



CORROSION AND ITS CONTROL





Learning Objective:

To understand about the Corrosion, types & Various control techniques.



Definition



Gradual degradation / destruction of metals / alloys due to chemical or electrochemical reaction with its environment.





? It Occurs





OCCURENCE



OCCURENCE

NATIVE STATE

COMBINED STATE



OBTAINING METALS

The metals we use are obtained from rocks in the Earth's crust.

Most metals are too reactive to exist in a pure uncombined form in the Earth's crust. Metals are found as in rocks metal compounds. The usual metal compounds found in rocks are **OXIDES**, **SULPHIDES** and **CARBONATES**.

NATIVE METALS

A few metals are found uncombined, as they are very unreactive. Metals, which are found uncombined are called **NATIVE METALS**.

The native metals are:



**Gold
(Au)**



**Platinum
(Pt)**



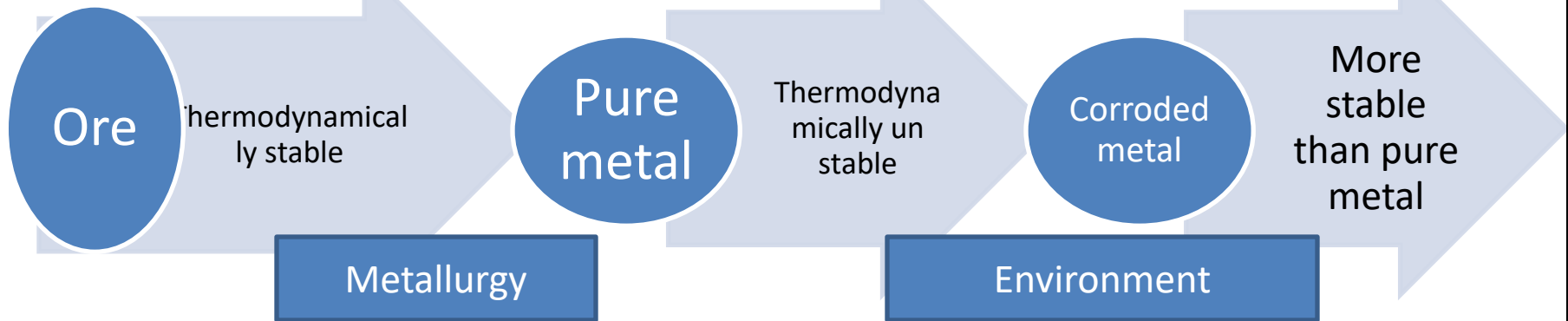
**Silver
(Ag)**

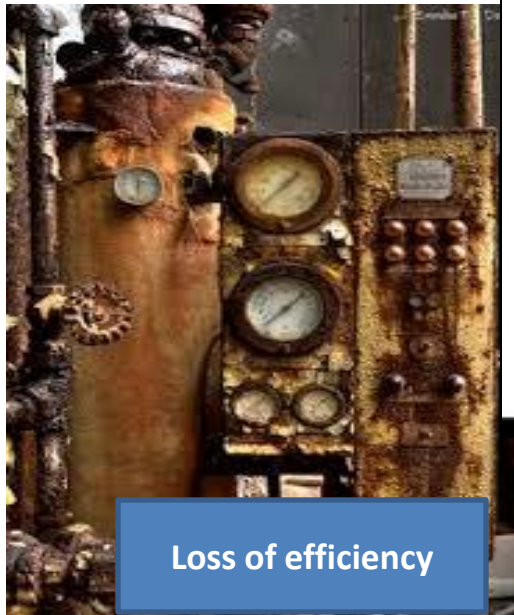


**Copper
(Cu)**

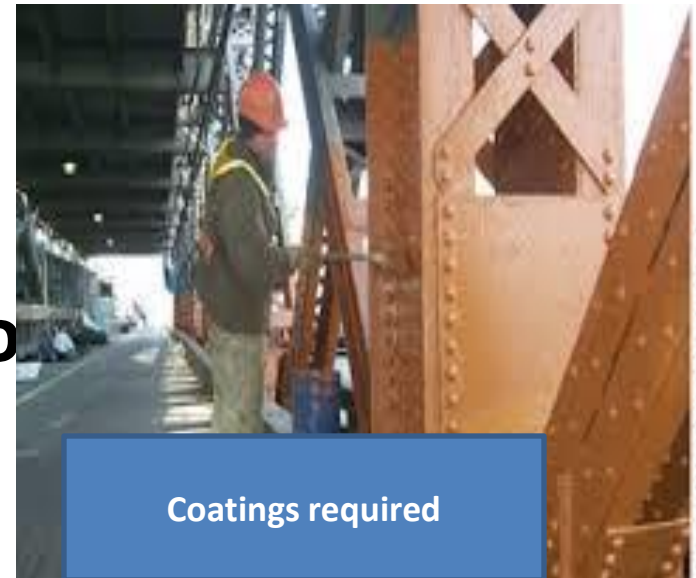


Illustration of corrosion





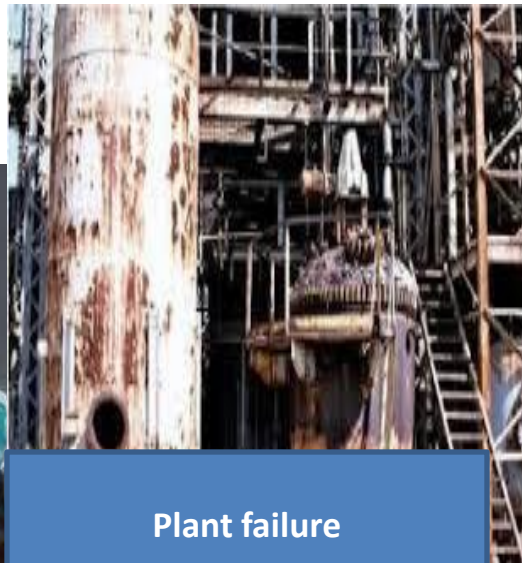
Loss of efficiency



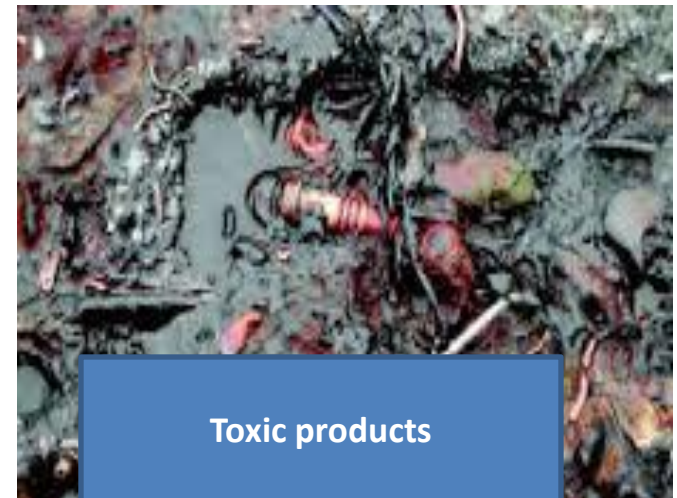
Coatings required



Equipment replaced



Plant failure



Toxic products