

**SCHEME OF TESTING AND INSPECTION FOR
CERTIFICATION OF
GALVANIZED STEEL BARBED WIRE FOR FENCING ACCORDING
ACCORDING TO IS 278:2009
(Fourth Revision)**

1 **LABORATORY** - A laboratory shall be maintained which shall be suitably equipped and staffed, where tests shall be carried out in accordance with the methods given in the specification.

2 **TEST RECORDS** – All records of tests, inspection and calibration shall be kept in suitable forms approved by the Bureau.

2.1 All testing apparatus/measuring instruments shall be periodically checked and calibrated and records of such checks/calibration shall be maintained.

2.2 Copies of any records and other connected papers that may be required by the Bureau shall be made available at any time on request.

3 It is recommended that, as far as possible. Statistical Quality Control (SQC) methods may be used for controlling the quality during production as envisaged in this scheme (See IS 397 (Part 1) to IS 397 (Part IV)).

3.1 In addition, effort should be made to gradually introduce a-Quality management System as per IS/ISO 9001.

4 **STANDARD MARK** - The Standard Mark as given in Column (1) of the first schedule of the licence shall be printed/stamped/stenciled on each reel of galvanized steel barbed wire, provided always that the barbed wire in each reel to which this mark is thus applied conforms to every requirement of the specification.

4.1 **MARKING** - In addition, the following information shall be given on the label applied to each reel:

- a) Name of the manufacturer or his recognized trade mark,
- b) Type and designation of the barbed wire;
- c) Diameter of the line and point wires;
- d) Barb-spacing;
- e) Length and/or mass of reel; and
- f) Identification in code or otherwise to enable the date and lot of manufacture to be traced back to factory records.
- g) Licence Number (i.e. CM/L.....)

4.2 **PACKING** - Unless otherwise agreed to between the supplier and the purchaser, the barbed wire shall be supplied in metal or wooden reels. Each reel of barbed wire shall be wound and fastened completely.

5. **LEVELS OF CONTROL:** The tests as indicated in Table 1 and at the levels of control specified therein shall be carried out on the whole production of the factory which is covered by this scheme and appropriate records and charts maintained in accordance with paragraph 2 above. All the production which conforms to the Indian Standard and covered by this licence shall be marked with certification mark of the Bureau.

5.1 On the basis of tests, the decision regarding the conformity or otherwise of the product to the various requirements of the specification shall be made as follows.

5.1.1 **MANUFACTURE, SIZES AND FREEDOM FROM DEFECTS:** A sample from each reel shall be checked for the manufacture, sizes and freedom from defects as per clauses 5, 7 and 8 of the Indian Standard and the reels found defective shall be rectified.

5.2 In respect of all other clauses of the specification, the factory shall maintain appropriate controls and checks to ensure that their product conforms to the various requirements of the specification.

7 **REJECTION:** A separate record shall be maintained giving information relating to the rejection of barbed wire not conforming to the specification and the method of its disposal. Such material shall not be stored together with that conforming to the specification.

8 **SAMPLE** – The licensee shall supply, free of charge the sample required in accordance with the Bureau of Indian standard (certification) Regulations, 1988 as subsequently amended, from the factory or godowns. The Bureau shall pay for the samples taken by it from open market.

9 **REPLACEMENT** – Whenever a compliant is received soon after the goods with standard mark have been purchased and used, and if there is adequate evidence that goods have not been misused defective goods are replaced free of cost by the licensee in case the compliant is proved to be genuine and the warranty period (where applicable) has not expired. The final authority to judge the conformity of the product to the Indian Standard shall be with the Bureau. The firm shall have own complaint investigation system as per IS/ISO 10002.

9.1 In the event of any damage caused by the goods bearing the standard mark or claim being filed by consumers against BIS Standard Mark, and not “conforming to” the relevant Indian Standard entire liability arising out of such non conforming product shall be of the licensee and BIS shall not in any way be responsible in such cases.

10 **STOP MARKING** – The marking of the product shall be stopped under intimation to the Bureau if at any time there is any difficulty in maintaining the conformity of the product to the specification or the testing equipment goes out of order. The marking may be resumed as soon as the defects are removed under intimation to the Bureau.

10.1 The marking of the product shall be stopped immediately if directed to do so by Bureau for any reason. The marking may then be resumed only after permission by the Bureau. The information regarding resumption of the marking shall also be sent to the Bureau.

11 **PRODUCTION DATA** – The licensee shall send to BIS as per the enclosed proforma -1 to be authenticated by a Chartered Accountant a statement of quantity produced, marked and exported by him and trade value thereof at the end of each operative year of the licence.

Table1...

IS 278:2009
GALVANIZED STEEL BARBED WIRE FOR FENCING ACCORDING
TABLE 1 LEVELS OF CONTROL
(Para 5 of the Scheme of Testing and Inspection)

TEST DETAILS			LEVELS OF CONTROL			REMARKS	
Sr. No.	Requirement	Test Method		No. of Samples	Lot Size		Frequency
		Clause	Reference				
6	Material		IS 280	One	Each consignment	In case consignment is supported by a test certificate ensuring conformity to IS 280, no further testing is required.	
5	<u>Sizes</u>						
	Diameter of line wire	5	IS 278:2009	One	Each reel		
	Diameter of point wire	5	-do-	One	-do-		
	Distance between two barbs	5	-do-	One	-do-		
	No. of lays between two consecutive barbs	5	-do-	One	-do-		
7 5 9	Manufacture	7.1 & 7.2	IS 278:2009	One	Each reel		
	Mass of completed barbed wire	5	-do-		Each reel		
	Freedom from defects	9	-do-		Each reel		
12	<u>Tests</u>						
12.1	Tensile test of line wire	12.1	IS 278:2009	Three	Each consignment or part thereof.		
12.1	Tensile test of completed barbed wire	12.1	-do-	One	Every 50 th reel of barbed wire of one type or part thereof manufactured in a day.	If the sample fails, sample from two reels manufactured before and two reels after the non-conforming reel shall be tested. the reels shall be marked if these four samples are found to be satisfactory.	
12.2	<u>Zinc coating</u>					Protective chromatic conversion coating may be given on the barbed wire as per agreement with the purchaser.	
	Line wire	12.2.1	IS 278:2009	One	Every 25 th reel of barbed wire & one type or part thereof manufactured in a shift with a minimum of two per shift.		
	Point wire	12.2.2	-do-	One			
8	<u>Chromating</u>	8	-do-	One			
12.3	Ductility test	12.3	-do-	One			

Table II.....

