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counter**

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japan Air Cleaning Association (JACA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

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Light extinction liquid-borne particle counter

Introduction

This Japanese Industrial Standard has been prepared based on the first edition of **ISO 21501-3** published in 2007, while modifying some of its technical contents so as to make them easier to understand, as well as to enhance the usability of this Standard.

The portions with continuous sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with the explanations is given in Annex JB.

1 Scope

This Standard describes a calibration and verification method for a light extinction liquid-borne particle counter (hereafter referred to as the “particle counter”), which is used to measure the size and number or particle number concentration of particles suspended in the liquid. The typical size range of particles measured by the particle counter in the method specified in this Standard is between 1 μm and 100 μm in particle size.

This particle counter is not used for measurements of hydraulic oils used for hydraulic power units.

NOTE 1 The instruments that conform to this Standard are used for the evaluation of the cleanliness of pharmaceutical products (e.g. injections, water for injections, infusions), as well as the measurement of size and number or particle number concentration of particles in various liquids.

NOTE 2 The particle size measured by the particle counter is not the actual particle size—it is the light extinction equivalent diameter of the calibration particles suspended in pure water.

The particle size is a diameter of particle and is also called the particle diameter.

NOTE 3 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 21501-3:2007 *Determination of particle size distribution—Single particle light interaction methods—Part 3: Light extinction liquid-borne particle counter* (MOD)

The symbols which denote the degree of correspondence in the contents in the corresponding International Standard and **JIS** are IDT (identical), MOD (modified) and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

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 standard (including amendments) indicated below shall be applied.