

Australian Standard<sup>®</sup>

**Coal and coke—Analysis and testing**

**Part 18: Coke—Size analysis**

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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 Preparation Society
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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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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 procedure

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 10 horizontal oscillations (each consisting of one movement to and fro) in a period of about 10 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.