
Coke — Determination of bulk density in a small container

*Coke — Détermination de la masse volumique en vrac dans un
récipient de petites dimensions*



This document is a preview generated by EKO



COPYRIGHT PROTECTED DOCUMENT

© ISO 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Apparatus	1
6 Test sample	2
7 Procedure	2
8 Expression of results	2
9 Precision	3
9.1 Repeatability	3
9.2 Reproducibility	3
10 Test report	3
Bibliography	4

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 27, *Coal and coke*, Subcommittee SC 3, *Coke*.

This third edition cancels and replaces the second edition (ISO 567:1995), which has been technically revised.

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

- General and technical revision.
- The container to be used for determination of coke bulk density can either be cubical or cylindrical in shape with a capacity 0,2 m³.

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 bulk density of coke depends on its physical characteristics, e.g. apparent relative density, shape and size of the coke particles, and on the dimensions of the container. The container specified in this International Standard has a capacity of 0,2 m³. The determination of bulk density of coke in a large container is described in ISO 1013.

Coke — Determination of bulk density in a small container

1 Scope

This document specifies a method for the determination of the bulk density of coke in a cubical or cylindrical container of small capacity (0,2 m³). It is applicable to coke with a nominal top size not greater than 125 mm.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 579, *Coke — Determination of total moisture*

ISO 728, *Coke — Size analysis by sieving*

ISO 13909-5, *Hard coal and coke — Mechanical sampling — Part 5: Coke — Sampling from moving streams*

ISO 13909-6, *Hard coal and coke — Mechanical sampling — Part 6: Coke — Preparation of test samples*

ISO 18283, *Hard coal and coke — Manual sampling*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

coke bulk density

mass of a portion of coke divided by the volume of the container, which is filled by that portion under specified conditions outlined in the procedure

4 Principle

A container of known mass and volume is filled with coke and the increase in mass is determined.

5 Apparatus

5.1 Cubical or cylindrical container, of small capacity (0,2 m³), with a smooth inner surface, and rigidly constructed. The exact volume of the small container shall be known. The container shall be waterproof and be resistant to deformation. A 200 l container (44 gallon drum) or a 100 l container is suitable for this purpose. A 44 gallon drum sliced to a height of 50 % is also suitable for this purpose.

5.2 Mass determination scale/machine, preferably of the platform type, of minimum capacity 200 kg and sufficiently accurate that the mass determination error does not exceed 0,1 % of the maximum load or 250 g, whichever is the smaller.