



भारतीय मानक ब्यूरो

(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)

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## Review Document

### Basic Details

1.	Sectional Committee No. & Title:	MTD 4 - Wrought Steel Products Sectional Committee
2.	IS No :	IS 8564 : 1977
3.	Title :	Specification for steel wire for nipples for spokes
4.	Date of Previous Review:	March, 2017

### Review Analysis

#### 5.1 Status of standard(s), if any from which assistance had been drawn in the formulation of this IS.

S.No.	Standard (No.)	Standard (Title)	Whether the standard has since been revised	Major changes	Action proposed
No entry made in this table					

5.2 Status of standard referred in the IS.						
S.No.	Referred standards (No.)	Referred standards (Title)	Since revised IS no. of the corresponding IS	Changes in the referred Standards since last review of IS	Changes in the referred standard which are affecting the standard under review	Action proposed
1	IS 1956 : Part 5 : 1976	Glossary of terms relating to iron and steel: Part V bright steel bar and steel wire (First Revision)	IS 1956 : Part 5 : 1976	Amendment 1 to the standard, published in 1987, substitutes the existing clause 2.138 with a new clause which mentions a new definition of "Wire".	No	No action needed, as the standard has been amended and not revised.
2	IS 1387 : 1993	General requirements for the supply of metallurgical materials (Second Revision)	IS 1387 : 1993 ( Second Revision)	It was felt that the original title of the specification made reference only to metals and metal products and as such doubts were expressed while making reference to this standard in specifications relating to raw materials, such as refractory materials, ferro-alloys, metallurgical coke and foundry raw materials. Therefore, it was decided to change the title and scope of this standard to cover metallurgical materials including raw materials and finished products.	No	Proposed to incorporate the 2nd revision
3	IS 228 : 1959	Methods of chemical analysis of pig iron, cast iron and plain carbon and low alloy steel	1)IS 228 : Part 1 : 1987 ISO 9556:1989 (2)IS 228 : Part 8 : 1989 ISO 439:1994 (3)IS 228 : Part 12 : 2001 (4)IS 228 : Part 9 : 1989 (5)IS 228 : Part 3 : 1987	1. a) The limit of determination of carbon in steel have been modified as 0.05 to 2.50 percent in place of greater than or equal to 0.1 percent. b) The range of pressure for the correction factors have been incorporated from 730 to 770(mm Hg) instead of 700 to 770(mm Hg).... (2)In this revision the limit for determination of silicon has been modified as 0.05 to 5.00 percent in place of greater than or equal to 0.1 percent and the reproducibility of the method has also been incorporated.....(3)During this revision the method for determination of manganese in high alloy steels have been included and the periodate spectrometric method specified in the standard has been updated.....(4)This standard IS 228 ( Part 9 ) was published in 1975. In this revision part has been updated and reproducibility of the method incorporated.....(5) In this revision method for determination of phosphorus in following alloy steels has been incorporated: a) Stainless steel, high chromium, nickel chromium and similar alloy steels without tungsten or vanadium,	Reproducibility of the method has been incorporated in IS 228: part 8: 1989 and IS 228: Part 9 : 1989.	Proposed to revise the standard as per the revised test IS issued in parts
4	IS 1521 : 1972	Method for tensile testing of steel wire	IS 1608 : Part 1 : 2018 ISO 6892 -1:2016	IS 1521 : 1972 has been withdrawn. a) Dimensions of the test piece: The original gauge length, L <sub>0</sub> , shall be taken as 200 mm ± 2 mm or 100 mm ± 1 mm. Tolerance has been mentioned in the standard IS 1608. b) Cross sectional Area: So 1.Determine So to an accuracy of ±1 or better. Tolerance increased from ±0.5 to ±1 2. For products of circular cross-section, the original cross-sectional area may be calculated from the arithmetic mean of two measurements carried out in two perpendicular directions. 3. The original cross-sectional area, So, in square millimetres, may be determined from the mass of a known length and its density using Formula (C.1): So = (1000.m)/ρ Formula for determination of original cross section area has been mentioned in the standard IS 1608. c) Determination of Tensile Strength: If only the tensile strength of the material is to be measured, a single strain rate can be used throughout the test which shall not exceed 0.008 s <sup>-1</sup> .	No	IS 1521 : 1972 has been withdrawn. Proposed to include IS 1608 : Part 1 : 2018 in the standard under review
5	IS 1501 : 2002	Method For Vickers Hardness Test for Metallic Materials	IS 1501 : Part 1 : 2020 ISO 6507-1:2018	The major changes in this revision are as follows: a) resolution requirements for the measuring system have been defined; b) requirements for the periodic (weekly or daily) verifications of the testing machine are normative, and the maximum permissible bias value has been revised. Requirements for the maximum permissible error in measuring a reference indentation have been revised; c) recommendations for inspection and monitoring of the indenter have been added; d) requirements have been added for the approach velocity of the indenter prior to contact with the sample surface; e) the timing requirements for the test force application and the duration at maximum test force have been revised to indicate target time values; f) Figure 2, which illustrates the requirements for the minimum distance between indentations, has been added, but the requirements have not changed; g) requirements have been added to the test report for reporting the test date and any hardness conversion method used; h) Annex D has been revised; and i) Annexes E, F and G have been added concerning Vickers hardness measurement traceability, the CCM — Working group on hardness and adjustment of Köhler illumination systems.	g) requirements have been added for the approach velocity of the indenter prior to contact with the sample surface;h) the timing requirements for the test force application and the duration at maximum test force have been revised to indicate target time values	Proposed to include IS 1501 : Part 1 : 2020 in the standard under review

**5.3 Any other standards available related to the subject & scope of the standard being reviewed (International/regional/other national/association/consortia, etc or of new or revision of existing Indian Standard).**

S.No.	Standard (No.)	Standard (Title)	Provisions that could be relevant while reviewing the IS	Action proposed
No entry made in this table				

5.4 Technical comments on the standard received, if any.				
S.No.	Source	Clause of IS	Comment	Action proposed
No entry made in this table				

  

5.5 Information available on relevant technical developments				
S.No.	Source	Development	Relevant clause of the IS under review that is likely to be impacted (Clause & IS No.)	Action proposed
No entry made in this table				

  

5.6 Issues arising out of changes in any related IS or due to formulation of new Indian Standard.					
S.No.	Related IS (revised or new)	Related IS Title	Provision in the IS under review that would be impacted & the clause no. or addition of new clause/provision	Changes that may be necessary in the Standards under review	Action proposed
No entry made in this table					

  

5.7 Any consequential changes to be considered in other IS.			
S.No.	Related IS to get impacted	Related IS Title	Requirements to be impacted
No entry made in this table			

Other Details	
6.	<p>Any other observation:</p> <p>1. There is no Indian Standard on determination of lead and tellurium, which is a requirement as per the allotted standard. 2.It was found that there were no licensees of the specified IS. Therefore the vendors of a few cycle manufacturers and nipple manufacturers were contacted for getting their inputs on the IS. The vendors informed that the mild steel nipple was most commonly used and were imported by them from china owing to their cheaper price. The vendors further informed that apart from steel nipples the nipples which were most commonly in use were Brass nipples, Aluminium Nipples, Stainless steel nipples and zinc plated nipples.</p>
7.	Upload Supporting Document(s)
7.1 ARP Report	<a href="#">Review Analysis of Indian Standard (1)(1).docx</a>
7.2 Draft Document	No Document Uploaded
8.	<p>Recommendations - On the basis of the analysis of the info available as mentioned above consideration of sectional committee is solicited on the following aspects of the IS under review:</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>The standard may be revised incorporating the changes as detailed above .</p> </div>