

## **RAW MATERIAL SPECIFICATION FOR HIGH TENSILE GALVANIZED STEEL WIRES**

**1. Scope:**

This specification covers the requirement of high tensile galvanized steel wires to be used to manufacture for reinforcement of overhead aluminum conductor and overhead steel conductor

**2. Quality requirement:**

The wire shall be smooth and round. The surface shall not have any flows, scratches, twists seams, scales and splits. It shall have no cavity and blowholes. There shall be no joint in the coil.

**3. Material:**

All steel wires shall be hot- dip galvanized the coating shall have uniform thickness, and shall be perfectly smooth, there shall be no bare sections due to peeling or other causes.

The wire shall be drawn after galvanization; steel wires shall not undergo any heat treatment. Acceptance tests shall be carried out on the uniformity, the weight, and adherence of the zinc coating

All steel wires shall be confirm to ASTM B498-83, IEC 61089/91-97, DIN 48200 part 3

ISO 1460-1992 (E), EN 10244-:2001

Diameter ( mm )	3.2
Tolerance ( mm )	± 0.05
Min. weight of zinc coating ( g / m <sup>2</sup> )	255
Min. Number of 1– minute dips	3.5
Tensile strength before Stranding (kg/mm <sup>2</sup> )	134-155
Min. Elongation before stranding %	4
Length of coil ( m )	4100 ±10
Weight of coil approx. ( kg )	260

**4. Packing:**

Each coil shall contain one continuous length of wire without welding, and with central winding 2 (z 2) and with a suitable hard carton cylindrical core (spool cores) and secured by six steel hoops.

- Preferred dimension: ID = 350 mm

H = 250 – 280 mm

OD = 750 mm (about) according to the length of the coil

- Coils shall be properly wrapped with bituminized paper or PE sheets to render it reasonably waterproof during transportation, and be put on wooden pallets.

- Each coil shall have a tag showing:

A - Net & gross weight of coil.

B - Wire diameter.

C - Serial number of coil.

D - Finish and grade of material.

**5. Test certificate:**

Each consignment shall be accompanied with a test report giving technical composition, galvanization report, and tensile strength values, etc..

**6. Criteria of acceptance/ rejection:**

The material shall be subjected to inspection and the tests shall be carried out for acceptance/ rejection on part or whole lot.

**7. Sample:**

5 kg of steel wire to reach our company before closing dates by express delivery.

Unless his material is already successfully tested

Sample shall be the basis for accepting or rejecting the offer.