

Australian Standard<sup>®</sup>

**Coal and coke—Analysis and testing**

**Part 18: Coke—Size analysis**



This Australian Standard® was prepared by Committee MN-001, Coal and Coke. It was approved on behalf of the Council of Standards Australia on 7 June 2006. This Standard was published on 11 July 2006.

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  - Australian Coal Association
  - Australian Coal Preparation Society
  - Australian Institute of Energy
  - Coalfield Geology Council of New South Wales
  - CSIRO, Energy Technology
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  - Minerals Council of Australia
  - National Association of Testing Authorities, Australia
  - National Generators Forum
  - University of Newcastle
  - University of New South Wales
  - University of Queensland
- 

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**RECONFIRMATION**

**OF**

**AS 1038.18—2006**

**Coal and coke—Analysis and testing  
Part 18: Coke—Size analysis**

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Technical Committee MN-001 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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The University of Queensland  
University of Newcastle

## NOTES

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**Coal and coke—Analysis and testing**

**Part 18: Coke—Size analysis**

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## PREFACE

This Standard was prepared by the Standards Australia Committee MN-001, Coal and Coke, as a revision of AS 1038.18—1996, *Coal and coke—Analysis and testing, Part 18: Coke—Size analysis*.

The objective of this Standard is to provide a means of obtaining a knowledge of the size analysis of coke, which is important in blast furnace, foundry and other metal-smelting processes. Certain standard coke testing procedures require a preliminary size analysis of the coke.

This revision confirms the method for undertaking a size analysis for coke and has been editorially updated into current format.

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## STANDARDS AUSTRALIA

## Australian Standard

## Coal and coke—Analysis and testing

## Part 18: Coke—Size analysis

**1 SCOPE**

This Standard sets out methods for determining the particle size distribution of coke using square-hole screens. Separate methods are described for—

- (a) large coke having a nominal top size greater than 16.0 mm; and
- (b) small coke having a nominal top size 16.0 mm or less.

**2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

AS	
1152	Specification for test sieves
2418	Coal and coke—Glossary of terms
4264	Coal and coke—Sampling
4264.2	Part 2: Coke—Sampling procedures
AS/NZS	
2243	Safety in laboratories

**3 DEFINITIONS**

For the purpose of this Standard, the definitions given in AS 2418 and those below apply.

**3.1 Hand-placing**

The operation in which the sieve remains stationary and each particle of coke is handled; if a particle will, in some position and without forcing, pass through the sieve aperture, it is considered as undersize.

**3.2 Hand-shaking**

The operation in which a sieve is held in the hands, or is freely suspended, and is given a horizontal oscillatory motion with a throw of about 75 mm. The coke that passes the sieve after 50 horizontal oscillations (each consisting of one movement to and fro) in a period of about 30 s is considered as undersize.

**3.3 Large coke**

Coke having a nominal top size greater than 16 mm.

**3.4 Mean size**

The arithmetic mean size of the coke derived from the sieve analysis using an empirical formula (see Clause 10).

**3.5 Mechanical sieving**

The operation in which a set of sieves is oscillated by mechanical means.