



**Copper, lead, zinc and nickel
concentrates—Guidelines for the
inspection of mechanical sampling
systems**



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- Australasian Institute of Mining and Metallurgy
 - CSIRO
 - Minerals Council of Australia
-

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Australian Standard[®]

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PREFACE

This Standard was prepared by the Standards Australia Committee, MN-005 Copper, Lead, Zinc and Nickel Ores and Concentrates.

The objective of this Standard is to set out recommended practices for the inspection of mechanical sampling systems. It serves as a reference for conformance with applicable International Standards for copper, lead, zinc and nickel concentrates. It also covers general considerations, including precision, quality variation, bias, establishment of inspection systems and inspection procedures.

This Standard is identical with, and has been reproduced from ISO 11790:2010, *Copper, lead, zinc and nickel concentrates—Guidelines for the inspection of mechanical sampling systems*.

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

- (a) In the source text ‘this International Standard’ should read ‘this Australian Standard’.
- (b) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

| <i>Reference to International Standard</i> | | <i>Australian Standard</i> | |
|--|--|----------------------------|---|
| ISO | | AS | |
| | | 2862 | Copper, lead, zinc and nickel concentrates—Sampling |
| 12743 | Copper, lead, zinc and nickel concentrates—Sampling procedures for determination of metal and moisture content | 2862.1 | Part 1: Sampling procedures for determination of metal and moisture content |
| 12744 | Copper, lead, zinc and nickel concentrates—Experimental methods for checking the precision of sampling | 2862.2 | Part 2: Experimental methods for checking the precision of sampling |
| 13292 | Copper, lead, zinc and nickel concentrates—Experimental methods for checking the bias of sampling | 2862.3 | Part 3: Experimental methods for checking the bias of sampling |

Only normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

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

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AUSTRALIAN STANDARD

Copper, lead, zinc and nickel concentrates—Guidelines for the inspection of mechanical sampling systems

WARNING — This International Standard may involve hazardous materials, operations and equipment. It is the responsibility of the user of this International Standard to establish appropriate health and safety practices and determine the applicability of regulatory limitations prior to use.

1 Scope

This International Standard sets out recommended practices for the inspection of mechanical sampling systems. It serves as a reference for conformance with applicable International Standards for copper, lead, zinc and nickel concentrates.

This International Standard covers general considerations, including precision, quality variation, bias, establishment of inspection systems and inspection procedures.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 12743, *Copper, lead, zinc and nickel concentrates — Sampling procedures for determination of metal and moisture content*

ISO 12744, *Copper, lead, zinc and nickel concentrates — Experimental methods for checking the precision of sampling*

ISO 13292, *Copper, lead, zinc and nickel concentrates — Experimental methods for checking the bias of sampling*

ISO 20212, *Copper, lead, zinc and nickel sulfides — Sampling procedures for ores and smelter residues*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12743, ISO 12744, ISO 13292 and ISO 20212 and the following apply.

**3.1
audit**

critical review of a mechanical sampling system, undertaken by a suitably qualified person not directly involved in the operation of that system, which measures its compliance with stipulated operating specifications