



भारतीय मानक ब्यूरो

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

**BUREAU OF INDIAN STANDARDS**

(Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India)

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## DRAFT INDIAN STANDARD IN WIDE CIRCULATION

Reference : MTD 11/T-187

Date : 05 December 2023

**TECHNICAL COMMITTEE : Welding General and its Applications sectional Committee, MTD 11**

To,

All concerned

Dear Madam/Sir,

The following document has been prepared by the Welding General and its Applications sectional Committee Sectional Committee, MTD 11. Please [click here](#) to view the document.

**Document Number : MTD 11 (24326) WC**

**Title of the document : Welding Consumables Solid Wire Electrodes Tubular Cored Electrodes and Electrode-Flux Combinations for Submerged Arc Welding of High Strength Steels Classification**

**Document Type : New Indian Standard**

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

- 1) *This document specifies requirements for classification of solid wire electrodes, tubular cored electrodes, and electrode-flux combinations (the all-weld metal deposits) in the as-welded condition and in the post-weld heat-treated condition for submerged arc welding of high strength steels with a minimum yield strength greater than 500 MPa or a minimum tensile strength greater than 570 MPa. One flux can be tested and classified with different electrodes. One electrode can be tested and classified with different fluxes. The solid wire electrode is also classified separately based on its chemical composition. This document is a combined specification providing for classification utilizing a system based on the yield strength and average impact energy of 47 J for the all-weld metal, or utilizing a system based on the tensile strength and average impact energy of 27 J for the all-weld metal.*
- 2) *a) Clauses, subclauses and tables which carry the suffix letter "A" are applicable only to solid wire electrodes, tubular cored electrodes and the all-weld metal deposits classified to the system based on the yield strength and the average impact energy of 47 J for the all-weld metal obtained with electrode-flux combinations in accordance with this document. b) Clauses, subclauses and tables which carry the suffix letter "B" are applicable only to solid wire electrodes, tubular cored electrodes and the all-weld metal deposits classified to the system based on the tensile strength and the average impact energy of 27 J for the all-weld metal obtained with electrode-flux combinations in accordance with this document. c) Clauses, subclauses and tables which do not have either the suffix letter "A" or the suffix letter "B" are applicable to all solid wire electrodes, tubular cored electrodes and electrode-flux combinations classified in accordance with this document.*
- 3) *For comparison purposes, some tables include requirements for electrodes classified in accordance with both systems, placing individual electrodes from the two systems, which are similar in composition and properties, on adjacent lines in the particular table. In a particular line of the table that is mandatory in one system, the symbol for the*

*similar electrode from the other system is indicated in parentheses. By appropriate restriction of the formulation of a particular electrode, it is often, but not always, possible to produce an electrode that can be classified in both systems, in which case the electrode, or its packaging, can be marked with the classification in either or both systems.*

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

**Last date for sharing the comments is : 04 January 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](mailto:mtd@bis.gov.in)**



## व्यापक परिचालन में मसौदा(दे)

हमारा सन्दर्भ : MTD 11/T-187

दिनांक : 05-12-2023

तकनीकी समिति : **Welding General and its Applications sectional Committee Sectional Committee, MTD 11**

प्राप्तकर्ता : रूचि रखने वाले सभी निकाय

महोदय/या,

निम्नलिखित मसौदा तैयार किया गया है :

प्रलेख संख्या : MTD 11 (24326) 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 : **04 January 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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