



MALAYSIAN STANDARD

**MS ISO 9516-1:2004
(CONFIRMED:2013)**

Iron ores - Determination of various elements by X-ray fluorescence spectrometry - Part 1: Comprehensive procedure (ISO 9516-1:2003, IDT)

ICS: 73.060.10

Descriptors: minerals and ores, metalliferous minerals, iron ores, chemical analysis, determination of content, various elements, x-ray fluorescence spectrometry

NOTE. This MS has been reviewed by the responsible committee and confirmed that its contents are current

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DEPARTMENT OF STANDARDS MALAYSIA

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Committee representation

The Iron and Steel Industry Standards Committee (ISC P) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Association of Marine Industries of Malaysia
Department of Standards Malaysia
Federation of Malaysian Manufacturers
IKRAM QA Services Sdn Bhd
Institute Materials Malaysia
Jabatan Kerja Raya
Malaysia Iron and Steel Industry Federation
Malaysian Automotive Association
Malaysian Industrial Development Authority
Master Builders Association Malaysia
Pertubuhan Arkitek Malaysia
SIRIM Berhad (Machinery and Tooling Technology Programme)
SIRIM QAS International Sdn Bhd
Universiti Malaya
Universiti Sains Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Raw Materials for Iron and Steel Production and Intermediate Products which developed this Malaysian Standard consists of representatives from the following organisations:

Amsteel Mills Sdn Bhd
Department of Mineral and Geoscience
Federation of Malaysian Foundries and Engineering Industries Association
Malayawata Steel Sdn Bhd
Master Builders Association Malaysia
Perwaja Steel Sdn Bhd
Perusahaan Otomobil Nasional Berhad
SIRIM Berhad (Machinery and Tooling Technology Program)
SIRIM Berhad (Secretariat)
SIRIM QAS International Sdn Bhd (Testing Services Department)
Southern Steel Berhad
Universiti Kebangsaan Malaysia
Universiti Teknologi Malaysia

Co-opted members:

Amsteel Mills Sdn Bhd (HBI Operation)
SIRIM QAS International Sdn Bhd (Product Certification Unit)

NATIONAL FOREWORD

This Malaysian Standard was developed by the Technical Committee on Raw Materials for Iron and Steel Production and Intermediate Products under the authority of the Iron and Steel Industry Standards Committee.

This Malaysian Standard is identical with ISO 9516-1:2003 *Iron ores – Determination of various elements by X-ray fluorescence spectrometry – Part 1: Comprehensive procedure* published by the International Organization for Standardization (ISO). However, for the purposes of this Malaysian Standard, the following apply:

- a) in the source text, 'this International Standard' should read 'this Malaysian Standard';
- b) the comma which is used as a decimal sign (if any), to read as a point; and
- c) references to International Standards should be replaced by equivalent Malaysian Standards as follows:

Referenced International Standards

Corresponding Malaysian Standards

ISO 3082, *Iron ores - Sampling and sample preparation procedures*

MS ISO 3082, *Iron ores - Sampling and sample preparation procedures*

ISO 7764, *Iron ores - Preparation of predried test samples for chemical analysis*

MS ISO 7764, *Iron ores - Preparation of predried test samples for chemical analysis*

Compliance with a Malaysian Standard does not of itself confer immunity from legal obligations.

NOTE. IDT on the front cover indicates an identical standard i.e. a standard where the technical content, structure, wording and presentation of a Malaysian Standard is exactly the same as in an International Standard or is identical in technical content and it may contain the minimal editorial changes specified in clause 4.2 of ISO/IEC Guide 21.

**Iron ores — Determination of various
elements by X-ray fluorescence
spectrometry —**

**Part 1:
Comprehensive procedure**

*Minerais de fer — Dosage de divers éléments par spectrométrie de
fluorescence de rayons X —*

Partie 1: Procédure détaillée

