

भारतीय मानक ब्यूरो

DRAFT FOR WIDE CIRCULATION

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भारतीय मानक मसौदा

वेल्डिंग उपभोग्य — गैस-परिरक्षित और गैर-गैस-परिरक्षित धातु आर्क वेल्डिंग के लिए निकल और निकल मिश्र धातुओं के लिए ट्यूबलर-कोर्ड इलेक्ट्रोड — वर्गीकरण

Draft Indian Standard

Welding Consumables — Tubular-Cored Electrodes for Gas-Shielded and Non-Gas-Shielded Metal Arc Welding of Nickel and Nickel Alloys — Classification

ICS 25.160.20

Welding General and its Applications
Sectional Committee, MTD 11

Last date of comment:
05/01/2024

NATIONAL FOREWORD

This draft standard is identical to ISO 12153 : 2022 ‘Welding consumables — Tubular-cored electrodes for gas-shielded and non-gas-shielded metal arc welding of nickel and nickel alloys — Classification’ issued by the International Organization for Standardization (ISO), and subject to its finalization, is to be adopted by the Bureau of Indian Standards on the recommendation of the Welding General and its Applications Sectional Committee and approval of the Metallurgical Engineering Engineering Division Council.

The committee decided to adopt ISO 12153 : 2022 standard under dual numbering system.

The text of ISO standard has been approved as suitable for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical with those used in Indian Standard. Attention is especially drawn to the following:

- Wherever the words ‘International Standard’ appear referring to this standard, it should be read as ‘Indian Standard’.
- Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exists. The corresponding Indian Standards which are to be substituted in their place are listed below along with their degree of equivalence for the edition indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
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ISO 544 : 2017 Welding consumables — Technical delivery conditions for filler materials and fluxes — Type of product, dimensions, tolerances and markings	Doc : MTD/11/22952 Welding consumables — Technical delivery conditions for filler materials and fluxes — Type of product, dimensions, tolerances and markings	Identical
ISO 6847 : 2020 Welding consumables — Deposition of a weld metal pad for chemical analysis	Doc : MTD/11/22954 Welding consumables — Deposition of a weld metal pad for chemical analysis	Identical
ISO 6947 : 2019 Welding and allied processes — Welding positions	Doc : MTD/11/22957 Welding and allied processes — Welding positions	Identical
ISO 14175 : 2008 Welding consumables — Gases and gas mixtures for fusion welding and allied processes	Doc : MTD/11/22962 Welding consumables — Gases and gas mixtures for fusion welding and allied processes	Identical
ISO 14344 : 2010 Welding consumables — Procurement of filler materials and fluxes	Doc : MTD/11/22964 Welding consumables — Procurement of filler materials and fluxes	Identical
ISO 15792-1 : 2020 Welding consumables — Test methods — Part 1: Preparation of all-weld metal test pieces and specimens in steel, nickel and nickel alloys	Doc : MTD/11/22966 Welding consumables — Test methods — Part 1: Preparation of all-weld metal test pieces and specimens in steel, nickel and nickel alloys	Identical
ISO 80000 - 1 : 2022 Quantities and units — Part 1 : General	IS / ISO 80000 - 1 : 2022 Quantities and units Part 1 General (First Revision)	Identical

This standard also makes a reference to the BIS Certification Marking of the product, details of which are given in National Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical-values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

The scope of the standard is as follows:

SCOPE

This document specifies requirements for the classification of tubular-cored electrodes for metal arc welding with or without a gas shield of nickel and nickel alloys. It includes those compositions in which the nickel content exceeds that of any other element.

The complete document/text of ISO 12153 : 2022 ‘Welding consumables — Tubular-cored electrodes for gas-shielded and non-gas-shielded metal arc welding of nickel and nickel alloys — Classification’ may be made available, on request to:

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National Annex A
(National Foreword)

A-1 BIS CERTIFICATION MARKING

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the products may be marked with the standard mark.