



Article published on June 29th 2012 | [Business](#)

The manufacturing process of hot dip galvanizing may vary slightly from plant to plant. The fundamental steps in the galvanizing process in nutshell can be described as under:

The steel articles are dipped into a hot alkaline solution or caustic soda solution to remove dirt, oil, grease, shop oil, and soluble markings for degreasing and caustic cleaning. The article is dipped in rinsing tank containing clean water for cleaning.

The article is then preserved in pickling tank containing dilute solution of either hydrochloric or sulfuric acid 10-12% for first pickling.

Second pickling is performed in second pickling tank which contains dilute solution of either hydrochloric or sulfuric acid 10-32% to remove surface rust and mill scale to provide a chemically clean metallic surface. The same article is again washed in rinsing tank containing clean water.

Next step is Flux heating system where the steel is dipped in fluxing tank containing usually a zinc ammonium chloride solution to remove oxides and to prevent oxidation prior to dipping into the bath of molten zinc. In the dry galvanizing process, the item is separately dipped in a liquid flux bath, removed, allowed to dry, and then galvanized. In the wet galvanizing process, the flux floats atop the molten zinc and the item passes through the flux immediately prior to galvanizing.

The article is immersed in a bath of molten zinc of 435 to 455 degree Celsius. During galvanizing, the zinc metallurgically bonds to the steel, creating a series of highly abrasion-resistant zinc-iron alloy layers, commonly topped by a layer of impact-resistant pure zinc. “”

After the steel is withdrawn from the galvanizing bath, excess zinc is removed by draining, vibrating. The galvanized item is then air-cooled or quenched in liquid.

The most important part of hot dip galvanizing shows the value of experience is flux heating system. An experienced and noted hot dip galvanizing consultant in Gujarat Prashant Galvanizers supply Online Flux Filter System that eliminates production downtime. It eliminates or reduces iron content to a minimum in the flux solution which reduces Dross formation in zinc bath. Using Flux Heating system and Online Flux Filter system, zinc consumption is reduced anywhere from 1-2 kg per metric.

The material is due for dispatch after "Passivation" and inspection formalities. Coating-thickness and surface-condition inspections complete the process of hot dip galvanizing.

Article Source:

<http://www.articleside.com/business-articles/manufacturing-process-of-hot-dip-galvanizing.htm> - [Article Side](#)

[Prashant Galvanizers](#) - About Author:

Prashant Galvanizer, India's Leading Consultant, Supplier of Hot Dip Galvanizing. We supply Online Flux Filter System that eliminates production downtime. It eliminates or reduces iron content to a minimum in the flux solution which reduces Dross formation in Zinc bath. <http://galvanizers.co.in>

Article Keywords:

Hot Dip Galvanizing, Flux heating system, galvanizers, galvanizer consultant, galvanizer companies, online flux system, hot dip galvanizing

You can find more [free articles](#) on [Article Side](#). Sign up today and share your knowledge to the community! It is completely FREE!