

ORDNANCE CABLE FACTORY, CHANDIGARH

Specification for High Carbon Steel Galvanized Wire of 1mm Dia

I Scope: This specification covers the requirement of High Carbon Steel Galvanized Wire of 1 mm dia for use in Field cable JWD 1.

II Related specifications for reference only:

- IS 7904-1975 :Specification for High Carbon Steel Wire Rods
- IS 209- 1966 :Specification for Zinc

III Specific condition of material:

1. As received condition:

- 1.1 Wire in coil form and each coil, has to have a single running length.
- 1.2 The Wire shall be free from defects viz fins, splits, surface flaws, rough, imperfect edges and other harmful surface defects.

2. Dimensions and Tolerances:

- 2.1 The wire shall have diameter of 1.00 mm to 1.04 mm.
- 2.2 The inner diameter of coil should be between 360 to 370mm.

IV Chemical composition:

Chemical Composition of wire shall conform to the following:

S.No	Constituent	Percent
1	Carbon	0.65-0.75
2	Manganese	0.30-0.60 X
3	Sulphur	0.025 Max
4	Phosphorous	0.025 Max
5	Sulphur & Phosphorous	0.04 Max
6	Silicon	0.15- 0.35

(as per amendment)

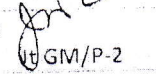

V Zinc Coating:

The wire is to be coated with electrolytic Zinc of 99.5% purity.

VI Mechanical properties:

Tensile strength (UTS): 115 to 130 Kg/mm²

VETTED
28.5.2016
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Dated: 16/05/2006	Dated: 25/06/2010	Vetted By: 

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VII End Use of product:

This wire is to be further drawn up to size of 0.282-0.290 mm dia, so as to give UTS of 200 to 225 Kg/mm² and zinc coating of 25gm/Kg and shall be able to withstand minimum 75 twists in 76mm length.

VIII Packaging:

- a) The material is to be supplied in coil form, properly packed in plastic sheets to avoid mechanical damage & direct exposure to rain /water.
- b) Each Coil should be of approx. 30kg weight after packaging.

IX Quality Assurance:

- 1 Each lot/batch shall be checked and accompanied with test certificate by manufacturer.
- 2 The material should be uniform in quality and free from foreign material and defects.
- 3 For other relevant data not mentioned in this specification, refer Clause II of this specification.

X Acceptance criteria:

Material will be accepted on following criteria:

Clause no. III(2), clause no. IV, Clause no.VI & clause no.VII

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NOTING

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Date:

Subject: Specification amendment of.

Ref: PV letter no. PV/1925/MISC dated 19.08.2015

Vide letter under reference, PV section has intimated that in sl. No. 1-2012-0094 dated 04.05.2012 and 1-2012-0461 for Galvanized Steel Wire the upper limit acceptable for manganese is 0.80% maximum.

However, there is no record available of manganese composition for the steel wires supplied against the above mentioned supply orders. The composition of manganese may be amended as 0.30 - 0.80%. This galvanized 1mm wire would be cold drawn up to 0.285mm. ~~The material supplied should not break while being drawn from 1mm to 0.285mm and also no springness effect should take place. A 60kg of sample may be provided by the firm supplying the material before going for bulk supply.~~

