

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
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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.

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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 inspection—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.