

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 620

METHODS OF CHEMICAL ANALYSIS OF MANGANESE ORES

DETERMINATION OF ZINC CONTENT

(Polarographic method, for zinc content from 0.005 to 0.1% inclusive)

1st EDITION

September 1967

COPYRIGHT RESERVED

The copyright of ISO Recommendations and ISO Standards belongs to ISO Member Bodies. Reproduction of these documents, in any country, may be authorized therefore only by the national standards organization of that country, being a member of ISO.

For each individual country the only valid standard is the national standard of that country.

Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.



Documents

Document Sharing Hub

BRIEF HISTORY

The ISO Recommendation R 620, *Methods of Chemical Analysis of Manganese Ores — Determination of Zinc Content*, was drawn up by Technical Committee ISO/TC 65, *Manganese Ores*, the Secretariat of which is held by Komitet Standartov Mer i Izmeritel'nyh Priborov pri Sovete Ministrov S.S.S.R. (GOST).

Work on this question by the Technical Committee began in 1954 and led, in 1964, to the adoption of a Draft ISO Recommendation.

In April 1965, this Draft ISO Recommendation (No. 779) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Argentina	India	Switzerland
Austria	Italy	Turkey
Chile	Korea, Rep. of	U.A.R.
Czechoslovakia	Netherlands	United Kingdom
Germany	Poland	U.S.S.R.
Greece	Romania	Yugoslavia
Hungary	Spain	

One Member Body opposed the approval of the Draft:

France

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in September 1967, to accept it as an ISO RECOMMENDATION.

METHODS OF CHEMICAL ANALYSIS OF MANGANESE ORES

DETERMINATION OF ZINC CONTENT

(Polarographic method, for zinc content from 0.005 to 0.1 % inclusive)

(Atomic mass Zn : 65.38 ; molecular mass ZnO : 81.38)

1. GENERAL INSTRUCTIONS

- 1.1 In the following analysis use a sample for chemical analysis of air-dried manganese ore, sampled and prepared in accordance with ISO Recommendation R 309, *Methods of Sampling Manganese Ores*.

Simultaneously with the collection of test samples for the determination of zinc, take three more test samples for the determination of hygroscopic moisture.

Calculate the content of zinc in ore on the dry basis by multiplying the numerical results of the determination of zinc by the conversion factor K , as found from the following formula:

$$K = \frac{100}{100 - A}$$

where

A is the percentage hygroscopic moisture content.

- 1.2 The determination of zinc in manganese ore should be carried out by analysing three parallel-weighed test samples of the ore together with two blank tests to allow the necessary corrections to be made to the results of the determination.

Simultaneously and under the same conditions carry out a check analysis of a standard sample of manganese ore for the determination of its zinc content. The standard sample for analysis should be taken from the same type of ore as that from which the analysed sample was taken.

The arithmetical mean of the three results should be accepted as the final result.