

Ampress GEM (Ground Enhancing Material)

Eco-Safe Earthing
Zero Maintenance
Long Life



Defence



Lightning



Substation



Pharma

Solar Plant



Storage Tanks



Cement Plants



Home & Complex



Telecom



Steel Plants

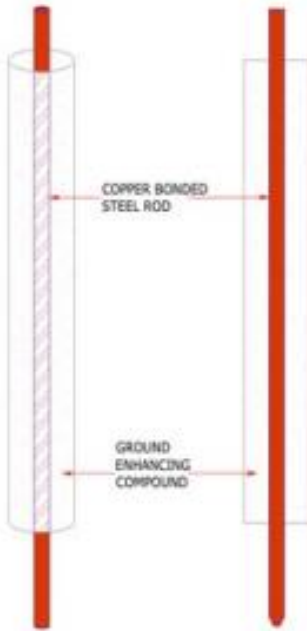


Railway



Transmission





FEATURES & ADVANTAGE

- * Highly conductive earth pit backfill
- * Reduces soil resistivity by upto 90%
- * Long life and non corrosive. Independent of ambient moisture content, hence works in all weather conditions
- * Compatible with all type of earthing electrodes, be it pipes, plates or rods of any materials
- * Can also be used in trenches made for horizontal type earthing system
- * Increases total surface area of earthing electrode ensuring quick dissipation of fault currents
- * Maintains constant volume regardless of moisture content. GEM earthing compound does not shrink or expand. It maintain constant contact with electrode and surrounding soil
- * Long shelflife ; can be stored for very long periods without deterioration
- * Environmental friendly; does not pollute or contaminate the water table
- * Ampress offered GEM compound is tested by NABL certified laboratory 'Lucid' & Copper bonded steel rod is tested by NABL Certified laboratory 'CPRI'

MAJOR CLIENT



PART No.	DESCRIPTION	APPLICATION
AEGM7205	Ampress GEM Earthing - 5ft L	Lightning radial, Earthing at building cellar & Digging accesibility upto 5ft
AEGM7206	Ampress GEM Earthing - 6ft L	For all
AEGM7210	Ampress GEM Earthing - 10ft L	For all

MADE TO ORDER

if you have need your own specification for earthing electrodes???. Give it to us, and we will tailor-make it for your. Various terrains pose various challenges for making an earth pit. We understand that it sometimes becomes difficult to choose from standard sizes. Give us the size you need and we will have it ready for you.

HOW IT WORKS?

In the event of a fault, the fault current will try to dissipate into the ground through the earth connection. All metals are good conductors of electricity, hence the fault current easily passes through the earthing conductor and the earthing electrode. The fault current faces major obstruction only at the interface of the earthing electrode and surrounding soil.

Researchers from arround the world have proved that, if the soil immediately surrounding the electrode is replaced with a conductive material, the resistance of the interface can be considerably reduced. As seen from the relation, the earth resistance 'R' of a given earth electrode is directly proportional to soil resistivity 'p'. Lower the value of soil resistivity, lower will be the earth resistance of electrode.

Therefore by using Ampress prefab advanced earthing, the value of soil resistivity(p) can be considerably reduced. This in turn will reduce the earth resistance 'R' of the electrode. This also reduce the number of electrodes required to achieve a particular earth resistance, thereby making the entire earthing system, efficient, durable and cost effective.

Where
 p = Soil resistivity
 L = The electrode length
 d = The electrode diameter

$$R = \frac{p}{1.915L} \left[\ln \frac{96L}{d} - 1 \right] \text{ ohms}$$

