“EZEE” **Safe Earthing Electrodes**

(Pipe in Pipe with Flat Technology)

Manufactured As Per IS 3043 : 1987.

The Pipe-in-Pipe with strip Technology concept involves two 'B' class mild steel pipes one inserted inside the other. Both the pipes are subjected to hot dip galvanization: 80 - 100 micron on the outer electrode and 80 - 100 microns inside the electrodes.

The empty space inside the electrodes is tightly filled with a specially developed Crystalline Conductive Mixture and then sealed. For uniform distribution of fault current an earthing electrode must be cylindrical in shape. The surface being circular the distance from the centre to any point is always equal. This facilitates uniform distribution of fault current from electrode to earth.

“EZEE” **Electrode Advantages**

Low-Impedance Grounding

“EZEE” Safe Earthing Electrode uses advanced engineering to achieve a consistent, low-impedance, electrical connection with the earth, even in unfavorable and varying ground conditions (like permafrost).

Safety of life and property from earth related electrical hazards
Strong, reliable, long life
Less maintenance
Saving on maintenance
Smooth dissipation of fault, lightning and short circuit currents
Low electrical resistance as per soil condition
Resistance to corrosion
Repeated current carrying capacity and continuity
Provides stable reference
Ideal earthing system for all kind of earthing applications
Adequate galvanization, Highly conductive, No corrosion, eco-friendly and a long and reliable life (Fit and Forget)
Can be installed indoors or outdoors and in almost all soil condition. For existing or new facilities, requires less space and time.

Applications

Efficient Grounding Systems reduce the risk of electrical arcing and fires. The Remedies brand “EZEE”
Safe Earthing Electrode improves reliability for many applications, including:
LT and HT applications – Domestic / Industries
Telecommunication, Transmission and Distribution systems.
Lightning protection systems
Prevention of accidents caused by static charge and stray currents
Substation and Power generated stations
Equipment earthing / Electrical machines
Ground fault neutralization
Lightning arrestor, Diesel generators etc..

Industries

Petrochemical, LNG, and nuclear facilities
Data centers, telecom, and broadcasters
Process control and automation
Corrections, hospitals, and 911 centers
Government, military, and defense installations
T&D operations, substations, and wind turbines

Installation Normal soil :

Augur / Drill / Bore a hole of 8 - 10 inches in diameter to a suitable depth of 2 or 3 meters (Electrode length)

Mix Ezee backfill compound nicely with dug out soil.
Throw handful of compound soil mix into pit.
Remove plastic sleeve carefully from electrode.
Place naked electrode at center of pit.
Start refilling empty space around electrode with backfill compound in small quantities.
Then pour some water and poke the pit with a long wooden rod, to allow trapped air to escape.
In this manner gradually continue refilling process till electrode is buried in the pit, up to the green patch painted on the top portion of electrode.
Ensure that pit is not watery.
Pack electrode with compound nicely and tightly, so that it stands firmly in pit.
Pour a few buckets of water around pit.
Test earth resistivity of electrode. If result is satisfactory, connect it with equipment.
If result is not satisfactory, give some time for electrode system to set in soil.
Then check ohmic value and connect with equipment.
In hard soil conditions, do not mix compound with dug out soil, and follow above procedure.
If auguring is not possible up to 3 meters inform customer/dealer.
Pour a few buckets of water around the pit everyday for 10 - 15 days for system to set.

Important:

Do not Drop Earthing electrode in pit.
Do not use force to drive electrode into pit
Do not hammer or cut electrode while installing.
Remove the transparent plastic cover before installation.
Ensure that electrode terminal and green color patch are above the soil.
Apply petroleum jelly on terminal and terminal hole.
Ensure that the entire length of electrode always remains buried in soil.
During peak summer months pour a few buckets of water in and around electrode for a few days. If you are in doubt, contact our dealer.
If soil in pit sinks, fill it with good soil

Sandy & Rocky Areas :

Dig a trench of 6' x 6' and 11' deep; fill the entire pit with black cotton soil or normal soil, pour enough water so that pit is full with water, leave it for three days so that soil soaks up the water. You will notice that soil level has gone down and again top up the pit with soil & fill the water. Now after two or three days this pit is sturdy and ready for Earthing purpose. Our Earthing electrode can

be installed as per installation method for normal soil given above.

Rocky/Semi-Rocky Soil:

If enough soil is there then Earthing can be done by normal method as above, otherwise follow the method as in case of sandy soil.

Once installed properly Remedies Brand “EZEE” Safe Earthing Electrode gives much better earth resistance value than conventional Earthing systems over a period of time. However, it is important to recognize the fact that characteristics of soil play a major role in determining the earth resistance value, and as per Indian/British Standards, in high resistive soil it requires more than one earth electrode installed and connected in parallel to bring down the earth resistance value within safe limits