



MALAYSIAN STANDARD

MS ISO 4301-3:2003
(CONFIRMED:2013)

Cranes - Classification - Part 3: Tower cranes (ISO 4301-3:1993, IDT)

ICS: 53.020.20

Descriptors: handling equipment, lifting equipment, cranes (hoists), tower cranes, classification

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

© Copyright 2013

DEPARTMENT OF STANDARDS MALAYSIA

DEVELOPMENT OF MALAYSIAN STANDARDS

The **Department of Standards Malaysia (STANDARDS MALAYSIA)** is the national standards and accreditation body of Malaysia.

The main function of STANDARDS MALAYSIA is to foster and promote standards, standardisation and accreditation as a means of advancing the national economy, promoting industrial efficiency and development, benefiting the health and safety of the public, protecting the consumers, facilitating domestic and international trade and furthering international cooperation in relation to standards and standardisation.

Malaysian Standards (MS) are developed through consensus by committees which comprise balanced representation of producers, users, consumers and others with relevant interests, as may be appropriate to the subject at hand. To the greatest extent possible, Malaysian Standards are aligned to or are adoption of international standards. Approval of a standard as a Malaysian Standard is governed by the Standards of Malaysia Act 1996 [Act 549]. Malaysian Standards are reviewed periodically. The use of Malaysian Standards is voluntary except in so far as they are made mandatory by regulatory authorities by means of regulations, local by-laws or any other similar ways.

For the purposes of Malaysian Standards, the following definitions apply:

Revision: A process where existing Malaysian Standard is reviewed and updated which resulted in the publication of a new edition of the Malaysian Standard.

Confirmed MS: A Malaysian Standard that has been reviewed by the responsible committee and confirmed that its contents are current.

Amendment: A process where a provision(s) of existing Malaysian Standard is altered. The changes are indicated in an amendment page which is incorporated into the existing Malaysian Standard. Amendments can be of technical and/or editorial nature.

Technical corrigendum: A corrected reprint of the current edition which is issued to correct either a technical error or ambiguity in a Malaysian Standard inadvertently introduced either in drafting or in printing and which could lead to incorrect or unsafe application of the publication.

NOTE: Technical corrigenda are not to correct errors which can be assumed to have no consequences in the application of the MS, for example minor printing errors.

STANDARDS MALAYSIA has appointed **SIRIM Berhad** as the agent to develop, distribute and sell Malaysian Standards.

For further information on Malaysian Standards, please contact:

Department of Standards Malaysia
Ministry of Science, Technology and Innovation
Level 1 & 2, Block 2300, Century Square
Jalan Usahawan
63000 Cyberjaya
Selangor Darul Ehsan
MALAYSIA

OR **SIRIM Berhad**
(Company No. 367474 - V)
1, Persiaran Dato' Menteri
Section 2, P. O. Box 7035
40700 Shah Alam
Selangor Darul Ehsan
MALAYSIA

Tel: 60 3 8318 0002
Fax: 60 3 8319 3131
<http://www.jsm.gov.my>
E-mail: central@jsm.gov.my

Tel: 60 3 5544 6000
Fax: 60 3 5510 8095
<http://www.sirim.my>
E-mail: msonline@sirim.my

Committee representation

The Mechanical Engineering Industry Standards Committee (ISC F) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Institusi Jurutera Malaysia
Institut Keselamatan dan Kesihatan Pekerjaan Malaysia
Jabatan Gas, Suruhanjaya Tenaga
Jabatan Kerja Raya
Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia
Jabatan Standard Malaysia
Kementerian Pertahanan Malaysia
Lembaga Kemajuan Perindustrian Malaysia
Malaysian Iron and Steel Industry Federation
Petroleum Nasional Berhad
SIRIM QAS International (Seksyen Pengujian Produk Mekanikal)
Universiti Kebangsaan Malaysia
Universiti Malaya
Universiti Teknologi Malaysia

The Technical Committee on Lifting Devices which developed this Malaysian Standard consists of representatives from the following organisations:

Favelle Favco Cranes (M) Sdn Bhd
Institusi Jurutera Malaysia
Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia
Jabatan Perumahan Negara
Lembaga Pembangunan Industri Pembinaan Malaysia
Northport Malaysia Berhad
SIRIM Berhad (Secretariat)
Universiti Kebangsaan Malaysia

Co-opted members:

Megah Sewa Sdn Bhd
MS Elevators Engineering Sdn Bhd
SIRIM QAS International Sdn Bhd (Seksyen Pengujian Bahan Binaan dan Bangunan)
Top Safe Management Sdn Bhd

NATIONAL FOREWORD

This Malaysian Standard was developed by the Technical Committee on Lifting Devices under the authority of the Mechanical Engineering Industry Standards Committee.

This Malaysian Standard is identical with ISO 4301-3: 1993, '*Cranes – Classification – Part 3: Tower cranes*' 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:

<u>International Standards</u>	<u>Corresponding Malaysian Standards</u>
ISO 4306-1:1990, Cranes – Vocabulary – Part 1: General	MS 1554-1:2002, Cranes – Vocabulary – Part 1: General
ISO 4306-3:1991, Cranes – Vocabulary – Part 3: Tower Cranes	MS ISO 4306-3:2001, Cranes – Vocabulary – Part 3: Tower Cranes

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.

INTERNATIONAL
STANDARD

ISO
4301-3

First edition
1993-12-15

Cranes — Classification —

Part 3:
Tower cranes

*Appareils de levage à charge suspendue — Classification —
Partie 3: Grues à tour*



Reference number
ISO 4301-3:1993(E)

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 4301-3 was prepared by Technical Committee ISO/TC 96, *Cranes*, Sub-Committee SC 7, *Tower cranes*.

ISO 4301 consists of the following parts, under the general title *Cranes — Classification*:

- *Part 1: General*
- *Part 2: Mobile cranes*
- *Part 3: Tower crane*
- *Part 4: Jib cranes*
- *Part 5: Overhead travelling and portal bridge cranes*

© ISO 1993

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

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

Printed in Switzerland