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**Class II biological safety cabinets**

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## Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Air Cleaning Association (JACA)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS K 3800** : 2009), which has been technically revised.

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## Class II biological safety cabinets

### Introduction

This Japanese Industrial Standard was established in 1994 with reference to **NSF/ANSI 49** *Biosafety Cabinetry : Design, Construction, Performance, and Field Certification*. This revision was initiated to update the contents of this Standard in keeping with the advance in testing technique and in light of the importance of in-site verification of the cabinet performance, as well as to respond to the revision of **NSF/ANSI 49** in 2014.

No corresponding International Standard has been established at this point.

### 1 Scope

This Standard specifies the performance, structure and material requirements, as well as the test methods of Class II biological safety cabinets. A Class II biological safety cabinet includes an exhaust duct and a remote blower connected to it, if any. This Standard is not applicable to classic type Class II cabinets in which the positive pressure contaminated plenum is directly in contact with the outer wall.

**WARNING 1** Users of Class II biological safety cabinets shall have sufficient knowledge regarding the handling of pathogenic microorganisms and the handling of Class II biological safety cabinets, and in operating the cabinet, shall follow the directions given by a person in charge of or responsible for biohazard safety. This Standard is not intended to address all the safety problems associated with its use.

**WARNING 2** The clean work station, in contrast with Class II cabinet, is an apparatus designed to send clean air to the work space and to prevent the treated sample from being contaminated, and is not intended for ensuring personnel or environmental safety against biohazards. Although the two apparatuses resemble each other in appearance, air-flow and structure, a clean work station should never be used in works requiring biohazard safety measures.

**NOTE 1** The Class II biological safety cabinets, as referred to in this scope, are the safety cabinets satisfying the requirements established by the Minister of Health, Labour and Welfare based on the Regulation for Enforcement of the Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases [Order of the Ministry of Health and Welfare No. 99 of 1998, 2 of Article 31, item (x)]. They are also safety cabinets stipulated in the Regulation for Enforcement of the Act on Domestic Animal Infectious Diseases Control (Order of the Ministry of Agriculture and Forestry No. 35 of 1951, 8 of Article 56) and also the research purpose safety cabinets stipulated in the Act on the Conservation and Sustainable Use of Biological Diversity through Reg-

ulations on the Use of Living Modified Organisms (Act on “Cartagena”) (Act No. 97 of 2003) and the Ministerial Order Providing Containment Measures to be Taken in Type 2 Use of Living Modified Organisms for Research and Development (Order of the Ministry of Education, Culture, Sports, Science and Technology and the Ministry of the Environment No. 1 of 29 January 2004), Attached Table 2.

NOTE 2 **JIS K 3800** : 2009 may be applied until 19 January 2023.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 7505-1 *Aneroid pressure gauges — Part 1 : Bourdon tube pressure gauges*

JIS B 8330 *Testing methods for turbo-fans*

JIS B 9917-3 *Cleanrooms and associated controlled environments — Part 3 : Test methods*

JIS C 1302 *Insulation resistance testers*

JIS C 1509-1 *Electroacoustics — Sound level meters — Part 1 : Specifications*

JIS C 1609-1 *Illuminance meters Part 1 : General measuring instruments*

JIS C 4034-30 *Rotating electrical machines — Part 30 : Efficiency classes of single-speed, three-phase, cage-induction motors (IE-code)*

JIS G 4304 *Hot-rolled stainless steel plate, sheet and strip*

JIS G 4305 *Cold-rolled stainless steel plate, sheet and strip*

JIS K 0557 *Water used for industrial water and wastewater analysis*

JIS T 7322 *High-pressure steam sterilizers for medical use*

JIS T 7324 *High-pressure steam sterilizers for medical use (Small size)*

JIS T 8202 *Anemometer for general use*

JIS Z 8122 *Contamination control — Terminology*

JIS Z 8731 *Acoustics — Description and measurement of environmental noise*

JIS Z 8901 *Test powders and test particles*

## 3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS Z 8122**, and the following apply.

### 3.1

#### biological safety cabinet

work equipment used for the purpose of protecting the worker and the environment