Zinc continues to develop protective layer throughout its life and will self-repair imperfections and scratches.

Protecting steel bridges, sign structures, guide rail, light poles, water/wastewater facilities, power generation stations, distribution poles, and ROLFO transport equipment.

Benefits of Utilizing Galvanized Steel

Durable

Hot-dip galvanized steel delivers maintenance-free corrosion protection for 75-100 years, in even the most corrosive atmospheres (industrial—plant emissions, urban – vehicle exhaust, northern – road salts). The zinc coating is actually harder than the steel it is protecting, and will retain the consistent matte gray finish throughout its service life.

Economical

Because galvanizing requires no maintenance, the initial cost of the transporter is the final cost. Therefore, hot-dip galvanized steel is the lowest life-cycle cost corrosion protection system available, far more economical than painted steel, which requires frequent and costly maintenance according to a predictable cycle.

Recyclable

Zinc and steel are 100% recyclable, without the loss of chemical or physical properties. Galvanized steel has been used to protect automobile and truck body panels for decades, because it protects the consumer's investment and there is no end-of-life impact to the environment. A natural primary material, zinc can be recycled indefinitely which benefits all the players in the chain.

Safe

Hot-dip galvanizing makes steel structures safer. The galvanizing process applies zinc on difficult to reach corners and the inside of poles, box sections, chassis beams, pillar corners; places where corrosion usually begins. Zinc is a natural metal (27th the most abundant in the Earth's crust), safe, healthy, and a necessary part of our diet, with a recommended daily allowance (RDA) of 15 mg.

Sustainable

Because galvanized steel structures last for decades with no maintenance, the energy input over the life of the Transporter of hot-dip galvanized steel is far less than half of painted steel. There is no energy, material, or labor input for maintenance throughout the project lifetime. The CO2 emission of hot-dip galvanized steel is one-third, and the SO2 output is less than half of painted steel (VTT Building & Transport Study).

Available

The factory controlled galvanized process is independent of weather. Steel can be coated with zinc 24/7/365.