

Australian Standard™

Coal and coke—Sampling

**Part 5: Guide to the inspection
of mechanical sampling systems**

This Australian Standard was prepared by Committee MN/1, Coal and Coke. It was approved on behalf of the Council of Standards Australia on 30 June 1999 and published on 5 September 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 NSW
CSIRO, Division of Energy Technology
Department of Mines & Energy (Qld)
Electricity Supply Association of Australia
Institution of Engineers Australia
Minerals Council of Australia
University of Newcastle
University of New South Wales
University of Queensland

Review of Australian Standards. *To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.*

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This Standard was issued in draft form for comment as DR 98644.

Australian Standard™

Coal and coke—Sampling

**Part 5: Guide to the inspection
of mechanical sampling systems**

First published as AS 4264.5—1999.

PREFACE

This Standard was prepared by the Standards Australia Committee MN/1, Coal and Coke.

This Standard was prepared with reference to ASTM D 4702-91, *Guide for inspecting crosscut, sweep-arm, and auger mechanical coal sampling systems for conformance with current ASTM Standards*.

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

The objective of this Standard is to provide users of new and existing mechanical sampling systems for coal and coke with guidance in their operation and inspection.

CONTENTS

1	SCOPE	3
2	REFERENCED DOCUMENTS	3
3	DEFINITIONS	3
4	SAFETY	3
5	GENERAL CONSIDERATIONS	3
6	ESTABLISHMENT OF INSPECTION SYSTEM	4
7	PROCEDURES	5

APPENDICES

A	EXAMPLE OF SAMPLING CHECKLIST	12
B	EXAMPLE OF SAMPLING PLANT OPERATORS INSPECTION REPORT	15
C	EXAMPLE OF SAMPLING PLANT OPERATIONS INSPECTION SUMMARY	20

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

STANDARDS AUSTRALIA

Australian Standard

Coal and coke—Sampling

Part 5: Guide to the inspection of mechanical sampling systems

1 SCOPE This Guide sets out recommended practices for the inspection of coal and coke mechanical sampling systems. This Guide serves as a reference for conformance with applicable Australian Standards.

This Guide includes general considerations including precision, coal variability and bias, establishment of inspection systems and inspection procedure.

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

AS

- 2418 Coal and coke—Glossary of terms
- 4264 Coal and coke—Sampling
- 4264.1 Part 1: Higher rank coal—Sampling procedures
- 4264.2 Part 2: Coke—Sampling procedures
- 4264.3 Part 3: Lower rank coal—Sampling procedures
- 4264.4 Part 4: Determination of precision and bias

3 DEFINITIONS For the purpose of this Standard, the definitions given in AS 2418, AS 4264.1 and those below apply.

3.1 Audit—a critical review of a sampling system, undertaken by a person not directly involved in the operation of that system, which measures its compliance with stipulated operating specifications.

3.2 Operational inspections—a record of observations and inspections undertaken by the operator during sampling of a consignment. The operator is the person taking the sample.

3.3 Mechanical inspections—a comparative record of observations and measurements of physical parameters against design criteria undertaken by a suitably qualified inspector.

4 SAFETY This Standard does not purport to address safety issues that may be associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety and health practices in line with site safety regulations and occupational health and safety acts in the relevant States of Australia. It is highly recommended that clear safety and maintenance instructions be provided to operators in the event of a breakdown. If parts of a system are used as a manual back-up, the parts not in use are to be clearly isolated according to site requirements.

5 GENERAL CONSIDERATIONS

5.1 Precision Precision checks are recommended for each coal or coke type used in the system. If there is a significant change in a coal or coke type or a new coal or coke type is introduced, a precision check should be carried out. The test should outline the precision of sampling, preparation and analysis of each type of coal or coke used in the system. These tests are to be in accordance with AS 4264.4.