

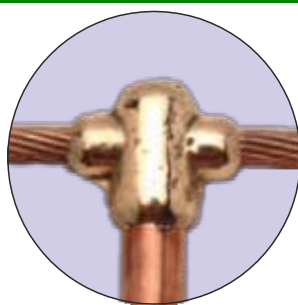
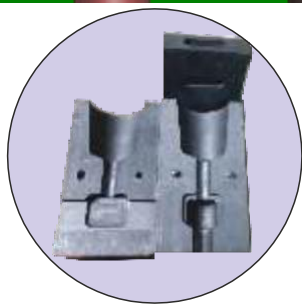


شركة البدرى لأعمال التأسيس الكهربى

إحدى شركات مجموعة البدرى للتنمية والاستثمار

BADRY Earthing & Grounding Co.

BADRY Earthing Bonded System Exothermic Welding (thermoweld)





INTRODUCTION

BADRY Earthing Systems LCC, formed in 2000, with an aim of providing safe & quality engineered products to customers. We have expertise in Earthing, bonded grounding systems, Lightning Protection, Surge Protection, Maintenance Free Earthing, equipotential bonding & Exothermic welding materials and services. We provide / SITC considering latest technological advancements & standards. We always put at your disposal latest technology, innovate everyday & provide customized solutions also.

MISSION & VISION

Our mission is to provide optimum, safe & most advanced solutions to our customers. We aim to become a referral in the field of Earthing & Grounding/Bonding systems, Lightning Protection and Surge Protection.

R & D

Our technical experts, engineers & researchers develop latest technology products for providing safe, efficient & cost effective solutions.

STANDARDS & CERTIFICATIONS

- SIGMA/METU/NABLLab
- ISO 9001 : 2008
- IEC 61643-11
- CE
- UL 467
- IEEE 837
- IEEE 80
- IS 3043
- IS 2309
- CPRI



SERVICES

- Site Surveys
- Risk Analysis
- Technical Assistance
- Supply & Installation
- Certify, Verification
- Maintenance Solutions
- T&C



Copper Bonded / Coated Earthing Electrode (Soiled Rod Type)

EARTHING ELECTRODE consists of low carbon high tensile steel Rods with molecularly Bonded with 99.9% pure Copper with provision for clamp / Terminal at the top for connecting earthing strip to the Machinerries / equipment's.

MODEL NO.	DIA (")	DIA (mm)
SCBR 12 XYZ	1/2	12.7
SCBR 12 XYZ	5/8	14.2
SCBR 12 XYZ	3/4	17.2

Where

X - Copper bonding thickness (in microns)

Y - Length of rod (in mm)

Z - Threaded / Unthreaded

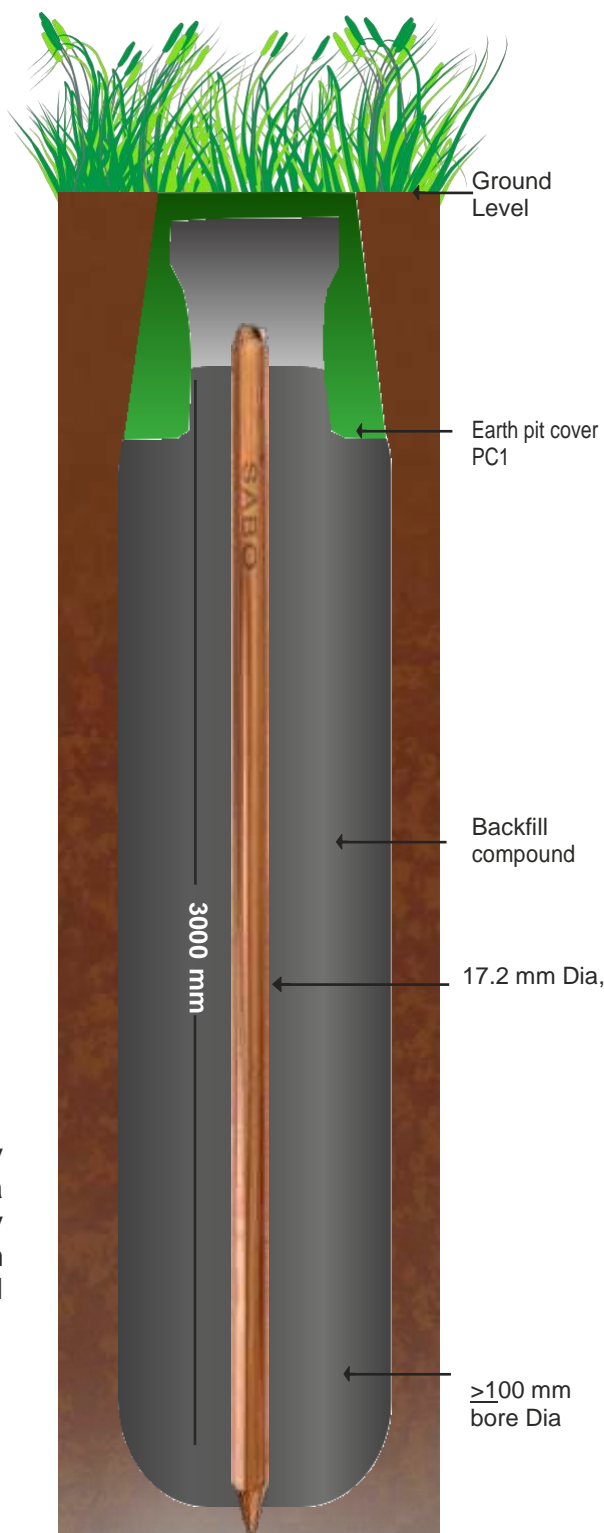
Good earth rods are commonly made from either copper, stainless steel or copper bonded steel. Copper bonded steel rods are preferred & most popular across the world due to its combination of corrosion resistance, strength, low cost & fairly high conductiveness.

Our copper bonded steel earth rods are mild steel of very high grade & tensile strength. They can be driven by power hammers to greater depth. Couplers are used to increase the length of copper bonded rods. Couplers are made of copper alloy which are corrosion resistance & high strength. These are of two types, compressed type & threaded type.

Copper RODs are being manufactured in various lengths and Dia with plain & threaded ends. Copper coating thickness up to 400 microns are manufactured but recommended to minimum 250 microns.

EARTHING INSTALLATION PROCEDURE:

1. Dig an earth pit of 125 - 150 mm Dia of required depth.
2. Wet the side walls of the earth pit & soil surrounding it & allow water to settle down.
3. Now make thick paste of back-fill compound by mixing 3kg compound with 2 liters of water.
4. Pour the paste inside the earth pit and place earth electrode in the center of the pit.
5. Now again make paste of back-fill compound by mixing 5kg compound with 5 liters of water and pour inside the pit.
6. Repeat the process till complete pit gets covered with compound.
7. Care should be taken while mixing the compound that no debris or plastic or air gap remains in the mixture
8. Place earth pit cover at the top of the earth pit in such a way that its top level is same as Ground Level.
9. Measure the earth resistance after couple of days once the compound gets set.
10. At locations where desired earth resistance is not achieved by single earth pit, then multiple earth pits should be installed at a distance of 3m from each other and connected together by suitable strip. This interconnecting strip should be buried 500 mm below the ground level for interconnection & covered by backfill compound paste.





READYMADE EARTHING KIT

Specification

1. Robust packing consist of :
 - a. 17.2mm 4' long copper bonded rod-SCBR17204
 - b. 5kg backfill compound
 - c. Clamp for connecting rod to strip / cable
2. Maintenance free earthing solution
3. Highly efficient
4. Easy to carry
5. Suitable for all type of soil / terrains and climatic conditions.

Application

1. Equipment body earth
2. Domestic earthing & Solar panel earthing
3. Suitable for load up to 5KVA, for larger capacity loads, multiple earthing should be done in parallel

Installation procedure:

1. Dig a bore of 100-150mm Dia & 1.2m deep
2. Pour 5 liters of water inside the kit & 20 liters of water in soil surrounding the kit. (for rocky soil this step is not required).
3. Make paste of 2 kg compound after mixing 5 liters of water. Mixing of compound with water should be made thoroughly by hand or stick till it take form of homogenous paste or say till 5 minutes.
4. Now pour this paste inside the pit.
5. Insert electrode / rod at the center of pit & hammer it so that some part should move inside the ground & Electrode gets grip.
6. Now fill the hole with the remaining compound paste after mixing with water in the same procedure.
7. Connect equipment and earthing through wire / cable / strip / clamp fitted at the top of the electrode.



EXOTHERMIC WELDING

We offer our clients a wide range of Exothermic Welding to our clients. These products are manufactured using high grade raw material. These products are mainly used in bonding in which one conductor / connector gets molecularly bonded to the other conductor/connector. The products offered by us are available at the most affordable rates to our clients. These products are in huge demand across the world.

Main features:

- Molecular bonding of copper and other metals can be made
- Current carrying capacity becomes equal to or greater than the conductor
- Will not deteriorate with age
- Withstand repeated faults
- Can be checked visually
- No special skills and labor required
- Never loosen or corrode
- No external power is required for jointing
- Easy to handle & Transportable



Applications:

Ideal for all earthing joints, strip joints, solid wire joints, rod joints, cable joints, wire and lug connections, cable and rail joints, continuity bonding and track circuiting, Grounding & bonding and lightning protection in power plants, substations, transmission line, refinery, industrial plant, commercial plants, telecommunication tower, building, housing etc.

