



## DRAFT INDIAN STANDARD IN WIDE CIRCULATION

Reference : MTD3/T-45

Date : 11 June 2024

**TECHNICAL COMMITTEE : Mechanical Testing of Metals Sectional Committee, MTD 03**

To,

**All concerned**

Dear Madam/Sir,

The following document has been prepared by the Mechanical Testing of Metals Sectional Committee Sectional Committee, MTD 03. Please [click here](#) to view the document.

**Document Number : MTD 03 (25819) WC**

**Title of the document : Metallic materials Vickers hardness test Part 1: Test method**

**Document Type : Revision of Indian Standard (IS 1501 : Part 1 : 2020)**

*This document has following salient features which may require specific attention for your valuable comments:*

- 1) This document specifies the Vickers hardness test method for the three different ranges of test force for metallic materials, including hard metals and other cemented carbides (see Table 1), metallic coatings and other inorganic coatings. The Vickers hardness test is specified in this document for lengths of indentation diagonals between 0.020 mm and 1.400 mm. Using this method to determine Vickers hardness from smaller indentations is outside the scope of this document as results would suffer from large uncertainties due to the limitations of optical measurement and imperfections in tip geometry.*
- 2) The Vickers hardness specified in this document is also applicable for metallic and other inorganic coatings including electrodeposited coatings, autocatalytic coatings, sprayed coatings and anodic coatings on aluminium. This document is applicable to measurements normal to the coated surface and to measurements on cross-sections, provided that the characteristics of the coating (smoothness, thickness, etc.) permit accurate readings of the diagonal of the indentation.*
- 3) This document is not applicable for coatings with thickness less than 0.030 mm when testing normal to the coating surface. This standard is not applicable for coatings with thickness less than 0.100 mm when testing a cross-section of the coating. ISO 14577-1 can be used for the determination of hardness from smaller indentations." A periodic verification method is specified for routine checking of the testing machine in service by the user. For specific materials and/or products, relevant International Standards exist.*

Please examine the document and share your comments regarding further improvement in the document.

**Last date for sharing the comments is : 11 July 2024**

The comments should be shared in the prescribed template through this portal only; and the comments so received shall be taken up by the Sectional Committee for necessary action. For any other query, please write an email at [mtd@bis.gov.in](mailto:mtd@bis.gov.in) to the undersigned at Bureau of Indian Standard, Manak Bhawan, 9, Bahadur Shah Zafar Marg, New Delhi.

In case no comments are received, we would presume your approval of the documents. However, in case we receive any comments on the document, the same shall be put up to the Sectional Committee for necessary action.

Thanking You,

**Yours faithfully,**  
**(SANJIV MAINI)**  
**Head (Metallurgical Engineering Department)**  
**Email: mtd@bis.gov.in**



## व्यापक परिचालन में मसौदा(दे)

हमारा सन्दर्भ : MTD3/T-45

दिनांक : 11-06-2024

**तकनीकी समिति : Mechanical Testing of Metals Sectional Committee Sectional Committee, MTD 03**

प्राप्तकर्ता : रूचि रखने वाले सभी निकाय

महोदय/या,

निम्नलिखित मसौदा तैयार किया गया है :

प्रलेख संख्या : MTD 03 (25819) WC

शीर्षक :

कृपया इस/इन मानक(को)/संशोधन(नो) के मसौदे(दो) का अवलोकन करें और अपनी सम्मतियाँ यह बताते हुए भेजें कि यदि ये मानक(को) के संशोधन(नो) के रूप में प्रकाशित हो तो इन पर अमल करने में आपके व्यवसाय अथवा कारोबार में क्या कठिनाइयां आ सकती हैं।

**सम्मतियाँ भेजने की अंतिम तिथि : 11 July 2024**

सम्मतियाँ, यदि कोई हों तो, कृपया यहाँ क्लिक करके ऑनलाइन पोर्टल के माध्यम से ऊपर दी गयी अंतिम तिथि तक दर्ज कराएं।

यह/ये प्रलेख भारतीय मानक ब्यूरो की वेबसाइट [www.bis.gov.in](http://www.bis.gov.in) पर भी उपलब्ध है/हैं।

धन्यवाद।

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