

About Galvannealed Steel

Galvannealed steel is coated with a Zinc-Iron Alloy by a process known in the metallurgical technology, as the Hot-Dip Process. This process consists of passing cold reduced sheet steel in coil form continuously through a pot of molten zinc. As the steel leaves the pot, the amount of coating allowed to remain on the sheet is controlled by coating rolls which are used to establish minimum coating weights in accordance to ASTM Designation A525/A525M. The zinc coating is what protects the steel against corrosion. This protection acts in two ways. The zinc acts as a shield between the base steel and the atmosphere and when the base steel is exposed, such as at sheared or blanked edges, the zinc acts as a galvanic protector, sacrificing itself in the presence of corrosive elements. The coating structure consists of a layer of zinc superimposed on a thin alloys layer consisting of both iron and zinc. The solidification of the zinc layer results from crystallization of the bath metal.



Galvannealed products are increasingly in demand. They are found in a wide variety of applications requiring long-term maintenance-free corrosion protection, such as, bridges, pulp and paper mills, recreation centers, utility industries, oil refineries and petrochemical industries, automobile industry, and for miscellaneous highway uses, such as guard rails, lights, signs and fencing. Why in so many applications? Because galvannealed products offer the most economical corrosion protection for steel.

Why you should specify Galvannealed Steel

- ▶ Purchasing cost of sheet metal is competitive.
- ▶ Reduced preparation and painting costs.
- ▶ Provides considerably longer life-expectancy.
- ▶ Delivers excellent resistance to corrosive elements.
- ▶ Offers superb paint adhesion characteristics.
- ▶ Requires minimal maintenance.

Galvannealed, when used without further treatment, offers the most economical corrosion protection for steel in many environments. The coating left on the steel is dull gray in color. It has no spangle and, after proper cleaning, is well suited for painting. The zinc coating makes an excellent base on which to develop a paint system.