

OFFICE OF THE EXECUTIVE ENGINEER (RWS)
ZILLA PARISHAD GADCHIROLI

QUOTATION NOTICE

NO./ZPG/RWS/Mech/ 662 /2026

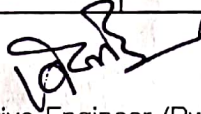
DATED 09.07.2026

Sealed quotation are invited by the undersigned for to reach this Office on or before --~~17/7/26~~ 5.00 PM for the supply of Lighting protection system as per described attached technical specification.

The rates should be inclusive of all taxes and duties and F.O.R. destination. Inferior quality of material / workmanship will not be accepted and the decision of this Office will be final in this regards.

Right to reject any all quotation is reserved with the undersigned.

Sr.No	Particulars	Specification	Qty No
1	Providing of early streamer emission lightning protection system (ESE System) (Radius Protection 107 Mtr)	As per attached Technical Specification	1 Nos


Executive Engineer (Rws)
Zilla Parishad, Gadchiroli

TO,

- 1) Mr. Umang Meshram, district project lead Z.p. Gadchiroli for publish on Z.P. Gadchiroli official website.
- 2) Notice Bord

Technical Specification of BFC

BFC (Back Fill Compound) Datasheet Material Description:

Material: A combination of Carbon Based.

Standards: Conforms to industry standards ensuring high performance and safety.

Specifications:

Standard - Carbon, etc.

Packing - 25KG

Product Code - BFCCBN25

PH value - 7.12

Resistivity - 1.32 Ohm-cm

Water soluble matter (Moisture Content %) - 16.96%

Colour - Black

Standard IEE80 & BS - 7430 :2011

Packing details - 25kg Bag

Sulphur content - 38%

Tolerance - +_5%

Key Properties:

Optimal Conductivity: Superior grounding performance for stable power distribution.

Durability: Enhanced strength and long-term protection.

Resistance: High resistance to corrosion and environmental degradation.

Applications:

Improving Conductivity:

BFC enhances the conductivity between the earthing electrode and the surrounding soil. This is particularly useful in areas with high soil resistivity, such as rocky or sandy terrain.

Moisture Retention:

It retains moisture around the electrode for extended periods, ensuring consistent grounding performance even in dry conditions.

Some BFCs have anti-corrosive properties, protecting the earthing electrode from degradation and extending its lifespan.

Stabilizing Earthing Resistance:

By providing a consistent low-resistance path, BFC minimizes fluctuations in earthing resistance due to environmental changes, such as seasonal variations.

Sensitive Installations:

BFC is vital for critical infrastructure like telecom towers, data centers, and power stations, where stable grounding is essential for safety and equipment performance.

Site Preparation:

Dig a pit for the earthing electrode as per design specifications (usually 3-5 meters deep).

Electrode Placement:

Install the electrode (e.g., copper or GI rod) at the center of the pit.

BFC Application:

Mix the BFC with water (if required) to form a slurry or use it in its dry form, depending on the manufacturer's instructions. Pour it around the electrode to fill the pit evenly.

Compaction:

Compact the BFC to remove air gaps and ensure good contact between the electrode and the compound.

Backfilling:

Cover the pit with soil after applying the BFC.

Advantages:

Safety: Protects electrical systems from surges and faults.

Performance: Ensures uninterrupted power and system stability.

Compliance: Meets international standards for reliability and safety.

Quality Assurance:

Thoroughly tested for material strength and durability.

Certified anti-corrosion treatment for extended life.

Supplied with material test certificates (MTC) for assurance.

Sr No Technical Specification of Copper Bonded Earth Rod

- 1 Type - Copper Plating
- 2 Size of Length Electrode (Rod) - 3000 mm
- 3 Dia of Rod - 17.2 MM
- 4 Rated Voltage - 33 KVA
- 5 Short Current Test in KA - 25 KA for 3 Sec
- 6 Rated Insulation Volatage - Nil
- 7 External Power Supply - N.R.
- 8 Frequency - 50 Hz
- 9 Weight of Electrode MS(ISI)
- 10 Outer surface of Electrode - Copper Plating
- 11 Copper Electro Palting -252 Micron
- 12 Rated short time current Duration (second) 3.00 second
- 13 Peak in KA - 50 KA
- 14 Equivalent Current I k Arms for 1.0 second - 1.0 second for 43.3 KA
- 15 Earthing Ohamic value (for Normal soil) less than 2 Ohm
- 16 Connecting Terminal size 50x5x200 mm
- 17 Standard - IS3043
- 18 Tolerance - +-5%
- 19 Accessories M10x80 Nuts bolts
- 20 Terminal 50 x 6 x 200 mm terminal copper bonded

No **Technical Specification of NFC-17-102 ESE Lightning Arrester (Radius Protection 107 Mtr)**

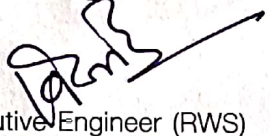
- 1 Make and Model ATS True power Ltd 107
- 2 Origin Country India
- 3 Technology ESE Type
- 4 Working Effect Corona Based Grounding
- 5 Area of Protection 107 Mtr Radius at Level-IV
- 6 60 μ Second
- 7 Test Conducted Lightning Impulse Current
- 8 Short Current Test 70kA With 5 Positive Discharge and 5 Negative Discharge
- 9 Impulse Current short 8/20 μ s indirect Lightning, 10/350 μ s Direct lightning
- 10 External Power Supply Not Require
- 11 Height of Mast
- 12 Operating Temperature Range -10 To 50 DegreeC
- 13 Type of Air Terminal/SS Rod Type
- 14 Length of ESE LA 625mm
- 15 Dia of Rod 48mm
- 16 Weight of Lightning Arrester 1.8Kg
- 17 Material Grade Outer Surface SS 304
- 18 Required Earthing Ohmic Value Maximum 2 ohm (as per NFC 17-102-2011)
- 19 Tested by CPRI
- 20 Standard NFC-17-102-2011

Sr No **Technical Specification of High GI Mast System**

- 1 Material Of Mast G I
- 2 Height Of Mast 7 mtr
- 3 No. Of Sections (3 Nos, 3000 mm, 2000mm,2000mm)
- 4 Material Construction S 355 Grade as per BS-EN10025
- 5 Top and Bottom Diameter 58 mm and 2 mm Pipe thickness
- 6 Base Plate Size 300x300x10 mm
- 7 Base Plate Thickness
- 8 No. of Bolts 8 Nos. M12x50
- 9 Base Plate Hole Size 14mm
- 10 Cross Section of Mast 20 side polygons
- 11 Standard for of Galvanization As per BS EN ISO 1461
- 12 Lightning Protection ESE LA
- 13 Net Weight 19 Kg more
- 14 Mast Outer Surface GI
- 15 Coating Min 80 Micron Zinc
- 16 Tensile Strength(N/mm) 422.00
- 17 Tolerance +_5%

Sr No Technical Specification of GI Nuts Bolts, J bolts and fastener

- 1 Make and Model True Power, TPJ12/300
- 2 PRODUCT DESCRIPTION J Bolts
- 3 APPLICABLE STANDARDS 1364/ part 1
- 4 USAGE For Connection
- 5 PRODUCT DIMENSIONS J bolt M12- 300mm
- 6 GALVANISING (Zinc coating) THICKNESS 80 100 microns
- 7 MECHANICAL/CHEMICAL PROPERTIES as per IS:1364-Part I
- 8 TESTING Dimensional, Elko meter Test, Mechanical and Chemical tests
- 9 Tolerance + 5%


Executive Engineer (RWS)
Zilla Parishad, Gadchiroli


Deputy Engineer (Mech)
Zilla Parishad, Gadchiroli