AS 2806.5—2003
ISO 10277:1995

Australian Standard™

Aluminium ores—Sampling

Part 5: Methods for checking the precision of sampling

Standards Australia

This Australian Standard was prepared by Committee MN-003, Aluminium Ores. It was approved on behalf of the Council of Standards Australia on 6 May 2003 and published on 26 June 2003.

The following are represented on Committee MN-003:

Australian Aluminium Council

Royal Australian Chemical Institute

Additional interests participating in the preparation of this Standard:

Aluminium ore exporters

Aluminium ores industry laboratories

Aluminium ore mining companies

Aluminium ore refineries

CSIRO Minerals

Superintending organization

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Australian Standard™

Aluminium ores—Sampling

Part 5: Methods for checking the precision of sampling

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PREFACE

This Standard was prepared by the Standards Australia Committee MN-003, Aluminium Ores, to supersede AS 2806.5—1994, *Aluminium ores—Sampling,* Part 5: *Methods for checking the precision of sampling.*

The objective of this Standard is to provide the aluminium ores industries with experimental procedures for checking the precision of sampling of aluminium ores.

This Standard is identical with and has been reproduced from ISO 10277:1995, *Aluminium ores—Experimental methods for checking the precision of sampling.*

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text 'this International Standard' should read 'this Australian Standard'.

(c) A full point should be substituted for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to equivalent Australian Standards, as follows:

Reference to International Standard		*Australian Standard*	
ISO		AS	
6139	Aluminium ores—Experimental determination of the heterogeneity of distribution of a lot	2806 2806.7	Aluminium ores—Sampling Part 7: Determination of quality variation
6140	Aluminium ores—Preparation of samples	2806.3	Part 3: Preparation of samples
8685	Aluminium ores—Sampling procedures	2806.1	Part 1: Sampling procedures

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

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AUSTRALIAN STANDARD

Aluminium ores—Sampling

Part 5:
Methods for checking the precision of sampling

1 Scope

This International Standard specifies the experimental methods to be applied for checking the precision of sampling of aluminium ores, expressed in terms of the standard deviation, being carried out in accordance with the methods prescribed in ISO 8685.

NOTE 1 These methods may also be applied for the purpose of checking the precision of preparation of samples being carried out in accordance with the methods prescribed in ISO 6140.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 10277. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 10277 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6139:1983, *Aluminium ores — Experimental determination of the heterogeneity of distribution of a lot.*

ISO 6140:1991, *Aluminium ores — Preparation of samples.*

ISO 8685:1992, *Aluminium ores — Sampling procedures.*

3 Symbols

The following symbols are used throughout this International Standard:

d_2 factor to estimate the standard deviation from the range ($d_2 = 1{,}128$ for a pair of determinations)

n number of increments

R_1 absolute difference between determinations on subsample A and subsample B

$\overline{R}_1$ mean absolute difference between determinations on subsamples A and B for n_s sampling units

R_2 absolute difference between determinations on divided subsamples B_1 and B_2

$\overline{R}_2$ mean absolute difference between determinations on divided subsamples B_1 and B_2 for n_s sampling units

R_3 absolute difference between determinations on the same divided subsample B_2