Determination of particle size distribution — Single particle light interaction methods —

Part 3:
Light extinction liquid-borne particle counter

Détermination de la distribution granulométrique — Méthodes d'interaction lumineuse de particules uniques —
Partie 3: Compteur de particules en suspension dans un liquide par extinction de la lumière
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Foreword

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This document was prepared by Technical Committee ISO/TC 24, Particle characterization including sieving, Subcommittee SC 4, Particle characterization.

This second edition cancels and replaces the first edition (ISO 21501-3:2007), which has been technically revised. The main changes from the previous edition are as follows:

— Clause 4 for “Principle” and Clause 5 for “Basic configuration” have been added;
— “size calibration” and “verification of size setting” have been combined as “size setting error” in the requirements (Clause 6);
— “Test report” (3.10 in the previous edition) has been changed to 6.9 on “Reporting of test and calibration results”;
— information about uncertainties has been enriched and is now the subject of Annex B.

A list of all parts in the ISO 21501 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.
Introduction

Monitoring particle contamination levels is required in various fields, e.g. in the electronic industry, in the pharmaceutical industry, in the manufacturing of precision machines and in medical operations. Particle counters are useful instruments for monitoring particle contamination in liquid. The purpose of this document is to provide a calibration procedure and verification method for particle counters, so as to minimize the inaccuracy in the measurement result by a counter, as well as the differences in the results measured by different instruments.