

भारतीय मानक ब्यूरो

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भारतीय मानक मसौदा

**धातुएँ और मिश्रधातुएँ — वायुमंडलीय संक्षारण परीक्षण — सामान्य
अपेक्षाएँ**

(IS 5555 का पहला पुनरीक्षण)

Draft Indian Standard

**Metals and Alloys — Atmospheric Corrosion
Testing — General Requirements**

(First Revision of IS 5555)

ICS 77.060

Corrosion Protection and Finishes
Sectional Committee, MTD 24

Last date of comment:
06/10/2023

NATIONAL FOREWORD

This draft standard is identical to ISO 8565 : 2011 'Metals and alloys — Atmospheric corrosion testing — General requirements' 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 originally published in 1970 and amended in 1989. The first revision of this standard has been undertaken to align with the international standard ISO 8565 : 2011 for wide acceptability and uniformity.

Former title of the Indian Standard IS 5555 was 'Code of procedure for conducting field studies on atmospheric corrosion of metals' which is changed to 'Metals and alloys — Atmospheric corrosion testing — General requirements' as per the title of ISO 8565.

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.

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>
ISO 8044 : 2020 Corrosion of metals and alloys — Basic terms and definitions	Doc. No.: MTD24(23220) Corrosion of metals and alloys — Basic terms and definitions (Revision of IS 3531)	Identical
ISO 9223 : 2012 Corrosion of metals and alloys — Corrosivity of atmospheres — Classification, determination and estimation	Doc. no.: MTD24(23407) Corrosion of metals and alloys - Classification of corrosivity of atmospheres (Revision of IS 14191)	Identical
ISO 9225 : 2012 Corrosion of metals and alloys — Corrosivity of atmospheres — Measurement of environmental parameters affecting corrosivity of atmospheres	IS 14322 : 1999 Corrosion of metals and alloys - Corrosivity of atmosphere - Measurement of pollution - Methods	Not Equivalent
ISO 9226 : 2012 Corrosion of metals and alloys — Corrosivity of atmospheres — Determination of corrosion rate of standard specimens for the evaluation of corrosivity	Doc. no.: MTD24(23408) Corrosion of metals and alloys — Corrosivity of atmospheres — Determination of corrosion rate of standard specimens for the evaluation of corrosivity (Revision of IS 14297)	Identical
ISO 4226 : 2021 Air quality — General aspects — Units of measurement	IS 9620 : 1980 Guide for air quality units used in measurements	Not Equivalent

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.

<i>International Standard</i>	<i>Title</i>
ISO 8407 : 2021	Corrosion of metals and alloys — Removal of corrosion products from corrosion test specimens
ISO 9169 : 2006	Air quality — Definition and determination of performance characteristics of an automatic measuring system
ISO 10289 : 1999	Methods for corrosion testing of metallic and other inorganic coatings on metallic substrates — Rating of test specimens and manufactured articles subjected to corrosion tests

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 International Standard establishes general requirements for stationary corrosion testing of metals and metallic and other inorganic coatings under atmospheric conditions carried out in the open air or under shelters. It can also be applied for testing of complex specimens and assemblies of metallic materials.

The complete document/text of ISO 8565 : 2011 ‘Metals and alloys — Atmospheric corrosion testing — General requirements’ may be made available, on request to:

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