

Australian Standard<sup>®</sup>

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**Coal and coke—Sampling**

**Part 1: Higher rank coal—  
Sampling procedures**

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This Australian Standard was prepared by Committee MN/1, Coal and Coke. It was approved on behalf of the Council of Standards Australia on 27 October 1994 and published on 5 March 1995.

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The following interests are represented on Committee MN/1:

Australasian Institute of Mining and Metallurgy  
Australian Chamber of Commerce and Industry  
Australian Coal Association  
Australian Coal Industry Research Laboratories  
Australian Coal Preparation Society  
Australian Institute of Energy  
Australian Mining Industry Council  
Bureau of Steel Manufacturers of Australia  
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*This Standard was issued in draft form for comment as DR 92013.*

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## PREFACE

This Standard was prepared by the Standards Australia Committee on Coal and Coke, as a revision of AS 2646.2—1984, *Sampling of solid mineral fuels, Part 2: Hard coal—Sampling from moving streams*, AS 2646.4—1984, *Sampling of solid mineral fuels, Part 4: Hard coal—Sampling from stationary situations*, and AS 2646.6—1984, *Sampling of solid mineral fuels, Part 6: Hard coal—Preparation of samples*.

Other Standards in this series are as follows:

Part 2: Coke—Sampling procedures

Part 3: Lower rank coal—Sampling procedures

Part 4: Determination of precision and bias

In preparing this revision, reference was made to recommendations provided by the General Sampling Subcommittee MN/10.

The objective of this Standard is to provide those responsible for sampling coal with a set of rules that will ensure that the subsequent testing of the coal is representative of the full quantity of coal being sampled.

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

This Standard has undergone a considerable number of changes and revisions. Details of the publishing history can be obtained from Standards Australia's Information Centre.

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Originated as AS CK2.1— 1946 (being endorsement of BS 1017— 1942 without amendment).  
 Previous editions AS 2646.1— 1984, AS 2646.2— 1984, AS 2646.4— 1984 and AS 2646.6— 1984.  
 Amalgamated and redesignated AS 4264.1—1995.

## STANDARDS AUSTRALIA

**Australian Standard**  
**Coal and coke—Sampling**

**Part 1: Higher rank coal—Sampling procedures**

SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE** This Standard sets out methods for the sampling of higher rank coal from moving streams and stationary situations, including stopped-belt sampling, for both routine and special purposes, to provide samples for general analysis and for the determination of total moisture.

NOTE: Higher rank coal is defined in AS 2096 as coal having a gross specific energy of 21.00 MJ/kg or greater on an ash-free, moist (afm) basis *and* 27.00 MJ/kg or greater on a dry, ash-free (daf) basis.

The provisions of this Standard specifically include stopped-belt sampling. Although this Standard is intended to cover all higher rank coal sampling from moving streams, the procedures recommended may not be applicable in cases of extreme segregation of material, as found with very wet coal owing to moisture reflow, or with very dry coal owing to generation of dust. In such cases, it may be necessary to revert to stopped-belt sampling.

Stopped-belt sampling is the reference method against which other sampling procedures are compared.

Methods for the preparation of samples are also included in this Standard, and it is recognized that some on-line sampling installations perform part of the sample preparation.

Sampling from coal seams is covered in AS 2617, and is excluded from this Standard.

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

## AS

1038	Coal and coke—Analysis and testing
1038.1	Part 1: Higher rank coal—Total moisture
1038.12.3	Part 12.3: Higher rank coal—Caking and coking properties—Dilatation
1038.19	Part 19: Determination of the abrasion index of higher rank coal
1038.20	Part 20: Higher rank coal—Hardgrove grindability index
1152	Specification for test sieves
1631	Electrically-heated ovens in which flammable volatiles occur—Type 1 ovens
2061	Preparation of coal samples for incident light microscopy
2096	Classification and coding systems for Australian coals
2137	Hard coal—Determination of plastic properties by the Gieseler plastometer
2267	Code of practice for conducting pilot coke oven tests
2418	Solid mineral fuels—Glossary of terms
2617	Guide for the taking of samples from hard coal seams in situ