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

AS ISO 11790:2022

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The following are represented on Committee MN-005:

Australian X-ray Analytical Association
Chamber of Minerals and Energy of Western Australia
CSIRO
International Copper Association Australia
Minerals Council of Australia

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

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Preface

This Standard was prepared by the Standards Australia Committee MN-005, Lead, Zinc and Nickel Ores and Concentrates, to supersede AS ISO 11790:2015.

The objective of this document 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.

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

This document is identical with, and has been reproduced from, ISO 11790:2017, *Copper, lead, zinc and nickel concentrates — Guidelines for the inspection of mechanical sampling systems.*

As this document has been reproduced from an International document, a full point substitute for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms "normative" and "informative" are used in Standards to define the application of the appendices or annexes to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 183, *Copper, lead, zinc and nickel ores and concentrates*.

This second edition cancels and replaces the 2010 edition (ISO 11790:2010), of which it constitutes a minor revision. The main change is the deletion of reference to ISO 20212, which has not yet been published.

Australian Standard®

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

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

1 Scope

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

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

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

3.2
mechanical inspection
comparative record of observations and measurements of physical parameters against design criteria, and records of subsequent changes or improvements undertaken by a suitably qualified person not involved in the day-to-day operation of the system