

Australian Standard[®]

Coal preparation

**Part 3: Magnetite in coal preparation
plant use—Test methods**



This Australian Standard® was prepared by Committee MN-001, Coal and Coke. It was approved on behalf of the Council of Standards Australia on 2 June 2008. This Standard was published on 30 June 2008.

The following are represented on Committee MN-001:

- Australasian Institute of Mining and Metallurgy
 - Australian Building Codes Board
 - Australian Coal Association
 - Australian Coal Preparation Society
 - Australian Institute of Energy
 - CSIRO Energy Technology
 - Coalfield Geology Council of NSW
 - Department of Natural Resources and Mines, Qld
 - Minerals Council of Australia
 - National Association of Testing Authorities Australia
 - National Generators Forum
 - University of Newcastle
 - The University of New South Wales
 - The University of Queensland
-

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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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PREFACE

This Standard was prepared by the Standards Australia sub-committee on Coal Preparation, under the direction of the Committee MN-001, Coal and Coke, to supersede AS 4156.3—1994.

This Standard incorporates Amendment No. 1 (June 2009). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The following methods are provided:

- (a) Sampling and determination of 'as-received' moisture.
- (b) Determination of relative density.
- (c) Determination of total iron content.
- (d) Determination of iron(II) content.
- (e) Determination of magnetics content.

This Standard is based on but not equivalent to ISO 8833:1989, *Magnetite for use in coal preparation—Test methods*.

The objective of this Standard is to provide those required to test magnetite with standardized procedures that will allow meaningful comparison between results generated in different locations.

The objective of this revision is to confirm the main body of the Standard and provide additional guidance in appendices.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard
Coal preparation

Part 3: Magnetite for coal preparation plant use—Test methods

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out methods for sampling bulk and bagged magnetite, total moisture determination, and determination of density, total iron, iron(II), particle size and magnetics content.

NOTE: For information on laboratory safety, reference should be made to the relevant parts of AS/NZS 2243.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 1038 Coal and coke—Analysis and testing
- 1038.11 Part 11: Coal—Forms of sulfur
- 1152 Specification for test sieves
- 2162 Verification and use of volumetric apparatus (series)
- 2378 Density bottles
- 2418 Coal and coke—Glossary of terms
- 3881 Higher rank coal—Size analysis

AS/NZS

- 2243 Safety in laboratories (series)

ISO

- 2597 Iron ores—Determination of total iron content
- 2597-1 Part 1: Titrimetric method after tin(II) chloride reduction
- 9507 Iron ores—Determination of total iron content—Titanium (III) chloride reduction methods

1.3 DEFINITIONS

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