# INTERNATIONAL STANDARD

**ISO 8685**

First edition
1992-06-01

# Aluminium ores — Sampling procedures

*Minerais alumineux — Procédés d'échantillonnage*

Reference number
ISO 8685:1992(E)

## Contents







International Organization for Standardization
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

## 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 8685 was prepared by Technical Committee ISO/TC 120, *Aluminium ores*, Sub-Committee SC 1, *Sampling*.

Annexes A, B, C and D of this International Standard are for information only.

This page intentionally left blank

# Aluminium ores — Sampling procedures



## 1 Scope

This International Standard sets out requirements for the sampling of aluminium ores from moving streams and stationary situations, including stopped-belt sampling, to provide gross samples for sample preparation. Stopped-belt sampling is the reference method for collecting ore samples against which other sampling procedures may be compared. Sampling from moving streams is the preferred method. Sampling from stationary situations should only be considered when sampling from moving streams is not possible. The procedures described in this International Standard for sampling from stationary situations merely minimize some of the sampling errors.

Although this International Standard is intended to cover all aluminium ore sampling from moving streams, the procedures recommended may not be applicable in cases of extreme segregation, for example very wet ore due to its sticky nature, or very dry ore due to generation of dust. In such cases it may be necessary to revert to stopped-belt sampling.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard 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 565:1990, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings.*

ISO 3534:1977, *Statistics — Vocabulary and symbols.*

ISO 6138:1991, *Aluminium ores — Experimental determination of the heterogeneity of constitution.*

ISO 6139:—[1], *Aluminium ores — Experimental determination of the heterogeneity of distribution of a lot.*

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

ISO 9033:1989, *Aluminium ores — Determination of the moisture content of bulk material.*

ISO 10226:1991, *Aluminium ores — Experimental methods for checking the bias of sampling.*

ISO 10277:—[1], *Aluminium ores — Experimental methods for checking the precision of sampling.*

## 3 Definitions

For the purposes this International Standard, the definitions given in ISO 3534 (including the terms "precision" and "accuracy") and the following, apply.

**3.1 bias:** The tendency to obtain a value which is persistently higher or persistently lower than the true value. Alternatively, the difference between the true value and the average result obtained from a large number of determinations using a biased method.

**3.2 constant mass division:** The method of sample division in which the retained portion from individual increments is of uniform mass.

**3.3 out:** A single pass of the sampling device through the ore stream.

**3.4 divided increment:** The quantity of ore obtained by division of the increment in order to decrease its mass.

1) To be published.