



**PROJECT SPECIFICATION AND BILL OF QUANTITY**

**FOR:**

**SUPPLY AND DELIVERY OF EARTH WIRE, BONDING CABLES AND SPARK GAPS FOR PRASA  
GAUTENG**



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**1. INTRODUCTION**

The purpose of this project is to provide a service to supply and deliver of earth wire, bonding cables, spark gaps, surge arresters and other accessories material.

**2. DESCRIPTION OF WORKS/SCOPE OF WORKS**

The contractor shall supply and deliver the following Electrical Material:

1. **Earth wire:** 61mm<sup>2</sup> Aluminium Conductor Steel Reinforced (ACSR).
2. **Bonding cable:** 97mm<sup>2</sup> PVC sheeted steel cables in accordance with BBC1678
3. **Spark gap:** 450 Volt Gas arrester Spark gap for traction power supplies in accordance with BBB1616.



Figure 1: Spark gap

**4. Uplift limiting device (Anti-lift device)**

5. **Lightning arrester (Arc horn type):** in accordance with BBB2141.

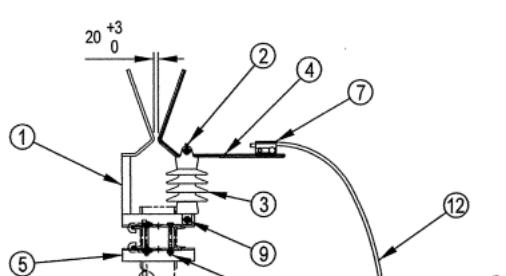


Figure 2: Horn arrester

**3. DURATION**

The project contract will be for 3 **months** from the date of award. i.e., Tenderer having acknowledged the receipt of award letter.



#### **4. GUARANTEE**

- 4.1. Prasa Metrorail shall be formally invited to conduct tests and visually inspect the material before delivery for any defects or damages.
- 4.2. The material shall be subjected to a guarantee period of one year. The guarantee period shall commence the day it is formally handed over to and accepted by Metrorail.
- 4.3. Any defects that may become apparent during the guarantee period shall be rectified to the satisfaction of the client at no cost to PRASA.
- 4.4. Should the contractor fail to comply with the above, Prasa is entitled to take effective replacement of the defective material. The contractor must reimburse Prasa Metrorail the total cost for replacement of materials.

#### **5. PENALTY**

Should the Contractor fail to complete delivery on/before the stipulated completion dates, a penalty fee of R5000 per week will be charged.

#### **6. DELIVERY**

All the material supplied must be delivered to Metrorail Gauteng North Region Store.

#### **7. BILL OF QUANTITIES**

| <b>OHTE</b>                               |  |            |                     |              |
|---|--|------------|---------------------|--------------|
| <b>Item</b>                               |  | <b>Qty</b> | <b>Rate</b>         | <b>Total</b> |
| Earth wire                                |  | 7500m      |                     |              |
| Bonding cable                             |  | 3500m      |                     |              |
| Spark Gap                                 |  | 100        |                     |              |
| Uplift limiting device (anti-lift device) |  | 40         |                     |              |
| Lightning arrester (horn type)            |  | 20         |                     |              |
| Earth bond Lugs                           |  | 500        |                     |              |
|   |  |            | <b>Total (Exc.)</b> |              |
|   |  |            | <b>VAT (15%)</b>    |              |
|   |  |            | <b>Total</b>        |              |