

**SCHEME OF TESTING AND INSPECTION
FOR CERTIFICATION OF
STEEL CHEQUERED PLATES
ACCORDING TO IS 3502:2009**

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

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

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

2.1 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. QUALITY CONTROL – It is recommended that, as far as possible, Statistical Quality Control (SQC) methods may be used for controlling the quality of the product during production as envisaged in this Scheme [See IS 397(Part I) to IS 397 (Part 4)].

In addition, effort should be made to gradually to introduce Quality Management system in accordance with IS/ISO 9001.

4. STANDARD MARK – The Standard Mark, as given in Column (1) of the First Schedule of the licence shall be applied on the Steel Chequered Plates provided that the Steel Plates to which the mark is applied, conform to every requirement of the specification.

4.1 In addition, the top plate of each pile of chequered plates shall be marked legibly and indelibly with the following details.

- (a) Manufacturer's name or trade mark;
- (b) Cast/lot number or identification mark by which the steel plates can be traced to the cast from which it has been made; and
- (c) Steel designation;
- (d) CM/L No.

5. TEST CERTIFICATE – For each consignment of BIS certified material conforming to IS 3502, there shall be a test certificate as given in Annexure-I, containing the Standard Mark, the cast/lot numbers, plate/coil number and the corresponding test results

6. SUPPLY OF MATERIAL- General requirements relating to supply of material shall conform to IS 8910.

7. **MATERIAL** - Unless otherwise specified, the steel (base plate) for chequered plates shall conform to Grade E 250 A of IS 2062. The base material other than E 250 A of IS 2062 may be supplied, if agreed to between the purchaser and the manufacturer.

8. **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 2.0 above. All the production which conforms to the Indian Standards and covered by the licence shall be marked with certification mark of the Bureau.

9. **LOT** – A lot shall consist of 5 coils from same/different cast having maximum of 40 tonnes.

9.1 Selection and preparation of test samples shall be done in accordance with clause 7 of IS 3502.

10. **REJECTIONS** - A separate record shall be maintained giving information relating to the rejection of the production not conforming to the requirements of the specification and the method of its disposal. Such material shall in no circumstances be stored together with those conforming to the specification .

11 **SAMPLES** - The licensee shall supply, free of charge, the samples required in accordance with the Bureau of Indian Standards (Certification) Regulations, 1988, as subsequently amended, from the factory or godowns. The Bureau shall pay for the samples taken by it from the open market.

12. **REPLACEMENT-** - Whenever a complaint is received soon after the goods with Standard Mark have been purchased and used, and if there is adequate evidence that the goods have not been misused, defective goods are replaced free of cost by the licensee in case the complaint 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.

12.1 In the event of any damages caused by the goods bearing the Standard Marks, or claim being filed by the 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 licensee and BIS shall not in any way be responsible in such cases.

13. **STOP MARKING** - The marking of the product shall be stopped under intimation to the Bureau if, at any time, there is some difficulty in maintaining the conformity of their 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.

13.1 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 marking shall also be sent to the Bureau.

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

Table 1.....

IS 3502:2009
SPECIFICATION FOR CHEQUERED STEEL PLATES
TABLE 1 LEVELS OF CONTROL
(Para 8 of the Scheme of Testing and Inspection)

TEST DETAILS				LEVELS OF CONTROL			
Cl.	Requirement	Test Methods		No. of samples	Lot Size	Frequency	Remarks
		Clause	Reference				
1.	Chemical Composition a) Ladle Analysis b) Product Analysis	4	IS 3502:2009	Two, For Heat <100 MT Three, For Heat >=100MT One sample from every 100 MT of material or part thereof rolled from the same cast.	One heat	Every heat	i) For Heat <100 MT - Two samples should be drawn (one each from the beginning and end of teaming) ii) For Heat >=100MT- Three samples should be drawn (one each from the beginning, middle and end of teaming).
2.	Freedom from defects	5	IS 3502:2009	Each Plate	Each Plate	Each Plate	
3.	Tensile Test	7 & 8	IS 3502:2009	One	40 tonnes or part there of finished chequered plates from one cast/lot.	Each cast/lot.	
4.	Bend test	7 & 9	IS 3502:2009	One	20 tonnes or part there of finished chequered plates from one cast/lot	Each cast/lot	
5.	Dimensions and Rolling Tolerances	10.1 to 10.2	IS 3502:2009	-	Adequate inspection to ensure each item to be within the limits of specification.	-	
6.	Pattern & Chequered Height	6 & 10.3	IS 3502:2009	-	-do-	-	

ANNEXURE -I
(Para 5 of the Scheme of Testing and Inspection)
XYZ - IRON AND STEEL COMPANY
(Registered Office Address and works address)

**STANDARD
MARK**

TEST CERTIFICATE FOR STEEL CHEQUERED PLATES

TEST CERTIFICATE NO. _____ DATE _____

To M/s _____

It is certified that the material described below conforms to IS 3502:2009. The chemical composition and mechanical properties of the product, as tested in accordance with the Scheme of Testing and Inspection contained in the BIS Certification Marks Licence No. CM/L _____ are as indicated below against each order no.

{ PLEASE REFER TO IS 3502:2009 FOR DETAILS OF SPECIFICATION REQUIREMENTS }

TEST RESULTS

Order No.& Date	Section (Nom.Size)	Cast/Lot No.	Quantity (MT)	CHEMICAL COMPOSITION				MECHANICAL PROPERTIES					Remarks
				C (%)	Mn (%)	S (%)	P (%)	Yield Stress (MPa)	Tensile Strength (MPa)	Elongation (%)	Bend Test	Grade	

REMARKS - The material supplied conforms to IS 3502:2009

SHIPPING ADVICE NO.
WAGON NO.
TRUCK NO.

SIGNATURE OF AUTHORISED SIGNATORY
DESIGNATION
FOR XYZ IRON AND STEEL COMPANY

{It is suggested that size A-4 paper (210 X 297 mm) be used for this Test Certificate

PERFORMA - 1

PROFORMA FOR OBTAINING PRODUCTION DETAILS

Period covered

Name of Licensee

CM/L No.

Name of Articles (s)

IS No.

Grade/Type/Size/Variety/Class/Rating

- 1.1 Brand/Trade/Name(s) of BIS Certification Marked Products
 - 2.0 Total production of the articles(s) licensed for certification marking
 - 2.1 Total production of the article(s) conforming to Indian Standard
 - 3.0 Production covered with BIS Certification Mark and its value
 - a) Quantity
 - b) Value (Rs.)
 - 3.1 Brand Name used on production covered under BIS Certification Mark
 - 3.2 Calculation of marking fee on unit-rate basis; Marking Fee per unit
 - a) Unit
 - b) Quantity covered with BIS Certification Mark
 - c) Marking fee rounded off in whole rupees as obtained by applying unit rates given in (a) on quantity given in (b)
- Note : In case a clause is not applicable, suitable remarks may be given against it.
- 4.0 Quantity not covered with BIS Certification Mark. If any, and the reasons for such non-coverage
 - 4.1 Brand Name under with non certified goods were sold
 - 5.0 Quantity Exported with BIS Standard Mark and its value
 - 5.1 Brand Name under which BIS Certified goods are exported
 - 6.0 Authentication by Chartered Accountant or by the manufacturer by giving an affidavit/undertaking