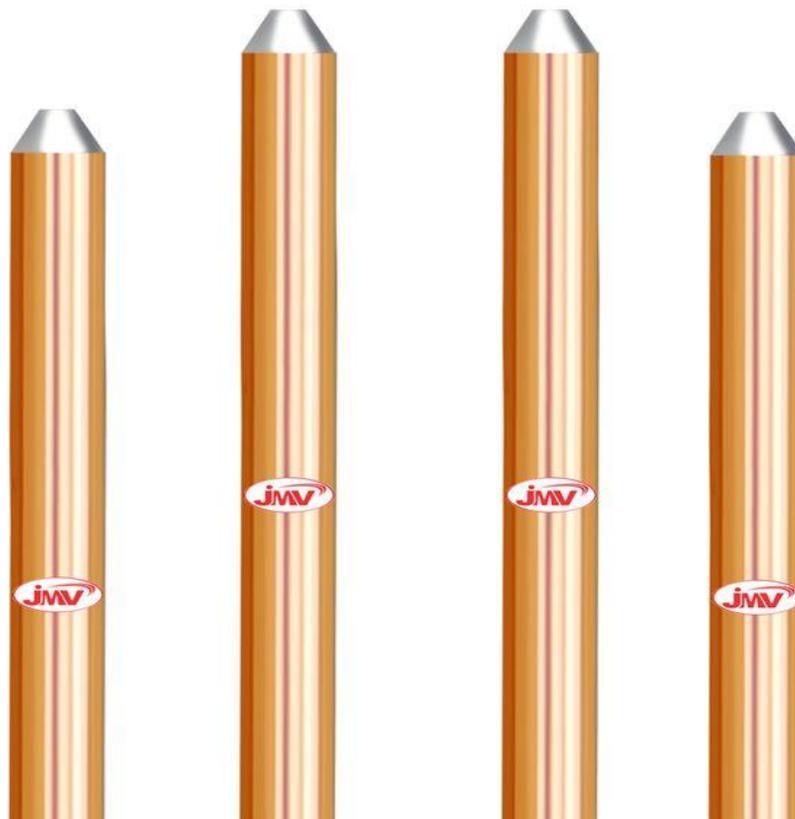


## Chemical Earthing System as Per IEEE 80 and IEC 62561 Standards

The term grounding means connect your equipment or appliance to the ground by making some arrangement. The grounding can be done by two types: Neutral Grounding and Body Grounding. Neutral grounding removes the problem of arcing ground. It is useful in discharging over- voltages to the earth due to lightning. While body grounding is used for safety of personnel by grounding of non- current carrying metal parts to earth.



## The earthing systems are of two types:

**Conventional Earthing-** This is a traditional earthing which uses salt, charcoal, GI/Copper plate, GI/Copper pipe, clamping, brazing, bolting, cemented chambers etc. The salt and charcoal requires replacement in every 3-4 years. Due to more moisture, the plate and pipe get corroded after sometimes which results in the reduction of life. And sometimes it fails to provide safe discharge path for fault current due to corrosion. The installation requires more area as it needs the depth of 30-40 feet. The connections made by pressing and tightening contact connection get loosened after sometime. This causes the current to get hold and may damage your system. The cemented chambers are highly weighted material which cannot be removed easily when the earthing requires maintenance.



## Leading The Nation Towards Electrical Safety

**Chemical Earthing-** This is a modern earthing which employs latest technology. The components that are involved in the installation process are vertical conductors, connecting conductors, exothermic welding, earth enhancement compound and pit covers. The vertical conductor requires the depth of 8-10 feet only. This type of [earthing is maintenance free and offers long life](#) up to 20-25 years. A copper bonded rod of 250 micron copper coating over mild steel is used as vertical conductor which enhances its conductivity and manufacturing strength since it is physically stronger than copper. Copper clad steel is used for connecting the equipment to the earth which is flexible in nature, corrosion resistant material and will not tear or crack if bent. The earth enhancement compound absorbs the water and provide safe discharge path for fault current which makes it free from maintenance. We are offering an absolute solution of earthing which offers low resistivity.



### Installation Process

- Make a borehole of 250 mm diameter and 10 ft. deep into the earth.
- Lower the copper bonded rod of dia. 14.2mm, 17.2mm or 23.2mm and 3 meter length into the depth of ground.
- Fill the annular space between the rod and the borehole walls with earth enhancement compound.
- Cover the top of the borehole with a pit cover.