

For Comments Only

BUREAU OF INDIAN STANDARDS

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भारतीय मानक मसौदा

अंतरिक्ष प्रणालियाँ — द्रव तंत्र की सतह की सफाई
भाग 3 गैर-वाष्पशील अवशेषों और कण संदूषण के निर्धारण के लिए विश्लेषणात्मक
प्रक्रियाएं

Draft Indian Standard

Space Systems — Surface Cleanliness of Fluid Systems
Part 3 Analytical Procedures for the Determination of Non-Volatile Residues and Particulate
Contamination

ICS: 49.080

Air and Space Vehicles Sectional Committee, TED 14 Last date for receipt of comments is
28/08/2024

NATIONAL FOREWORD

(Identical Clause to be added later)

This Indian Standard which is identical with ISO 14952-3: 2003 'Space Systems — Surface Cleanliness of Fluid Systems Part 3 Analytical Procedures for the Determination of Nonvolatile Residues and Particulate Contamination' issued by International Organization for Standardization (ISO), was adopted by the Bureau of Indian Standards on the recommendations of Air and Space Vehicles Sectional Committee and approval of the Transport Engineering Division Council.

This standard is one of a series of Standards on the Space systems — Surface cleanliness of fluid systems. Other standard in this series are:

<i>Doc. No.</i>	<i>Title</i>
Doc (22927)/ ISO 14952-1 : 2003	Space systems — Surface cleanliness of fluid systems — Part 1 Vocabulary (<i>under development</i>)
Doc (22930)/ ISO 14952-2 : 2003	Space systems — Surface cleanliness of fluid systems — Part 2 Cleanliness levels (<i>under development</i>)
Doc (22932)/ ISO 14952-4 : 2003	Space systems — Surface cleanliness of fluid systems — Part 4 Rough-cleaning processes (<i>under development</i>)
Doc (22933)/ ISO 14952-5 : 2003	Space systems — Surface cleanliness of fluid systems — Part 5 Drying processes (<i>under development</i>)
Doc (22934)/ ISO 14952-6 : 2003	Space systems — Surface cleanliness of fluid systems — Part 6 Precision-cleaning processes (<i>under development</i>)

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

- a) Wherever the words 'International Standard' appear referring to this standard, they 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 exist. The corresponding Indian Standard, which are to be substituted in their respective place, are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 14952-1 : 2003 Space systems — Surface cleanliness of fluid systems — Part 1 Vocabulary	Doc (22927)/ ISO 14952-1 : 2003 Space systems — Surface cleanliness of fluid systems — Part 1 Vocabulary (<i>under development</i>)	Identical under dual numbering
ISO 14952-5 : 2003 Space systems — Surface cleanliness of fluid systems — Part 5 Drying processes	Doc (22933)/ ISO 14952-5 : 2003 Space systems — Surface cleanliness of fluid systems — Part 5 Drying processes (<i>under development</i>)	Identical under dual numbering

The technical committee has reviewed the provisions of following International Standards referred in this adopted standard and has decided that their acceptable for use in conjunction with this standard:

<i>International Standard</i>	<i>Title</i>
ISO 2210 : 1972	Liquid halogenated hydrocarbons for industrial use — Determination of residue on evaporation
ISO 5789 : 1979	Fluorinated hydrocarbons for industrial use — Determination of non-volatile residue
ISO 5884 : 1987	Aerospace — Fluid systems and components, Methods for system sampling and measuring the solid particle contamination of hydraulic fluids
ISO 14951-3 : 1999	Space systems — Fluids characteristics — Part 3 Nitrogen
ISO 14951-4 : 1999	Space systems — Fluids characteristics — Part 4 Helium
ISO 14951-10 : 1999	Space systems — Fluids characteristics — Part 10 Water

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. The Bureau of Indian Standards shall not be held responsible for identifying any or all such patent rights.

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.

SCOPE

This part of ISO 14952 provides sampling and analytical test methods to validate the cleanliness levels of parts and components that have been precision cleaned, and identifies processes that may be used for the verification of cleanliness in ground support equipment, launch vehicles and spacecraft. This part of ISO 14952 is used to sample and verify the level of cleanliness of parts and components that have been precision cleaned and applies equally to parts, components and systems in ground support equipment, launch vehicles and spacecraft.

FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO 14952-3: 2003 or CONTACT:

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