



DRAFT INDIAN STANDARD IN WIDE CIRCULATION

Reference : MTD24/T-84

Date : 03 June 2024

TECHNICAL COMMITTEE : Corrosion Protection and Finishes Sectional Committee, MTD 24

To,

All concerned

Dear Madam/Sir,

The following document has been prepared by the Corrosion Protection and Finishes Sectional Committee Sectional Committee, MTD 24. Please [click here](#) to view the document.

Document Number : MTD 24 (25739) WC

Title of the document : Metallic and Other Inorganic Coatings Electrodeposited Gold and Gold Alloy Coatings for Electrical Electronic and Engineering Purposes Specification and Test Methods

Document Type : Revision of Indian Standard (IS 3266 : 1982)

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

- 1) *The engineering uses of electrodeposited gold and gold alloy coatings have expanded with the growth of the electrical and electronic industries. Low voltages and currents, dry circuits and microwave frequencies require low-resistance interconnection systems, connectors and waveguides. Non-tarnishing, low-resistance gold coatings were the logical choice for connectors where the stability of contact surfaces was critical. The need to improve the wear resistance of gold coatings led to the development of new electroplating solutions containing controlled amounts of metallic and non-metallic additives that either changed the composition or altered the crystal structure of the coating. The special needs of the printed-circuit industry led to the development of acid gold electroplating solutions that contained no free cyanide, yielding coatings that are hard, bright and solderable.*
- 2) *Formulations for high-speed electroplating up to current densities of 200 A/dm² were introduced for continuous strip, stripe or spot gold and gold alloy coatings. The high cost of gold metal has led to the development of selective and thickness profile plating techniques to limit the use of the metal to the active areas only of the components, where the gold is required. Designers will therefore often specify the area requiring gold electroplating as well as the thickness profile, if required, by reference to suitably marked drawings.*
- 3) *With the introduction of many new gold electroplating formulations and the proliferation of engineering applications, the need for technical standards that specify the requirements of electrodeposited gold and gold alloy coatings, as well as the test methods to ensure that the specified requirements are met, is critical. Composition, appearance, hardness, thickness, purity, porosity, wear resistance, solderability, electrical contact resistance, infrared reflectivity and other properties must be controlled to produce high-quality gold and gold alloy coatings for engineering purposes.*
- 4) **WARNING** — *This International Standard may not be compliant with some countries' health, safety and environmental legislations. It calls for the use of substances and/or procedures that may be injurious to health if adequate safety measures are not taken. This International Standard does not address any health hazards, safety or environmental matters, or legislation associated with its use. It is the responsibility of the user of this International Standard to establish appropriate health, safety and environmentally acceptable practices and take appropriate action to comply with any national, regional and/or international regulations. Compliance with this International Standard*

does not, of itself, confer immunity from legal obligations.

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

Last date for sharing the comments is : 03 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 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 : MTD24/T-84

दिनांक : 03-06-2024

तकनीकी समिति : Corrosion Protection and Finishes Sectional Committee Sectional Committee, MTD 24

प्राप्तकर्ता : रूचि रखने वाले सभी निकाय

महोदय/या,

निम्नलिखित मसौदा तैयार किया गया है :

प्रलेख संख्या : MTD 24 (25739) 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 : 03 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 पर भी उपलब्ध है/हैं।

धन्यवाद।

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