

(AN ISO 9001: 2008 CERTIFIED COMPANY AND CE CARTIFIED PRODUCT)

G.S. ELECTROTECH PRIVATE LIMITED Web.www.gselectrotech.com

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OUR COMPANY

G.S. Electrotech Pvt. Ltd. is an association of dedicated and hard working professionals. The Company is a manufacturer of the Chemical Earthing Electrode, Ground Enhancement Minerals, Earthing Enhancement Minerals, and also deals in Lightning Arr-ester, Solar pannals and Electrical Pannals. We provide complete & consistent solutions for all types of Electricals and Earthing Solutions.





EARTHING/IMPORTANCE OF EARTHING

A protective earthconnection ensures that all exposed conductive surfaces are at the same electrical potential as the surface of the Earth, to avoid the risk of electrical shock if a person touches a device in which an insulation fault has occurred. It also ensures that in the case of an insulation fault, a high fault current flows, which will trigger an over current protection device (fuse, MCB) that disconnects the power supply. The Primary objective off earthing is to control radio frequency emission and electromagnetic interference to provide stable reference potential for instrument to provide a safe discharge path for short circuit lighting current.

A functional earthconnection serves a purpose other than providing protection against electrical shock. In contrast to a protective earth connection, a functional earth connection may carry a current during the normal operation of a device. Functional earth connections may be required by devices such as surge suppression and electromagneticcompatibility filters, some types of antennas and various measurement instruments







G.S. EARTHING ELECTRODE

b EARTHING ELECTRODE

G.S. Earthing Electrode has developed GEL Earthing (Maintenance Free Chemical Earthing) after a long consistence R & D.In this, we have given maximum area and better design for discharging of current. It has developed Pipe in Pipe, Pipe in strip and Pipe in Rod Technology..

In this technology, we used G.I. and Copper whichever is required. The G.I. Pipe and terminal on the top fabricated in high quality MS material and hot dip galvanized 80 to 100 microns and the Pipes are filled hydroscopic conductive compound and anti corrosive crystalline conductive mixture. **6** EARTHING ELECTRODE



GROUND ENHANCEMENT MINERALS

Earth enhancement Minerals (Back fill compound) is a superior conductive material that improves earthing effectiveness especially in areas of poor conductivity such as rocky ground, sandy soil & areas of moisture variation. It has good hydroscopic and rich conductive compound. It has property to retain the moisture for a long time. It has quality to retain the moisture upto 15 times and its not soluble in water. Its contain conductive graphite carbon powder , Aluminum sulfate , montmorillonite, Potassium Nitrate, Sodium Hydroxide etc. Its placed around earth electrode in the earth pit to improve the conductivity of earth electrode & ground contact area.



HIGHLIGHTS OF GEM

- It is a superior conductive material that Improves earthing effectiveness, especially in area of poor conductivity.
- It has better hygroscopic properties to absorb moisture.
- It has property to absorb & release the moisture in the dry weather condition and help in maintaining the moisture around the earth electrode.
 It Improve conductivity earth to electrode.

It is a nontoxic, nonreactive, nonexplosive & noncorrosive.

- It expand & swell considerably & remove entrapped air to create strong connection between earth electrode & soil.
- It has quality to retain the moisture upto 15 times and its not soluble in water.
- Filling minerals is not soluble in water.
- Solubility of water is very low in normal temperature (5%).
- It has capacity to retain more than 10% moisture at 105.
- GEM enhance ground resistivity upto 80%.



USED MINERALS IN (GEM)

- ► GRAPHITE
- ► ALUMINIUM SULFATE
- POTASSIUM NITRATE
- SODIUM HYDROXIDE
- CHALCANTHITE
- MONTMORILLONITE







LOW OHMIC VALUES

- GS Earthing Electrode is capable of giving earth resistance valve below 2 ohm under normal soil conditions.
- It will give a good earth resistance value as compared to conventional earthing.
- Its all depends on the resistivity of the soil where the electrode is installed.

ADVANTAGE AND BENEFITS

- Less time space and manpower required for installation.
- A maintenance Free earthing.
- Cost saving on maintenance.
- No material replacement during its life period.
- Ohmic value always within safe limits.
- Smooth dissipation of fault, lightning and short circuit current.
- Low Electrical resistance.



HIGHLIGHTS

- A maintenance free earthing electrode.
- Lost Effective.
- Easy to install.
- Minimum space is required.
- Eco friendly (GEM)
- Longer life compared to conventional earthing.
- Ohmic value always within same limits.

APPLICATIONS

- Sub stations, Power Generating Stations.
- Equipment earthing / electrical machines.
- Lightning arrester, Diesel Generators.
- Computer & Data processing Centers.
- Low / Medium / High / Extra high Voltage Applications Domestic & Industrial.





A- PIPE IN PIPE

PRODUCT	OUTER PIPE DIA (mm)	INNER PIPE DIA (mm)	LENGTH (mm)	TERMINAL (mm)
G-40M	40	20	2000	32X6
G-40N	40	20	3000	32X6
G-50M	50	25	2000	40X6
G-50N	50	25	3000	40X6
G-65M	65	32	2000	40X6
G-65N	65	32	3000	40X6
G-80M	80	40	2000	50X6
G-80N	80	40	3000	50X6

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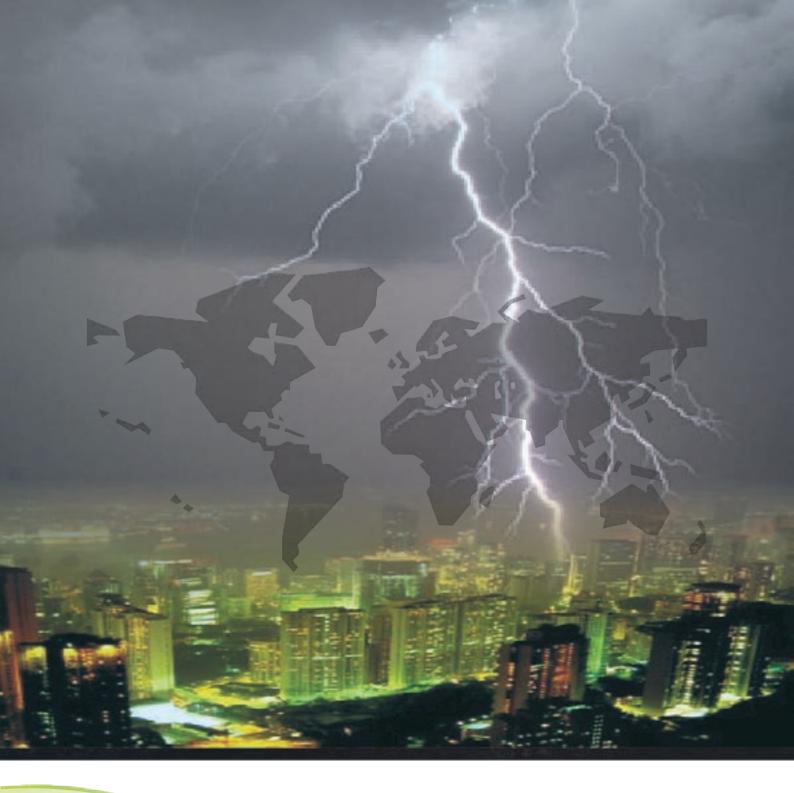
B- PIPE IN STRIP

PRODUCT CODE	OUTER PIPE DIA (mm)	INNER STRIP (mm)	LENGTH (mm)	TERMINAL (mm)
GS-40M	40	32X6	2000	32X6
GS-40N	40	32X6	3000	32X6
GS-50M	50	40X6	2000	40X6
GS-50N	50	40X6	3000	40X6
GS-65M	65	40X6	2000	40X6
GS-65N	65	40X6	3000	40X6
GS-80M	80	50X6	2000	50X6
GS-80N	80	50X6	3000	50X6

C- PIPE IN ROD

PRODUCT	OUTER PIPE DIA (mm)	INNER ROD DIA (mm)	LENGTH (mm)	TERMINAL (mm)
GR-40M	40	12	2000	32X6
GR-40N	40	12	3000	32X6
GR-50M	50	16	2000	40X6
GR-50N	50	16	3000	40X6
GR-65M	65	19	2000	40X6
GR-65N	65	19	3000	40X6
GR-80M	80	19	2000	50X6
GR-80N	80	19	3000	50X6







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