

**TECHNICAL DATASHEET**
**1. PRODUCT NAME:**

- Low Carbon Galvanized Steel Wire for Armouring of Cables.

**2. APPLICATION/ USE OF THE PRODUCT:**

- Zinc-Coated (Galvanized) Steel Wire for Use in Armouring of Cables.

**3. ASSOCIATED DOCUMENTS / STANDARDS (IF APPLICABLE):**

- As per As per IS 3975:1999, IS 4826:1979, IS 2633:1986, IS 1755:1983, IS 1608:2005, IS 1717:1993 and Customer Specification.

**4. TECHNICAL SPECIFICATION :**
**4.1. CHEMICAL COMPOSITION:**

Element	Carbon	Manganese	Phosphorus	Sulfur	Silicon
%	Max. 0.10	Max. 0.40	Max. 0.035	Max. 0.035	Max. 0.10

**4.2. MATERIAL PROPERTIES:**
**4.2.1 As per IS 3975:1999 (G.I. Wire)**

*Nominal wire diameter	*Diameter Tolerance	*Tensile Strength	*Elongation (GL=Upto & incl.1.60mm - 125 mm and over 1.60mm - 250 mm)	*Wrapping Test (8 turns round on cylindrical mandrel)	*Torsion Test (GL=75 mm in case of 1.25 mm & more than 1.25 mm GL=150 mm)	*Zinc Coating (Gravimetric Method)		*Uniformity of coating		*Adhesion Test (8 turns round on cylindrical mandrel)	*Resistance Test (At 20°C)
						Light Coated	Medium Coated	Light Coated	Medium Coated		
(mm)	(mm)	(Mpa)	(%)		(Nos.)	(g/m <sup>2</sup> )	(g/m <sup>2</sup> )	(Nos. of 1 min dips)	(Nos. of 1 min dips)		Ω.cm
		Minimum	Minimum	1 x D	Minimum	Minimum	Minimum	Minimum	Minimum	4x D	Maximum
Reference Standard	IS 3975:1999	IS 1608:2005	IS 1608:2005	IS 1755:1983	IS 1717:1983	IS 4826:1979	IS 4826:1979	IS 4826:1979	IS 4826:1979	IS 4826:1979	IS 10810(Pt-42):1984
<b>1.40</b>	± 0.040	300-500	10	The wire shall not break	43		90		1	4xD	14.5X10 <sup>-6</sup>
<b>1.60</b>	± 0.045	300-500	10		37		95		1	4xD	14.5X10 <sup>-6</sup>
<b>2.00</b>	± 0.050	300-500	10		30		105		1	4xD	14.5X10 <sup>-6</sup>
<b>2.50</b>	± 0.065	300-500	10		24		110		1 & 1/2	4xD	14.5X10 <sup>-6</sup>

- The result of the adherence of zinc coating test shall show no signs of flaking or cracking
- The result for uniformity of zinc coating test shall show no signs of adherent copper deposits.

**TECHNICAL DATASHEET****5. MATERIAL QUALITY AND FINISH :**

- The wire shall be manufactured according to material properties in clause 4.
- The wire surface shall be smooth and free from rust, scale & any other contaminants.

**6. QUALITY CONTROL / QUALITY ASSUARANCE:**

- Test certificate with each lot as per table given in clause 4.2.
- \* - Characteristics covered in Test Certificate
- The Sampling plan is accordance with Purchaser.

**7. COIL DIMENSIONS:****7.0 G.I. Wire:- 1.40/1.60/2.00/2.50 mm**

- Inside diameter of Coil : 550-630 mm
- Outside diameter of Coil : Depends on coil weight
- Weight of Coil : 70 +/- 10 kg

**8. PACKAGING AND DELIVERY:**

- The Galvanized Steel Wire shall be in coil form.
- The bundles shall be wrapped with stretch film & HDPE roll.
- Galvanized binding wire 90<sup>0</sup> apart shall be holding the coil in place.

**9. COIL IDENTIFICATION:**

Each bundle shall be clearly labeled as per the following.

- Manufacturer Name
- Product Name
- Coil No
- Diameter in mm
- Lot No.
- Gross Wt. / Net Wt. (kg)
- Date of manufacturing
- Purchase Order Number