

ArmorGalv®

Thermal diffusion galvanizing

What is ArmorGalv®?

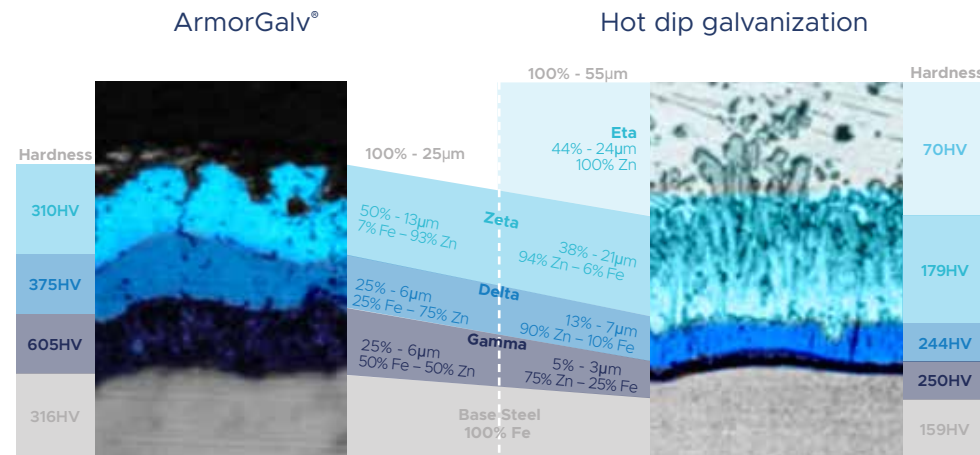
ArmorGalv® capitalizes on the latest technology in order to enhance the Thermal Diffusion Galvanizing (TDG) process. It consists of applying a uniform zinc iron alloy coating using vapor diffusion process combined with patented additives. That gives AG coated products a **longer life in corrosive environments** than hot dip galvanized products (HDG).

How it works?

Using Zinc powder and heat, ArmorGalv® forms a corrosion-resistant, zinc-iron alloy layer on the surface of steel or iron. Then patented top coats are added to create the ArmorGalv® barrier. AG works with any type of steel, cast or forged, as well as stainless steel, and so much more. This layer is not simply a coating, it molecularly transforms the steel surface allowing for superior corrosion protection. Internal thread and cavities are coated to give products complete protection from corrosion.

ArmorGalv® versus hot dip galvanization

Metallurgical cross sections compositions



The metallurgical composition of ArmorGalv® is 100% zinc iron alloy. The GAMMA layer which is 50% zinc, 50% iron alloy is the hardest and most important layer for corrosion protection. This Layer represents 20 to 30% of the total coating and allows for this critical layer to protect against corrosion resist and also maintaining strong resistance to any abrasion resistance and abuse in the field..

Certified coating



Our ArmorGalv® treatment guarantee, a corrosion protection performance up to 3000H in salt spray. The level of performance is similar or even better to 316 stainless steel.

Certified Process

- We are the 1st supplier of the utility industry in the US territory to use ArmorGalv® coating process and Thermal Diffusion Galvanizing
- We are licensed and engage with the most experienced TDG company into the world, Distek
- Our technology is compliant with national American ASTM A1059 & AG 3000 standard
- It is approved by utilities around the country.
- Low energy consuming process
- EPA Award winning for environmental waste reduction



Our Sicame offer

Aware of the issues faced by the utilities to maintain a longer service life, we are pleased to offer ArmorGalv®. **ArmorGalv® is the most effective alloy solution against corrosion and field abrasion while limiting the environmental footprint of the product.**

Benefits

Coating

- Uniform & consistent coating thickness
- Hardness properties
- Anti-galling properties
- Cost effective
- Durable
- Allows additional sealants & top coats

Performance

- Highly corrosion resistant even on extreme and salted exposure
- Extends life of product similar to stainless steel
- Better thread fit and thread corrosion performance
- Highly abrasion resistant
- No flaking, peeling or blistering
- Free from hydrogen embrittlement

Greener

- Product life extension
- Energy efficient process
- Near zero waste
- Greener supply chain
- No acids or harsh chemicals
- Non toxic vapor or gases release in the air
- No heavy metals used; replacement of cadmium, leads

Summary & coating processes

	Hot dip galvanization	ArmorGalv®	Stainless steel
Corrosion protection	+	+++	+++
Thickness consistency	+	+++	/
Thread reliability	-	+	+/-
Anti galling performance	+	+++	-
Strength	+	+	+
Abrasion resistance	-	+	+
Product life	+	+++	+++
Cost	\$	\$\$	\$\$\$



We are committed to offering you solutions for:

- Resilience of the utility network from undesirable effect of corrosion or abrasion

We can provide full equipment for

- Pole line hardwares
- Guying fittings
- Brackets
- Personalized solution
- Insulating strings
- Insulators end fittings