भारतीय मानक ब्यूरो

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भारतीय मानक मसौदा

एल्यूमीनियम और उसके मिश्रधातुओं का एनोडाइजिंग — संयोजन के बाद एनोडिक ऑक्सीकरण लेपन की अवशोषी शक्ति की क्षति का आंकलन — पूर्व अम्ल उपचार के साथ डाई-स्पॉट परीक्षण

(*IS 11268 का पहला पुनरीक्षण*)

Draft Indian Standard

Anodizing of Aluminium and Its Alloys — Estimation of Loss of Absorptive Power of Anodic Oxidation Coatings After Sealing — Dye-Spot Test with Prior Acid Treatment

(*First Revision of IS 11268*)

ICS 25.220.20

Corrosion Protection and Finishes Sectional Committee, MTD 24	Last date of comment: 03/07/2024

NATIONAL FOREWORD

This draft standard is identical to ISO 2143 : 2017 'Anodizing of aluminium and its alloys — Estimation of loss of absorptive power of anodic oxidation coatings after sealing — Dye-spot test with prior acid treatment, copper plus nickel and of copper plus nickel plus chromium' 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 Corrosion Protection and Finishes Sectional Committee and approval of the Metallurgical Engineering Division Council.

This standard was first published in 1985. The first revision of this standard has been undertaken to align with the International Standard ISO 2143 : 2017 under dual numbering system.

Former title of the Indian Standard IS 11268 was 'Estimation of loss of absorptive power of anodic oxide coatings after sealing - Dye spot test with prior acid treatment for anodized aluminium and its alloys' which has been changed to 'Anodizing of aluminium and its alloys — Estimation of loss of absorptive power of anodic oxidation coatings after sealing — Dye-spot test with prior acid treatment' as per the title of ISO 2143.

The text of ISO standard has been approved as suitable for publication as in 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:

a) Wherever the words `International Standard' appear referring to this standard, it should be read as `Indian Standard'

b) Comma (,) has been used as a decimal marker while in Indian Standards the current practice is to use a point (.) as the decimal marker.

The technical committee responsible for the preparation of this standard has reviewed the provisions of following International Standards referred in these adopted standards and decided their acceptability for use in conjunction with this standard.

International Standard	*Title*
ISO 7583:2013	Anodizing of aluminium and its alloys — Terms and definitions

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 he 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 a method of estimating the loss of absorptive power of anodic oxidation coatings that have undergone a sealing treatment, by dye absorption after acid pretreatment.

The method is suitable for use as a production control method and can be applicable to anodic oxidation coatings which may be subjected to weathering or aggressive environments, or where resistance to staining is important.

The method is not applicable to those coatings that

a) are formed on alloys containing more than 2 % copper or 4 % silicon,
b) are sealed by the dichromate process,
c) have been given supplementary processing, e.g. oiling, waxing or lacquering,
d) are coloured in deep shades, and
e) are less than 3 µm thickness.

The method is less appropriate where nickel or cobalt salts, or organic additives, have been added to baths used for hydrothermal sealing.

The complete document/text of ISO 2143 : 2017 'Anodizing of aluminium and its alloys — Estimation of loss of absorptive power of anodic oxidation coatings after sealing — Dye-spot test with prior acid treatment, copper plus nickel and of copper plus nickel plus chromium' may be made available, on request to:

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