



MALAYSIAN STANDARD

MS 2240-2:2023

**Stainless steels for general purposes - Part 2:
Corrosion-resistant semi-finished products,
bars, rods and sections
(First revision)
(ISO 16143-2:2004, MOD)**

ICS: 77.140.20

Descriptors: Stainless steels including alloyed steels, corrosion-resistant steels, heat-resisting steels, etc

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Committee representation

The National Standards Committee on Metallic Material and Semi Finished Products (NSC 16) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations.

Association of Consulting Engineers Malaysia
Construction Industry Development Board Malaysia
Department of Standards Malaysia (Secretariat)
Federation of Malaysian Manufacturer
IKRAM QA Services Sdn. Bhd
Jabatan Kerja Raya
Malaysia Steel Association
Malaysia Steel Institute
Malaysian Iron and Steel Industry Federation
Master Builders Association Malaysia
Ministry of International Trade and Industry
SIRIM Berhad
SIRIM QAS International Sdn Bhd
The Institution of Engineers, Malaysia
Universiti Malaya
Universiti Sains Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Steel Alloy (NSC 16/TC 4) which developed this Malaysian Standard consists of representatives from the following organisations:

Amsteel Mills Sdn Bhd
Department of Standards Malaysia
Construction Industry Development Board Malaysia
IKRAM QA Services Sdn Bhd
Intextra Industry Sdn Bhd
Ministry of International Trade and Industry
NS BlueScope Malaysia Sdn Bhd
Royal Malaysian Customs Department
SIRIM QAS International Sdn Bhd
Southern Steel Berhad
Universiti Islam Antarabangsa Malaysia
Universiti Kebangsaan Malaysia
Universiti Sains Malaysia

Co-opted members:

Malaysia Steel Institute
Southern PC Steel Sdn Bhd

National foreword

The adoption of the ISO Standard as a Malaysian Standard was recommended by the Technical Committee on Steel Alloy (NSC 16/TC 4) under the authority of the Metallic Material and Semi Finished Product National Standards Committee (NSC 16).

This standard is modified adoption of ISO 16143-2:2014, *Stainless steels for general purposes - Part 2: Corrosion-resistant semi-finished products, bars, rods and sections*, published by the International Organization for Standardization (ISO) with the following modification:

- a) in the source text, “the International Standard” has been replaced by “this Malaysian Standard”,
- b) the comma which is used as a decimal sign, has been replaced by a point;

c) Clause/Subclause	Modifications
6 Classification of Grades	Additional of austenitic-ferritic (duplex) steels
9.1 Marking	Inclusion of minimum marking requirement
Table 2	Addition chemical composition for steel designation, X12CrMnNiN17-7-5 Additional footnote ‘h’ and ‘l’
Table 5 and Table B.1	Additional mechanical properties of steel designation, X12CrNiCuS18-9-3 and X12CrMnNiN17-7-5
d) Reference to International Standard should be replaced by equivalent Malaysian Standards as follows:	

<u>Reference International Standards</u>	<u>Corresponding Malaysian Standards</u>
ISO 404, <i>Steel and steel products – General technical delivery requirements</i>	MS 1846, <i>Steel and steel products – General technical delivery requirements</i>
ISO 15510, <i>Stainless steels — Chemical composition</i>	MS 2317, <i>Stainless steel - Chemical composition</i>
ISO 14284, <i>Steel and iron — Sampling and preparation of samples for the determination of chemical composition</i>	MS 2332, <i>Steel and iron - sampling and preparation of samples for the determination of chemical composition</i>

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

NOTE. MOD on the front cover indicates a modified standard i.e. a standard adapted from an International Standard with permitted technical deviations, which are clearly identified and explained. The changes in structure are permitted provided that the altered structure permits easy comparison of the content of the two standards. Modified standards also include the changes permitted under identical correspondence.

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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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 17, *Steel*, Subcommittee SC 4, *Heat treatable and alloy steels*.

This second edition cancels and replaces the first edition (ISO 16143-2:2004), which has been technically revised.

ISO 16143 consists of the following parts, under the general title *Stainless steels for general purposes*:

- *Part 1: Corrosion-resistant flat products*
- *Part 2: Corrosion-resistant semi-finished products, bars, rods and sections*
- *Part 3: Wire*