# PASCHIM GUJARAT VIJ COMPANY LTD TECHNICAL SPECIFICATION OF GI EARTHING STRIPS

### SCOPE:

This specification covers the supply, testing and delivery of Galvanizes Iron Earthing Strips for distribution network.

### Applicable Standard:

The galvanizing and testing of materials shall conform to the latest edition of the following standards.

Recommended Practice for hot dip galvanized of iron earthing	IS:2629 (1966)
strips	
Methods of testing uniformity of coating on zinc coated	IS:2633 (1972)
articles	
Hot dip Zinc coatings on Structural steel and other allied	IS:4759 (1996)
products	
Zinc for galvanizing	IS:13229 (1992)
Steel plates, sheets, strips and flats for structural and general	IS:1730 (1989)
engineering purpose - DIMENSIONS	
General requirements for the supply of metallurgical materials	IS 1387 (1993)
Methods for determination of mass of zinc coating on zinc	IS 6745
coated iron and steel articles.	

### <u>Size:</u>

GI strip of 25 mm wide, 3 mm thick having hot dip galvanized zinc coating of 80-100 microns. Average weight should be minimum 0.589 KG per meter without coating based on density of steel 7.85 gm/cm<sup>3</sup> confirm with IS 1730 (1989). The length of strip shall be 7.5 meter.

### Material:

Supplier has to purchase raw material MS flat as per relevant IS 2062-2011.

### Zinc Coating:

MS flat shall be galvanized in accordance with IS:2629-1986. The zinc required for galvanizing shall be quality Zn-98 and shall confirm to IS 209-1966 and its latest amendments. The coating should be uniform, smooth and free from visual defects.

### Tensile Strength:

Tensile strength should be minimum 410 MPa and internal bending diameter should be minimum 2t (Thickness) confirms with IS 2062 (2011).

#### <u>Tests:</u>

The following acceptance test shall be carried out on each and every lot at manufacturer premises at manufacturer's cost. The manufacturer must be fully equipped to carry out the tests at his premises in presence of PGVCL's inspector.

- 1. Visual examination
- 2. Dimension check
- 3. Tensile strength.
- 4. Mass of zinc coating (As per IS 4759)
- 5. Uniformity of zinc coating (As per IS 2633)
- 6. Adhesion of zinc coating

Manufacturer shall have to submit Test certificates with every lot for Chemical Composition.

#### Sample:

As mentioned in IS 4759 & IS 2633.

#### Packing:

Packing shall be bundle of 50 no of strips.

#### **Guaranteed Technical Particulars:**

Tender shall submit the Guaranteed Technical Particulars as per Performa attached here with only. The offer without technical particulars shall be ignored.

#### **Deviation from specification:**

No deviation in the above specification shall be allowed.

### ANNEXURE – A

Name of Manufacturer: -

Address:-

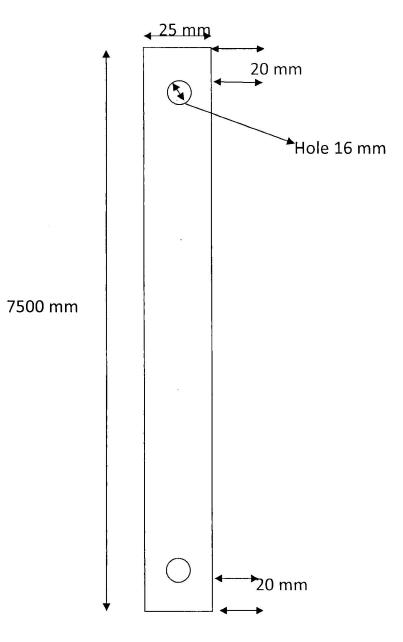
## **Guaranteed Technical Particulars**

SR NO	PARTICULARS	CONFIRMATION
1	MS Earthing Strip :- 25 mm x 3 mm with tolerance of 5 % in width	Yes
2	Tensile strength – 410 MPa	Yes
3	Minimum bending diameter – 2 t	Yes
4	Length of MS Earthing strip – 7.5 Meter	Yes
5	Zinc coating shall be as under	
	• Visual check as per IS 4759	Free from ash, dross and black spot
	• Adhesion Test as per IS 2629	No flacking of zinc coating
	• Knife Test (Sharp edge) IS 2629	No peeling of zing coating
	<ul> <li>Mass of Zing Coating Test</li> </ul>	610 GM/m <sup>2</sup> , 90 micron
	<ul> <li>Precee Test as per IS 2633</li> </ul>	No Copper effect
6	Holes of 16 mm diameter shall be provided at both ends as per drawing in Annexure-1.	Yes
7	Packing :- Bundle of 50 strips	Yes

#### **ANNEXURE -1**

Drawing showing holes of 16 mm diameter are to be provided at both end of MS STRIP

Thickness of MS Earthing Strip – 3 mm



Alleeseem.

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