

Australian Standard™

Coal preparation

**Part 7: Coal size classifying
equipment—
Performance evaluation**

This Australian Standard was prepared by Committee MN/1, Coal and Coke. It was approved on behalf of the Council of Standards Australia on 29 January 1999 and published on 5 April 1999.

The following interests are represented on Committee MN/1:

Australasian Institute of Mining and Metallurgy
Australian Coal Association
Australian Coal Preparation Society
Australian Institute of Energy
Bureau of Steel Manufacturers of Australia
Coalfield Geology Council of New South Wales
CSIRO, Division of Energy Technology
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Originated as AS 1634—1974.
Revised and redesignated AS 4156.7—1999.

PREFACE

This Standard was prepared by the Standards Australia Committee MN/1, Coal and Coke to supersede of AS 1634—1974, *Recommended procedures for expression and presentation of results of tests of coal size classifying equipment*.

This Standard is based on, but not equivalent to, ISO 10752:1994, *Coal sizing equipment—Performance evaluation*. It includes an additional Australian Appendix which provides a worked example for sieve bend.

The objective of this Standard is to provide users of coal sizing equipment with a standard expression of performance which is required to define the accuracy of separation of particular item and to assist in the comparison of the performance of different items of coal sizing equipment and in the prediction of separation results.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard

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Part 7: Coal size classifying equipment—Performance evaluation

1 SCOPE This Standard sets out the principles and methods for the expression of results of performance tests on sizing equipment used in coal preparation, and includes methods for the evaluation of performance parameters. Performance test procedures and size measurement techniques are recommended.

This Standard applies to all types of sizing equipment, categorized as follows:

- (a) Screens.
- (b) Classifiers.
- (c) Others.

The procedure described in this Standard applies to two-product separations. Performance assessment of multiproduct separations can be achieved by consideration of a series of two-product separations.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- 1038 Coal and coke—Analysis and testing
- 1038.16 Part 16: Acceptance and reporting of results
- 2418 Coal and coke—Glossary of terms
- 3881 Higher rank coal—Size analysis
- 4264 Coal and coke—Sampling (series)

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

3.1 General

3.1.1 Actual feed (T)—material fed to the sizing equipment during the test period and including any recirculated material.

3.1.2 Reference size—the separation size, designated particle size or control size used to define size analysis of the products of a sizing operation.

3.1.2.1 Coarser material—material that is coarser than the reference size.

3.1.2.2 Finer material—material that is finer than the reference size.

3.1.2.3 Designated size—the particle size at which a feed is to be separated by a sizing operation.

3.1.2.4 Equal errors size—the separation size at which equal portions of the feed material are wrongly placed in each of two products of a size separation.

3.1.3 Product—material discharged from the sizing equipment prior to any further treatment or recirculation.