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Ozone treatment apparatus for water and wastewater including other oxidation uses—
Specifications of apparatus and measurement methods for ozone concentration

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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 The Japan Ozone Association (JOA)/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 B 9946**:2011), which has been technically revised.

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NOTE Based on Article 9 of the Supplementary Provisions to the Unfair Competition Prevention Act etc., any submission of proposal, or employment of procedures such as deliberation by the Japanese Industrial Standards Committee under the previous Industrial Standardization Act shall be deemed to have been conducted pursuant to the provision of Article 12, paragraph (1) of the revised Industrial Standardization Act.

# Ozone treatment apparatus for water and wastewater including other oxidation uses—Specifications of apparatus and measurement methods for ozone concentration

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### Introduction

This Japanese Industrial Standard was established in 2011 and has been revised at this time mainly to respond to the advance in technology of ozone resistant materials and the increased availability of ozone treatment apparatus.

No corresponding International Standard has been established at this point.

Persons using this Standard should be familiar with properties and proper handling of artificially-generated ozone and its relevant apparatus, as well as any applicable regulations. Due attention should also be paid to health of workers during ozone measurements.

## 1 Scope

This Standard stipulates general specification items (performance requirements) for ozone treatment apparatus (hereafter referred to as treatment apparatus) used in such areas as industrial water and wastewater, sewage water and drinking water, as well as the methods of ozone concentration measurement.

This Standard is applicable to treatment apparatuses with a rated ozone generation capacity (total generation capacity if the apparatus consists of a series of ozone-generating processes) of 0.5 kg/h or greater.

The method for calculation of this capacity is provided in Annex A.

NOTE A treatment apparatus is used for the purposes of destruction of organic substances and trace toxic substances, disinfection, and decolouring and deodourizing. The apparatus consists of a series of processes or units, including ozone generation, ozone contact, and ozone destruction at ozone concentration control points (hereafter referred to as process control points) where ozone concentrations are properly measured and controlled.

### 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 7957 Continuous analyzers for ozone and oxidants in ambient air

JIS B 8265 Construction of pressure vessel—General principles

JIS K 0804 Gas detector tube measurement system (Length-of-stain type)

## 3 Terms and definitions

For the purpose of this Standard, the following terms and definitions apply.