

Galvanisation Isn't A Luxury, It is A Necessity: Arun Misra



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Better steel means more efficiency and improved safety. However, the use of galvanised steel in Indian car manufacturing continues to lag behind global practices, despite its proven ability to reduce corrosion and lower lifetime maintenance costs. Arun Misra, Chief Executive Officer of [Hindustan Zinc](https://www.hindustanzinc.com), outlines why galvanisation is yet to become widespread in Indian passenger vehicles, and how the company is working towards changing that narrative.

Why has galvanised steel adoption been slow in Indian passenger vehicles?

The Indian market has historically downplayed the importance of corrosion protection in domestically sold vehicles. The same cars made for export markets get better corrosion protection because those countries enforce stringent durability and safety regulations. In India, cost sensitivity and low consumer awareness have meant that long-term structural integrity is often compromised to keep prices competitive.

This is a false economy; corrosion costs India over \$100 billion annually, which is nearly 5% of the GDP and this will be the long-term implications of skipping corrosion protection. In automotive terms this translates to reduced vehicle lifespan, safety risks, and increased maintenance expenses. Hindustan Zinc is working to reverse this trend by engaging with manufacturers and consumers to champion galvanisation as a national priority.

What are the real-world safety implications of not using galvanised steel?

The risks are more than just cosmetic. When steel rusts, it weakens. And since steel constitutes over 70% of a vehicle's structure, corrosion can compromise critical components, like the chassis, suspension mounts, or even seat belt anchor points.

To demonstrate this, [Hindustan Zinc](#) has conducted real-life corrosion testing at its Udaipur facility. The difference between galvanised and non-galvanised models is visually striking. One holds up, the other degrades. For the Indian car buyer, this translates into more than just higher maintenance costs; it raises serious questions about passenger safety and long-term usability.

Is galvanisation expensive or complex to implement in local production?

There is a widespread myth that galvanisation significantly raises production costs, but the truth is it adds less than 0.1% to a vehicle's total cost. Compared to the long-term savings on repairs, warranty claims, and vehicle downtime, the cost-benefit ratio strongly favours galvanisation.

In global markets such as Japan, the EU, and the US, galvanised steel usage is well above 90%. India can, and must, follow suit. It's not a question of capability. It's a question of commitment. The manufacturing process already exists here; it's about choosing to implement it at scale.

What role do consumers play in driving this transition?

Consumer pressure could be the tipping point. Today's buyers are more informed than ever, and many are demanding anti-perforation warranties. These warranties, common in export vehicles, are only viable when galvanised steel is used.

Public engagement is critical; once buyers realise the long-term savings and safety benefits, they will demand better. That will make manufacturers respond, even before regulations catch up.

Should India regulate corrosion protection in vehicles?

Absolutely; countries like Japan and Australia have slashed corrosion-related GDP losses to below 2% through regulatory interventions. India needs to formalise corrosion protection standards in automotive manufacturing. This would not just protect consumers, but also align the industry with global norms.

Galvanisation has cross-cutting benefits: reduced maintenance, longer vehicle life, improved crashworthiness, and stronger resale value. It's the kind of industrial policy that pays for itself many times over.

For India to move forward in automotive safety and manufacturing resilience, steel protection needs to become a built-in standard, just as it is across much of the developed world. Hindustan Zinc is making a strong case, both technically and economically.