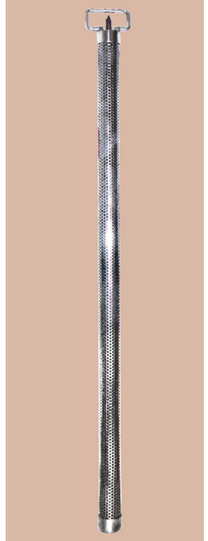
Mobi Earth

Mobi Earth is a respite to all mobile Electrical, Electronic & Communication equipments. It is a need for mobile equipments used in Defense, Space programs, Intelligence agencies. Mobi Earth provides quick & efficient earthing. Proper earthing ensures reference voltage (GND) for its functional needs. It is also the only 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
un balance 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 / Indorous	
Volumetric Mass	500 to 650 Kg/m3 compressed 450 to 500 Kg/m3 uncompressed	
Solubility in Water	Partially miscible	
PH Value	6.9 to 7.2 of 1000 gm/lit at 20° C	
Number of operations	75 Times or 2 Years whichever is earlier	



Installation

In Vertical setting follow the following steps:

1. Bore a 100 mm dia hole in the ground.
2. Place Mobi Earth inside the Bore such that the handle is above the ground.
3. Fill the bore with loose earth slurry.
4. After operations is over pull the Mobi Earth out of the ground.
5. Clean it mildly & repack for further usage.

In Horizontal setting follow the following steps:

1. Make a trench 300 mm wide & 600 mm depth 1200 mm long.
2. Place the Mobi Earth inside the trench.
3. Fill the bore with loose earth slurry.
4. After operations is over pull the Mobi Earth out of the ground.
5. Clean it mildly & repack for further usage.

In case the operational parameters are exceeding the limiting parameters of Mobi Earth multiple systems can be connected in parallel in either horizontal or vertical setting. In both cases the parallel Mobi Earths should be separated by a distance of 1 meter.

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TEREC +

DUVAL MESSIEN GROUNDING

Miracle Compound for Earthing (IEEE 80 2000 Clause 14.5.d)

- Ionic chemicals - Salts creates ions for easy conduction
- Dispersion chemicals - Spreads the salts equally in the earth pit
- Expansion chemicals - Expands 18 to 20 times and removes entrapped air to create strong connection between rod and soil
- Diffusion chemicals - Diffuses into soil pores and creates conductive silicate roots enlarging conductive zone of earth pit.
- Hygroscopic chemicals - Absorbs atmospheric & surrounding moisture and retain it in the soil
- Other Patented chemicals

Drain Your Problems To Keep Smiling ...

DUVAL MESSIEN
HIGH TECH EARTHING SYSTEM

The Earth electrodes reduce the pit resistance as per tables and charts as detailed in various international specifications. Any amount of costly electrode installations do not give needed resistivity permanently. It is thus essential to understand the technique of altering the soil resistivity by effective TEREC+ artificial treatment. Soil resistivity is permanently reduced 25-50 % of original value after using TEREC + depending on the soil condition.

Miracle Compound for Earthing

Physical Properties

Presentation	: In granular form.
Granulometry	: 0.85mm to 4mm
Colour / Smell	: Grey / Inodorous
Volumetric Mass	: 500 to 650 Kg/m3 compressed 450 to 500 Kg/m3 uncompressed
Solubility in water	: Partially miscible
PH Value	: 6.9 to 7.2 of 1000gm/lit at 20°C

Applications

- Large multistoried / high-rise office complexes, multiplexes, shopping malls, etc.
- Modern buildings housing IT offices, BOP's and concentration of sensitive electronic and / or telecom equipment.
- Factories having PLC based controls for critical plant and machinery
- Hospitals, cinema halls, museums, old monuments, schools etc.

What happens with normal Earthing using Salt & Charcoal

The Electrical drain gets clogged in summer allowing electrical energy to remain in the circuit destroying life, live stock and assets.

The TEREC + Advantage

- Miracle compound
- Achieves resistance acceptable to any international body
- Maintenance Free
- Low Step and Touch Potential
- Environmentally Friendly
- Saves your electrical and electronic equipments from ground faults

The Electrical drain does not get clogged allowing immediate exit of the energy keeping all equipments intact.

Horizontal Setting For Hard Rock Condition

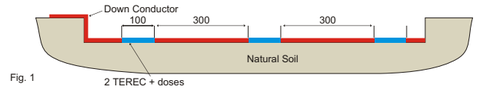


Fig. 1

- Build trench of 1m effective depth
- Lay Earthing conductor at the bottom of the trench
- Fill 20 kg TEREC+ in 1m every 4m.
- Put 20liter of water in TEREC region and cover the trench
- Measure the resistance. This represents 70% of optimal value, which is obtained in a period of 2 months

Vertical Setting For Tubular Electrodes

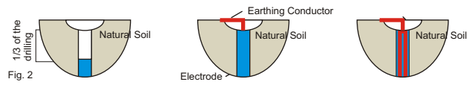


Fig. 2

- Make a stable boring without any water entry.
- Mix 10 Kg of TEREC+ in 10 liter of water to make a slurry.
- Fill the bore with 1/3rd of the slurry.
- Insert the Pipe and add the remaining slurry out side the pipe.
- Add agricultural soil in the remaining bore and compress.

Vertical setting for rod electrodes

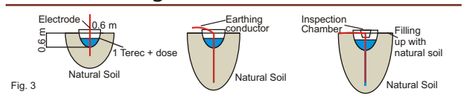
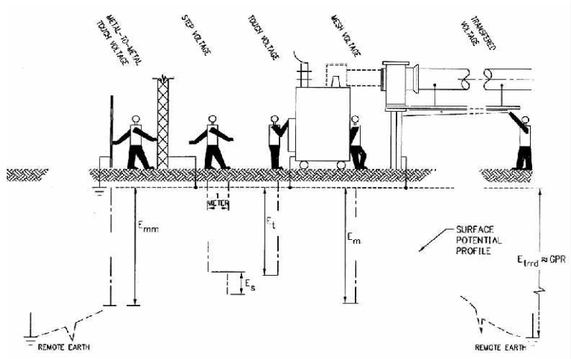


Fig. 3

- Make a pit of 0.6m * 0.6m * 0.6m.
- Mix 10 Kg of TEREC+ in 10 liter of water to make slurry.
- Fill the pit with the slurry.
- Hammer the rod softly in the middle of the pit.
- Water with 20 liter of water after 2 hours.
- Add agricultural soil in the remaining bore and compress.



Reduction Of Soil Resistivity Using A Vertical Electrode

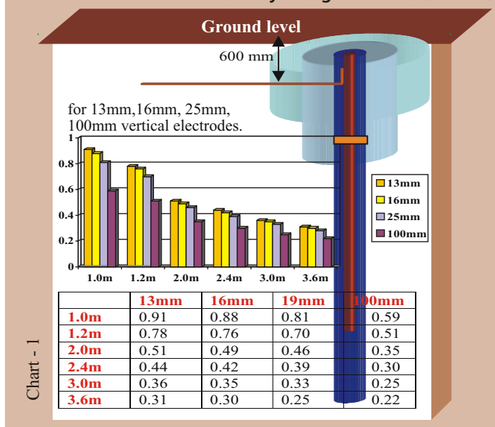


Chart - 1

	13mm	16mm	19mm	100mm
1.0m	0.91	0.88	0.81	0.59
1.2m	0.78	0.76	0.70	0.51
2.0m	0.51	0.49	0.46	0.35
2.4m	0.44	0.42	0.39	0.30
3.0m	0.36	0.35	0.33	0.25
3.6m	0.31	0.30	0.25	0.22

Reduction Of Soil Resistivity Using A Plate Electrode

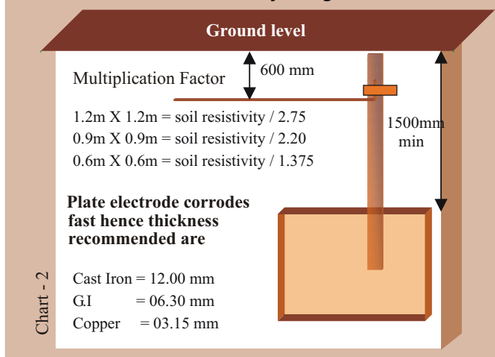


Chart - 2

Reduction Of Soil Resistivity Using A Strip Electrode

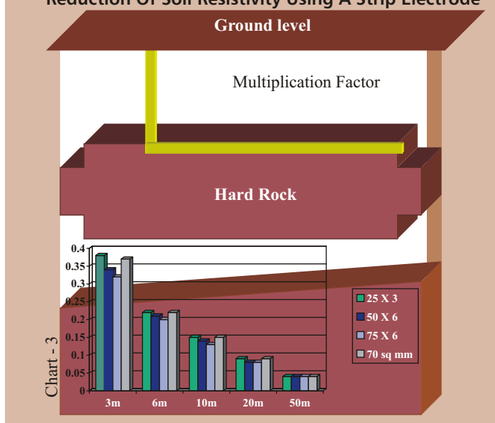


Chart - 3

3-Point Eathing - Star Configuration