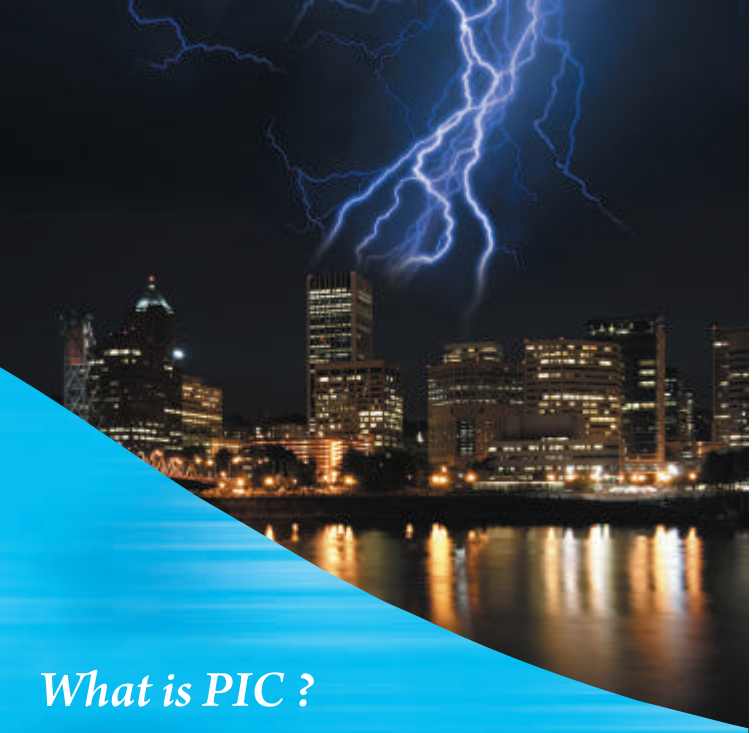

What is PIC ?
PIPE IN CAGE TECHNOLOGY

PIPE IN CAGE technology is the solution we offer for any Earthing related problems.

Especially we had developed the alloy of Nickel and stainless steel having very high rust resistive property and good current conductive property.

Beauty of the product is in its design. We had construct this earth electrode with special alloy in such a fashion that we can get total contact area of electrode with earth is as possible as maximum.

Our product complies with all world wide relevant standards.

Why PIC?

- PIC electrode is made from unique metal with special alloys as homogeneous material, no bimetal contacts.
- PIC electrode is free from galvanic attack.
- PIC electrode is having very high rust resistive property and good current conductive property.
- PIC electrode has maximum utilization of available surface area.
- PIC electrode provides theft proof design.
- PIC electrode is available in wide range in different sizes to suit all types of need from common man to foreman.
- PIC electrode is having large surface area compare to conventional electrodes.
- PIC electrode has capacity to carry high current repeatedly.
- PIC electrode is easy to install and require less space.
- PIC electrode provides fast dissipation of any fault / static current due to large surface area, no corrosion and maintaining require moisture contents.
- Eco friendly earth enhancer compound as SFC.
- Cost effective.

Email: support@picearthingtech.com
Web: www.picearthingtech.com

PIPE IN CAGE Technology
C-1/I - S2 GIDC Estate,
Vitthal Udyognagar - 388121
Via - Anand, Gujarat.
Contact: +91 94276 46357 / 94263 50726

"Quality is all we Deliver , Satisfaction is what you gain"

COMPANY PROFILE:

"CUSTOMER SATISFACTION" is our prime responsibility and to provide value to the customer is our main objective. Our team professional are expert in field of Electrical Engineering. We follow TQM (Total Quality Management) for products we provide. We strive to turn over knowledge into value for customer.

VISION:

To provide Maintenance Free Safe Earthing for common man to foreman.

To provide cost effective Electrical Earthing Solution incurring one time investment.

PIPEinCAGE
Pic Earthing Technology
EARTH - अत्र तत्र सर्वत्र

MORE ABOUT US:

We have sound infrastructural base that is divided into an in-house designing unit and a manufacturing unit.
Our designing unit is well furnished with facilities that assure the development of high quality electric equipment. PICearthingtech has the knowledge, experience, and products to provide the optimal solution, from protection against direct lightning strikes, electromagnetic, electrostatic, and power quality concerns.

As Solution Providers, we offer a comprehensive facility protection approach to solving the world's most difficult Earthing problem. Our varied products permits a high degree of flexibility and the introduction of new products for better safety and modern design helps to adapt to the changing circumstances.

TERMINOLOGY :

In Britain, people have 'earth' and in Northern America they have 'ground'. They are exactly the same thing, only different terms are used in different countries.

NEED FOR EARTHING:

EARTHING system has four main purposes:

1. Current path in order to facilitate the operation of protective devices.

Earthing system provides certain level of safety to humans and property in case of equipment damages.

2. Over voltage protection.

Earthing provides alternative path to lightning, line surges or unintentional contact with HV lines, and prevents damages of electrical system equipments or human being.

3. Voltage stabilization.

There are many sources of electricity as generators, transformers etc. It must require a common reference point for all these voltage sources for calculate their relationship to each other. The earth is the most omnipresent conductive surface and so it was adopted as a nearly universal standard for all electric systems.

4. Minimize the danger of fire hazard.

The earth wire should always be in good contact with all metal parts of any appliance the user may touch. Should the equipment become faulty by the active wire touching the case, then current will rush to earth, smoke will rise from the equipment, and if the current is very high the fuse in the active line will blow, disconnecting mains power from the faulty appliance. Standards limiting current in any circuit are vital to prevent excessive heating of the power supply wires leading to fires.

WHAT ARE OUR FINDINGS ?

After lots of concentration on earthing related issues we thought that there must be improvement in two areas.

- Material used as earth electrode should have very high rust resistive property and good current conductive property.
- Total contact area of electrode with earth should be as possible as maximum.

As a result of this thought we tried to develop special design of earth electrode by which we can get both the benefits.

SOME FACTS:

1) Relation between moisture, resistivity and corrosion rate

Higher the moisture lowers the soil resistivity, lower the resistance value and more the corrosion rate.
Lower the moisture higher the soil resistivity, higher the resistance value and lesser the corrosion rate.

Therefore, a good earthing ensure a balance between low resistance value and low corrosion rate and maintain a constant moisture level during all seasons.

2) Steel Core Electrodes have the best attributes

- Electrically, a good earth electrode should have a low intrinsic resistance and be of sufficient section to carry high currents without damage when called upon.
- Mechanically, a good earth electrode's physical properties should exhibit strength, have a sturdy design for easy driving and durable against corrosion.

3) Copper vs. Stainless Steel

- The permanence of copper in most soils, its resistance to chemical attack, and its inherent low resistance, brings it into widespread use throughout the electrical industry around the world.
- However, there are certain soils where it is inadvisable to use copper such as in tidal land salt marshes, swamps and land filled with ashes, coke breeze and like materialsPIPE IN CAGE electrode have a high resistance to both atmospheric and soil corrosion as it made from stainless steel with zinc.

Typical of the applications where stainless steel PIPE IN CAGE electrode are favored over copper clad is

- Where the chemical composition of the soil reacts more unfavorably than copper as per conditions described above.
- Where the earthed item needs to be protected against galvanic attack and corrosion, eg. lead sheathed cables, steel poles, etc

TYPES OF EARTH ELECTRODE :

- At one time or another, all manners of conductor materials and shapes have been installed in the ground to provide an electrical earth. These materials range from cast iron plates, tubes, galvanized steel stakes, copper strip, metallic electrode, wire and water pipe etc.
- Taking into account conductivity, high resistance to atmospheric corrosion and soil attack, ease and economy of installation and overall reliability, the PIPE IN CAGE made from stainless steel alloy has proven its superiority over all others.
- The PIPE IN CAGE electrode is simple to install, its connection to the earthing system is easily made, and the installation is readily accessible for inspection and test.

S.F.C. (SUPPORT FILLING COMPOUND):

What is support filling compound? It is a conductivity improver & earth enhancer compound. It is a specially developed compound having high conductivity, rust resistance property, absorbing & retaining the moisture for a long time. It reduces the soil resistivity and helps in faster dissipation of fault current. It is also helpful to control fluctuation of OHMIC value.

S – Super conductivity enhancer.
F – Free from magnetic/ferrous material.
C - Corrosion preventer.

PIC EARTHING TECH IS USED FOR:

Model E1: Residential areas

Model E2: Commercial markets

Model E3 : Heavy Industries & Hospitals

Model E4 : Electrical Generation, Transmission and Distribution