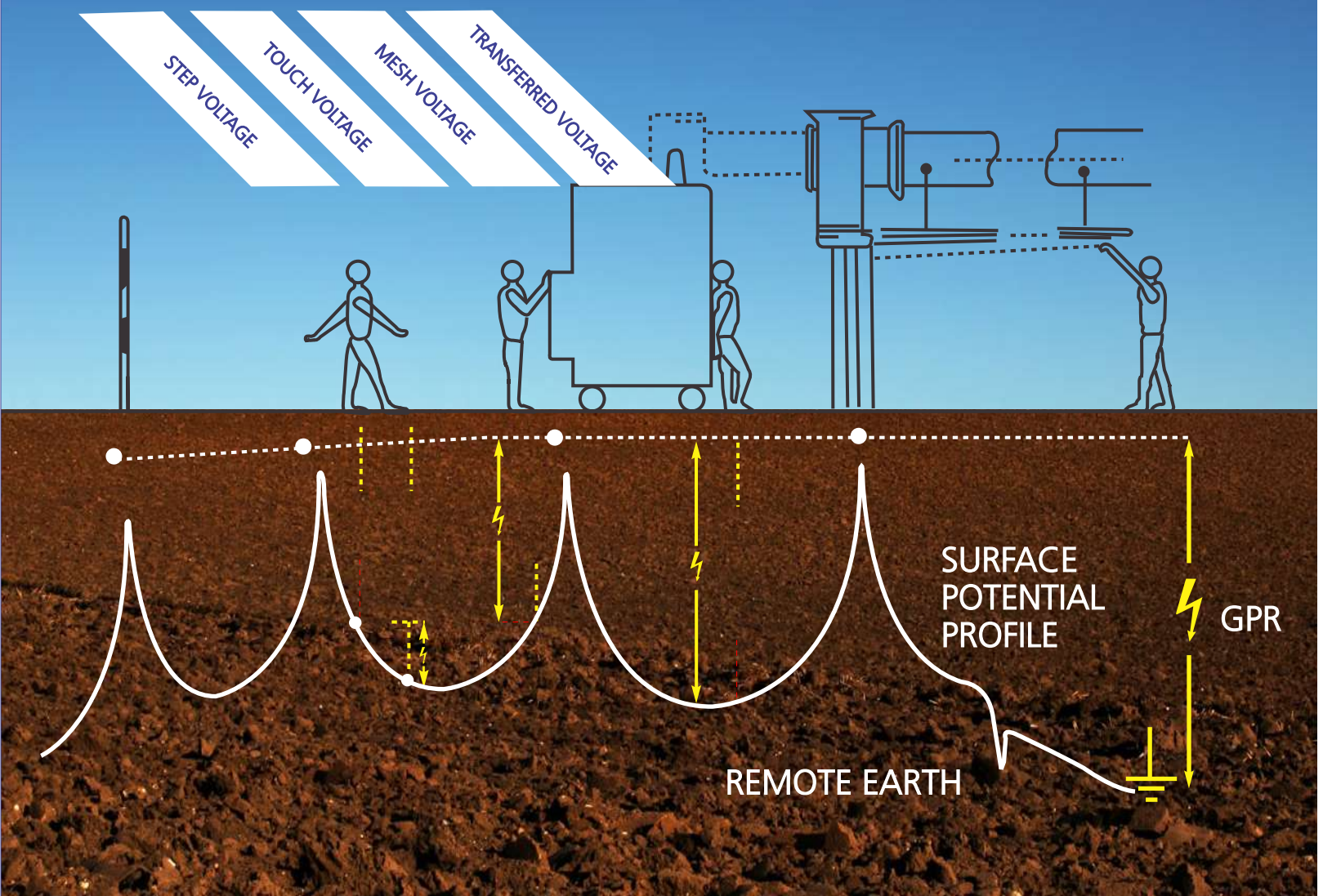


## OUR CLIENTS

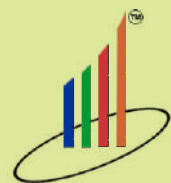


# TEREC +

### EARTH PIT AND MAT DESIGN



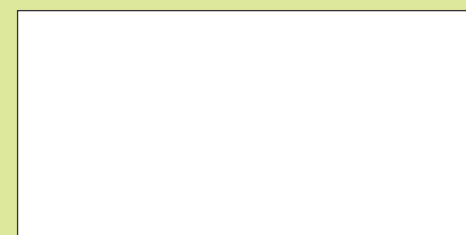
As per IEEE 80 2000 clause 14.5 d



SGI Engineers Pvt. Ltd.

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Our Associates:



Earthing

# INTELLIGENTLY

## CONVENTIONAL EARTHING USING "Salt & Charcoal"

- It is highly workmanship driven
- Not maintenance free
- Earth Rod corrodes
- Periodic salt & water addition is often not done resulting in clogging and accumulation of electrical charges which may lead to failures/fire/death

## TEREC+ ADVANTAGES

- As per IEEE 80:2000 Clause 14.5d
- Artificial treatment compound to reduce the original soil resistivity of the earth in order to dissipate the concentrated electrical charges
- Achieves resistance acceptable to any International Body
- Maintenance Free
- Low Step and Touch Potential
- Environment Friendly
- Saves Electrical and Electronic equipments from faults

## MIRACLE COMPOUND FOR EARTHING (IEEE 80:2000 Clause 14.5d)

### COMPOSITION

Ionic Chemicals	:	Create ions for easy conduction of electrical charges
Dispersion Chemicals	:	Spread the salts equally in the earth pit
Diffusion Chemicals	:	Diffuse into soil pores and create conductive silicate roots enlarging conductive zone of earth pit
Expansion Chemicals	:	Expand 18 to 20 times and remove entrapped air
Hygroscopic Chemicals	:	Absorb atmospheric and surrounding moisture and retain it in the soil

Other Patented Chemicals

### PHYSICAL PROPERTIES

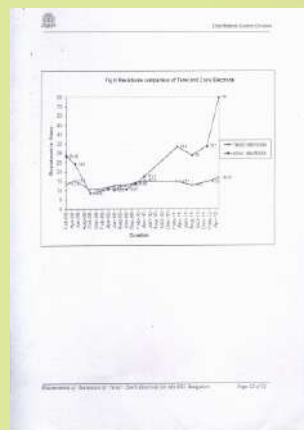
Presentation	:	Solid in granules
Granulometry	:	0.85 mm to 4mm
Color	:	Grey
Smell	:	Inodorous
Volumetric Mass	:	500 to 650 Kg/m <sup>3</sup> (compressed) 450 to 500 Kg/m <sup>3</sup> (uncompressed)
Solubility in Water	:	Partially miscible
p <sup>H</sup> value	:	6.9 - 7.2 of 1000gm/lit at 20°C

## CERTIFICATES

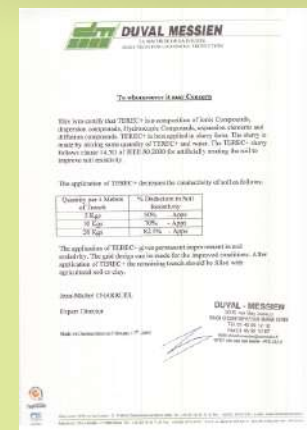
Eco Friendly



Long Term Test at CPRI



Soil Resistivity Reduction



## OUR OTHER EARTHING PRODUCTS

### AUDIT, DESIGN, REFURBISHING AS PER IS/BS/IEEE STANDARDS

### MOBI EARTH

Mobi Earth is a respite to all mobile Electrical, Electronic & Communication equipments. It is a need for mobile equipments used in Defence, Space programs, Intelligence agencies. Mobi Earth provides quick & efficient earthing. Proper earthing ensures reference voltage (GND) for its functional needs. It is also the safe path to conduct VHF, Harmonics, Surges, Spikes, Unbalances, Short Circuit Current & other faults into the ground mass.

### Technical Parameters

Resistance in vertical setting	:	32.45% of soil resistivity
Resistance in horizontal setting	:	21.05% of soil resistivity
Unbalance withstand capability	:	6.28 A
Short term duty for 1 sec.	:	596.60 A

### Material

Body	:	SS 304L 250 µ Molecularly Bonded Copper Over
Central Conduction	:	Steel

### Infill Compound

Presentation	:	In granular form
Granulometry	:	0.85 mm to 4 mm
Colour / Smell	:	Grey / In-odorous
Volumetric Mass	:	500 to 650 Kg/m <sup>3</sup> Compressed 450 to 500 Kg/m <sup>3</sup> Uncompressed
Solubility in Water	:	Partially miscible
p <sup>H</sup> Value	:	6.9 to 7.2 of 1000 gm/lit at 20° C
Approx. Number of operations	:	75 Times or 2 Years whichever is earlier



### COPPER BONDED EARTH RODS

SGI copper bonded earth rods are made from low carbon steel of Grade BS 970 or AISI 1018 with a high tensile strength of at least 600 N/mm<sup>2</sup>. Low carbon steel core are molecularly bonded with 99% pure electrolytic copper 250 micron.



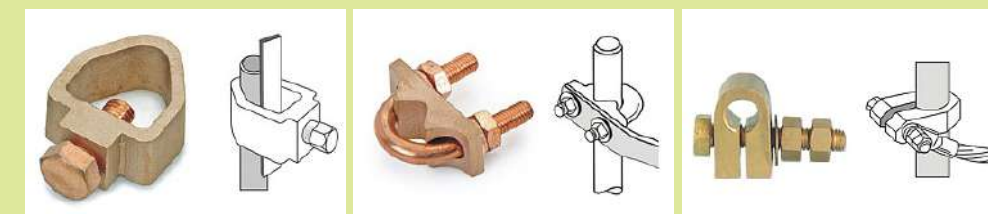
### Salient Features

- Perfectly bonded rod will last longer, drive easier & will not crack.
- Corrosion resistance while providing the lowest resistance to ground.
- Threads are rolled by 'roll threading process' that ensures an even copper covering is maintained, even at the root of the thread.
- Roll thread gives greater strength than the cut thread.
- Thread rolling process raises the surface of the rod.

### Standard size

- 14 mm dia, 1.2 mtr length
- 17 mm dia, 3 mtr & 2 mtr length
- 19 mm dia, 1.8 mtr length

### COPPER ALLOY CLAMPS



### HDPE EARTH PIT COVER

