

Can my 'old' items be galvanized?

WHY GALVANIZE?

Hot dip galvanized coatings are applied to steel to improve the anti-corrosion performance of the steel to ensure that it lasts as long as possible with a minimum of maintenance

COATINGS DIFFER

Only hot-dip galvanizing gives a coating that can reach the 50 year life required of structural building products.

THICKNESS COUNTS

Compared to other zinc-rich coatings, hot-dipped galvanizing is:-

- THICKER
- HARDER
- FULLER

HOT-DIP GALVANIZED
PRODUCTS LAST
LONGER...



Old made new. All security mesh panels on lower level were re-galvanized and returned to service.

Steel that has previously been galvanized can be easily re-galvanized. If the base steel is still in good condition, the re-galvanizing will restore the item to as-new condition. Boat trailers are regularly re-galvanized but must be stripped of their running gear and electrical equipment, with moving parts separated, to be satisfactorily galvanized.

Items such as wrought iron that has previously been painted should be cleaned of old paint and excessive rust prior to galvanizing. This is best done by abrasive blasting, but grinding or wire brushing is suitable for smaller items.

Care must be taken with some vintage wrought iron of heritage value, that was manufactured from iron castings in the 19th Century. This older wrought iron may be porous and have casting defects that allow moisture to penetrate inside the metal.

This can cause damage to the item, or injury to the galvanizing plant staff because of the risk of explosion when the material is immersed in the molten zinc.

Old motor vehicle parts – fuel tanks in particular – may have been assembled originally by soldering. The solder will melt in the galvanizing process and render the items unusable. Soldered items cannot be galvanized.

Any items that have been riveted with aluminium pop rivets are also unsuitable for galvanizing, as the aluminium will be dissolved during the pre-treatment process.

Some fabrications may have stainless steel fittings welded to them. While the stainless steel fittings may galvanize satisfactorily, there is a risk that they will be adversely affected by immersion in the molten zinc, which may cause embrittlement. They may fracture under loads if this occurs. Such fittings should be attached after the fabrication is galvanized.

Excessively rusted items can be re-galvanized, but the heavy rust nodules should be removed by abrasive blasting prior to galvanizing, as the time taken to remove this excessive rust in the chemical pre-treatments used would otherwise be excessive. The 'old' steel will be pitted and the rough surface will be reflected in the new galvanized coating, although the durability of the steel will be restored.

Can my 'old' items be galvanized?

TRIED & PROVEN

Over 40 years of field testing shows that galvanized coatings perform well even in harsh environments.

RE-GALVANIZING

Steel that has previously been galvanized can be easily re-galvanized. If the base steel is still in good condition, the re-galvanizing will restore the item to as-new condition. Care must be taken with old (porous) castings, soldered items and aluminium rivets. Hollow steel articles previously not galvanized will need holes drilled for correct venting and draining.

WHY GALVANIZE WITH INDUSTRIAL GALVANIZERS?

For steel users requiring fast, proven corrosion protection for local or national projects Industrial Galvanizers is the established hot dip galvanizer with nationwide coverage.

If older fabrications made out of hollow sections (bike frames, handrails, etc) that have not previously been galvanized are required to be hot dip galvanized, they will need to have vent and drain holes put in appropriate locations to ensure safe and effective galvanizing.

It is advisable to consult with the galvanizer for advice on venting and draining of these types of fabrications. This will ensure that vent and drain holes are in the right places and are kept to a practical minimum.

One feature of re-galvanizing 'old' steelwork is that the resultant coating is likely to be thicker than what would have been applied to new steelwork because the rougher surface will react more vigorously with the zinc. This means that, second time around, the durability of the re-galvanized item is likely to be better than the original.

A.C.N. 000 545 415

Registered Office:
11 Talavera Road,
Macquarie Park, NSW 2113

INDUSTRIAL GALVANIZERS (AUSTRALIA)

Townsville | Brisbane | Newcastle | Sydney | Port Kembla | Melbourne | Launceston | Perth

www.ingal.com.au

www.valmont.com

