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Particle size analysis — Image analysis methods —

Part 2: Dynamic image analysis methods

*Analyse granulométrique — Méthodes par analyse d'images —
Partie 2: Méthodes par analyse d'images dynamiques*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

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 13322-2:2006), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the text has been aligned with changes introduced in ISO 13322-1:2014;
- clauses on instrumentation (principle) and operational procedures have been significantly expanded;
- a new clause on accuracy and instrument qualification using particulate reference materials has been added.

A list of all parts in the ISO 13322 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

The ISO 13322 series is applicable to the analysis of images for the purpose of determining particle size distributions. The purpose of this document is to provide guidance for measuring and describing particle size distribution, using image analysis methods where particles are in motion. This entails using techniques for dispersing particles in liquid or gas, taking in-focus, still images of them while the particles are moving and subsequently analysing the images. This methodology is called dynamic image analysis.

There are several image capture methods. Some typical methods are described in this document.

ISO 13322-1 on static image analysis methods assumes that an adequate image has already been captured and concentrates upon the analysis of these images.