

## Non ferrous metal

Generally these metals are non magnetic ,Rust-resistant ,Non-corrosive, Pliable

These metals are rarer compared to ferrous metals

They do not lose their chemical properties though used over again

These metals include

- Aluminium
- Copper
- Insulated Wire
- Brass
- Lead
- Zinc
- Tin
- Nickel alloys
- Gold
- Silver

Non-ferrous metals can be found in

- Roofing
- Gutters
- Pipes
- Outdoor Signs

They are used for wiring and electronics

### Uses of non-ferrous metals

- Non-Ferrous Metal Recycling promotes the development of new markets.

- Non-Ferrous Metal Recycling is a viable revenue source.
- Non-Ferrous Metal Recycling offers additional materials that can be reused in manufacturing.
- Non-Ferrous Metal Recycling provides additional employment opportunities.
- Non-Ferrous Metal Recycling causes less pollution, produces greater energy savings, and is more environmentally friendly overall.
- Non-Ferrous Metal Recycling provides a safer work environment.
- Non-Ferrous Metal Recycling helps to free up space.

Source link

<https://nrimn.com/non-ferrous-metal-recycling/>



## HOW TO PREVENT IRON FROM RUSTING?

Rusting of iron is due to its reaction with water and air.



The reactions taking place are

1.  $\text{Fe(OH)}_2 \rightleftharpoons \text{FeO} + \text{H}_2\text{O}$
2.  $4\text{Fe(OH)}_2 + \text{O}_2 + \text{H}_2\text{O} \rightarrow 2\text{Fe}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$
3.  $\text{Fe(OH)}_3 \rightleftharpoons \text{FeO(OH)} + \text{H}_2\text{O}$
4.  $\text{FeO(OH)} \rightleftharpoons \text{Fe}_2\text{O}_3 + \text{H}_2\text{O}$

On rusting properties of Iron gets reduced

It loses its strength, gets weak. It causes damage to automobiles, grills.

Factors affecting rusting of Iron

- Moisture
- Acid
- Salt(Ocean water)
- Impurity(Pure Iron gets rusted more slowly than Impure Iron)

### Steps to prevent Rusting of Iron

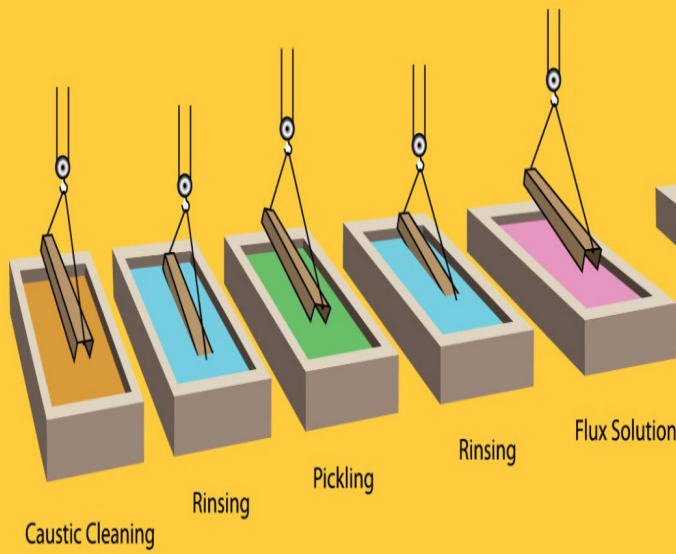
- Keep Iron clean and dry  
Don't let Iron soak in water for a long time



Remove Rust immediately to prevent it from rusting

- Galvanization  
In this clean Iron and dip it in molten zinc

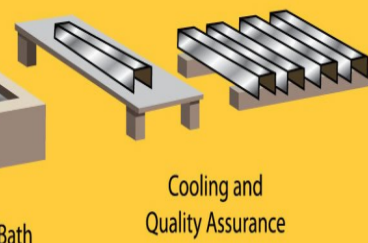
## Surface Preparation



## Galvanizing



## Inspection



Source: American Galvanizers Association