

Methods of corrosion prevention

(A)  
Preventive methods

(B)  
protection corrosion

I-Preventive methods

(1)  
adapted shape  
of the metal parts

(2)  
judicious choice  
of metals or alloys

(II) protection corrosion

(1) By coating

- ↳ Metallic
  - ↳ Anodic
  - ↳ Cathodic
- ↳ Non Metallic
  - ↳ polymer
  - ↳ PVC
- ↳ Organic
  - ↳ Organic compounds
  - ↳ adhesive films

(2) By inhibitors

Inhibitors: Chemical compounds

classification

(1) By area of application

- 1- aqueous medium
- 2- organic
- 3- In gas phase

(2) By nature (composition)

- 1- Organic inhibitors
- 2- Inorganic inhibitors
- 3- Green corrosive Inhibitors

(3) By their effect

- 1- anodic
- 2- Cathodic
- 3- Mixed

(4) By reaction mechanism

- 1- Adsorption
- 2- precipitation

(3) Electrochemical protection

- ↳ Anodic protection
- ↳ Cathodic protection
  - 1- By sacrificial anode
  - 2- By impressed current