



PRODUCT CATALOGUE

NIKKON FERRO PRIVATE LIMITED

Manufacturer and Exporter of Ferrous
& Non-Ferrous Metal Earthing Products

Kolkata | India

www.nikkonferroprivatelimited.com





ABOUT US

Nikkon Ferro Private Limited (NFPL) is a manufacturing and export house of copper plated grounding products located in Kolkata, India since 1996. Spearheaded by a team of dedicated engineers and a dynamic management team, NFPL manufactures, exports, and distributes UL standard ground rods and accessories of various dimensions for safe and efficient earthing systems around the world.

These rods have applications in different industrial sectors:

- Telecommunications and Broadcasting
- Power Plants/Substations
- Transportation (Railways, Airports)
- Infrastructure:
(Township, Commercial, & Residential)

NFPL's global presence include North America, Latin America, Europe, and the Indian Subcontinent and are certified and affiliated with the following industrial organizations:

CERTIFICATIONS:

- UL Listed: Underwriters Laboratories
- ISO 9001:2015 Certified



AFFILIATIONS:

- EEPC :Engineering Export Promotional Council
- MCCI :Merchants Chamber of Commerce and Industry

EARTHING TECHNOLOGY

A stroke of lightning and many undetectable reasons can cause generation of fault currents that have high potential to damage electrical/electronic appliances. Similar fault currents can be generated at power supply sources and can be a direct threat to areas with electrical facilities and habitation.

Thus, the process of grounding and earthing has become an indispensable system to scatter such fault currents and provide a safe and secure environment for us and our electrical equipment.

Grounding or Earthing is a method to send the fault currents to the ground using metal conductors in an electrical wiring system that offers low impedance channel to the earth in order to avoid hazardous voltages.

NFPL has been incorporating novel designs along with advanced technologies to provide relevant industries with highly efficient copper bonded ground products in different sizes and grounding solutions for protecting our valuables.

PRODUCT PORTFOLIO

Our grounding product range include:

Copper Bonded Ground Rods

Copper Bonded Cold Rolled Threaded Ground Rods

Copper Bonded Chemical Earthing Electrode

Copper Bonded Earthing Electrode
with Welded Clamps

Ground Rods Accessories:

Clamps for Ground Rods

Heavy Clamps for Ground Rods

Coupling/Couplerfor Ground Rods

COPPER BONDED GROUND RODS

The copper bonded ground rod is the most widely used grounding electrode. It dissipates the current to the earth through physical connectivity. NFPL offers a complete line of rods and accessories to meet the industry needs.

Quality Measures:

- Visual check for uniform coating and devoid of pins and pits
- Digital thickness test
- Vernier caliper test for diameter
- Adhesion test
- Bending and wrapping test

COPPER-BONDED GROUND RODS

- Resist corrosion better than galvanized rods allowing for approximately 30-year service life in most soils
- Cold Drawn steel core complies with ASTM-A-370
- Tensile strength not less than 80,000 lbs, PSI
- Steel Rockwell hardness - B80 minimum
- Copper Coating is of 10mil (250 microns) minimum for UL standards requirement
- Cat Part, UL logo, Control Number, and Company Name are located within 12" of the chamfered end of each rod

- Other commercial requirements of copper coating ranges from 25 to 250 microns. We also customize the coating according to the requirements

SECTIONAL COPPER-BONDED GROUND RODS

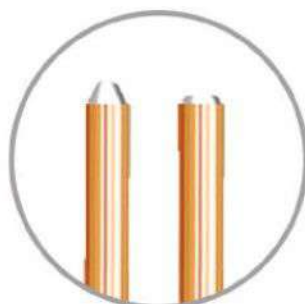
- Same as above
- Used to deep-drive rods
- Cold-rolled threads are stronger than cut threads.

SIZE AND WEIGHT CHART FOR COPPER BONDED GROUND RODS

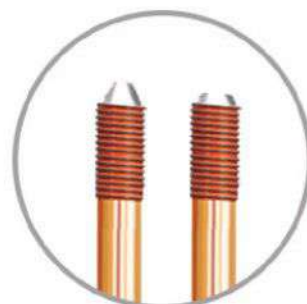
CAT PART NO.	SIZE	WEIGHT PER 100 PCS (LBS)	SUB/MASTER BUNDLE	CAT PART NO.	SIZE	WEIGHT PER 100 PCS (LBS)	SUB/MASTER BUNDLE
CE 512	1/2" X 5'	305	10/100	CE 858(5-MIL)	5/8" X 8'	650	10/100
CE 612	1/2" X 6'	370	10/100	CE 858	5/8" X 8'	655	10/100
CE 812	1/2" X 8'	500	10/100	CE 1058(UL)	5/8" X 10'	838	10/100
CE 812 (UL)	1/2" X 8'	500	10/100	CE 834 (UL)	3/4" X 8'	978	5/50
CE 1012	1/2" X 10'	700	10/100	CE 1034 (UL)	3/4" X 10'	1207	5/50
CE 1012 (UL)	1/2" X 10'	700	10/100	CE 1088 (UL)	1" X 10'	2205	5/25
CE 658	5/8" X 6'	510	10/100	CE 858 P13	5/8" X 8'	660	10/100
CE 458	5/8" X 4'	340	10/100	CE 558	5/8" X 5'	425	10/100

SIZE AND WEIGHT CHART FOR COPPER BONDED COLD ROLLED THREADED GROUND RODS

CAT PART NO.	SIZE	WEIGHT PER 100 PCS (LBS)	SUB/MASTER BUNDLE	CAT PART NO.	SIZE	WEIGHT PER 100 PCS (LBS)	SUB/MASTER BUNDLE
CE 812S	1/2" X 8'	545	10/100	CE 834S	3/4" X 8'	978	5/50
CE 1012S	1/2" X 10'	690	10/100	CE 1034S	3/4" X 10'	1215	5/50
CE 858S	5/8" X 8'	668	5/100	CE 1088S	1" X 10'	2285	25
CE 1058S	5/8" X 10'	838	5/100	CE 858 P13S	5/8" X 8'	671	5/100



COPPER BONDED GROUND RODS



COPPER BONDED COLD ROLLED THREADED GROUND RODS

GROUND RODS ACCESSORIES

Used for fitting and connecting ground rods

All bronze non-corrosive copper alloy

Suitable for direct burial

GROUND ROD CLAMP AND HEAVY CLAMPS, ROD TO ROD CONNECTOR, BRONZE

- Made of copper alloy
- Ensures perfect connection due to its nominal torque value.
- Bolts bronze and/or steel

COUPLING/COUPLERS FOR GROUND RODS

- Made of copper alloy
- Chamfered on both ends for easy driving
- Permits full contact of the rods being connected
- These corrosion resistant couplings ensure long lasting low resistance, rod to rod connections.
- Available in 1/2", 5/8", 3/4", 8/8" sizes

SIZE AND WEIGHT CHART FOR CLAMPS FOR GROUND RODS

CAT PART NO.	SIZE	WEIGHT PER 100 PCS (LBS)	SUB/MASTER BUNDLE
CE 38	3/8" STR 10 SOL	8.0	100
CE 12	1/2" 2 STR 10 SOL	9.0	100
CE 58	5/8" 2 STR 10 SOL	9.8	50
CE 34	3/4" 2 STR 10 SOL	12.5	50

SIZE AND WEIGHT CHART FOR HEAVY CLAMPS FOR GROUND RODS

CAT PART NO.	SIZE	WEIGHT PER 100 PCS (LBS)	SUB/MASTER BUNDLE
CE 12H	1/2" 2 STR 10 SOL	12.0	100
CE 58H	5/8" 1/0 STR 10 SOL	13.0	50
CE 34H	3/4" 1/0 STR 10 SOL	15.0	50



COUPLERS FOR GROUND RODS



CLAMPS FOR GROUND RODS



CLAMPS FOR GROUND RODS

COPPER BONDED CHEMICAL EARTHING ELECTRODE

Copper bonded grounding electrode has been considered as the most apt equipment for earthing purposes owing to excellent resistance to oxidization. The main copper coated earth electrode is saved by the copper bonding from corrosion and the crystalline mixture is filled within the electrode.

Designed on the principle of Flat-in-pipe technology, we coat copper earth electrode by Electrolysis process in microns. With a crystalline mixture, the annular space between the inner conductor and the external conductor is filled. After that, it is sealed cautiously from both the ends. Due to the anti corrosive and extremely conductive nature of crystalline mixture, it also offers low impedance grounding that is necessary for protecting transmitting facilities as well as personnel from any kind of internal electrical inconsistencies.

ADVANTAGES:

- Upto 250 micron CU on Steel
- Life Span: Due to 250 micron CU Bonded life is much more than GI & CU Earthing Rods
- High Conductivity with High Strength
- Cost Effective in comparision to life span of CU Rods
- Highly Reliable in the long run

FEATURES:

- Continuous electroplating processing
- Manufactured as per customes' requirement
- Value over the life of the product
- Reduced installation area and time



COPPER BONDED CHEMICAL EARTHING ELECTRODE



COPPER PIPE CHEMICAL EARTHING ELECTRODE

COPPER BONDED EARTHING ELECTRODE WELDED WITH CLAMPS

ADVANTAGES:

- Upto 250 micron CU Bonded on Steel
- Life Span: Due to 250 micron CU Bonded life is more than Earthing Rods
- Good Conductivity
- Cost Effective

FEATURES:

- Electrolysis process
- Manufactured as per customers' requirement
- Easy to install
- Reduced installation area and time

COPPER BONDED EARTH ELECTRODES

CAT PART NO.	SIZE (ROD)	SIZE (TERMINAL)
CBEE 5/8" X 6"	14.2 X 1800 MM	150 X 50 X 6 MM
CBEE 5/8" X 8"	14.2 X 2400 MM	150 X 50 X 6 MM
CBEE 5/8" X 10"	14.2 X 3000 MM	150 X 50 X 6 MM
CBEE 3/4" X 6"	17.2 X 1800 MM	150 X 50 X 6 MM
CBEE 3/4" X 8"	17.2 X 2400 MM	150 X 50 X 6 MM
CBEE 3/4" X 10"	17.2 X 3000 MM	150 X 50 X 6 MM



ADVANCED COPPER BONDED EARTHING ELECTRODE

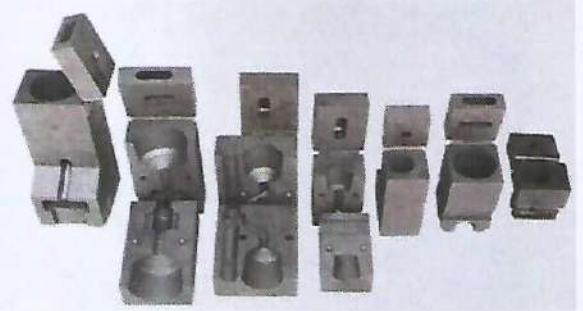


COPPER BONDED EARTHING ELECTRODE WITH CLAMPS

NIKKON LEE-EXOTHERMIC WELDING PRODUCTS

1) GRAPHITE MOULD

Graphite mould is made of high quality graphite suitable for high quality welding work and can be used for several times. The exothermic welding reaction takes place in a specially designed, semi permanent graphite mould. The mould is designed and manufactured with a specific weld cavity and it is in this cavity that the molten metal is allowed to flow to all sections.



2) HANDLE CLAMP FOR MOULD

These Handle Clamp will fit almost all standard exothermic Mould. Our recommendation one Handle for every two mould



3) STEEL METAL DISC

Steel Metal disc is must for every shot. The disc act as timing device to allow the welding powder to heat to proper temperature.



4) EXOTHERMIC WELDING POWDER

Lee Exothermic Weld Powder is the most reliable and Consistently-performing Weld metal.

Welding powder is in the tube and Ignite powder in small zip bag. The standards Size Packing available are – 15 Grams, 25 Grams, 32 Grams, 45 Grams, 65 Grams, 90 Grams 115 Grams, 150 Grams, 200 Grams, 250 Grams



5) IGNITE POWDER (STARTING POWDER)

Lee Ignite Powder also known as Starting Powder is required and is must. This resulting exothermic reaction reduces the weld powder to molten copper alloy.



6) HAND GLOVES

Gloves is required for safety purpose as the Exothermic Weld Powder Melts at more than 1400 degree Celsius. One Hand Gloves Good for 250 Joints.



7) **FLINT IGNITE**

Flint ignite is designed with the advantages of safety and convenience. It is used to ignite starting Powder in order to result in exothermic reaction. Our recommendation is one Flint ignite for every 50 Shots



8) **MOULD CLEANING BRUSH**

Mould Cleaning Brush is used to Clean Mould Weld Cavity because its shape is very sensitive and cavity should not be any damage while using Brush, so we recommend to use Soft Brush to Clean Mould Weld Cavity. Our recommendation is one Brush for 25 Connection



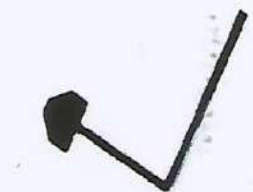
9) **CABLE CLEANING BRUSH**

Cable Cleaning Brush used for cleaning cable before making connection. Our recommendation is one Brush for 25 Connection



10) **MOULD SCRAPER**

It is used to remove the metal Slag and Dust from the Mould. Our recommendation is one Slag Scraper for 250 Connection



11) **FILE CARD (FCB)**

It is used to clean bus bar before making connection. Our recommendation is one Slag Tool for 50 Connection



12) **SEALING COMPOUND (SCD)**

Sealing Compound is used to fill the gap on the mould where the conductor is passing. Our recommendation is one Packet of Sealing Compound for 100 Connection



13) **FLAME TORCH (FD)**

Flame Torch is used to warm the mould. Our recommendation is one Flame Torch for 250 Joints



14) **SAFETY EYE GLASSES**

Safety Eye Glass should be wear to protect eyes. Our recommendation is one Flame Torch for 500 Joints





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