

SS 559-1:2022
ISO 12480-1:1997, MOD
(ICS 53.020.20)

SINGAPORE STANDARD

Code of practice for tower cranes

– Part 1 : General

[ISO title: Cranes – Safe use – Part 1: General]

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| Contents | Page |
|---|-------------|
| National Foreword | 3 |
| Foreword | 4 |
| 1 Scope | 5 |
| 2 Normative references | 5 |
| 3 Definitions | 5 |
| 4 Management of the crane operation | 7 |
| 5 Selection, responsibilities and minimum requirements of personnel | 8 |
| 6 Safety | 12 |
| 7 Selection of cranes | 13 |
| 8 Siting of cranes | 14 |
| 9 Erection and dismantling | 15 |
| 10 Procedures and precautions | 17 |
| 11 Operating conditions | 19 |
| 12 Rigging and handling of loads | 23 |
| 13 Raising and lowering of persons | 23 |
| 14 Tests, inspections and condition monitoring | 23 |
| Annex A (Informative) Example of communication system | 24 |
| Annex ZA (Normative) National deviations | 25 |
| Bibliography | 29 |

National Foreword

This Singapore Standard was prepared by the Working Group on Tower Cranes set up by the Technical Committee on Safety and Health Involving Equipment under the purview of the Quality and Safety Standards Committee.

In the review of SS 559:2010, 'Code of practice for safe use of tower cranes', the following three parts, under the general title 'Code of practice for tower cranes' were developed:

- Part 1: General
- Part 2: Safe use
- Part 3: Inspection

SS 559-1 is a modified adoption of ISO 12480-1: 1997 "Cranes – Safe use – Part 1: General", published by the International Organization for Standardization.

SS 559-1 is intended to be read in conjunction with SS 559-2 and SS 559-3.

In this standard, certain modifications due to national requirements and the particular needs of the local industry have been made. Except for the alternate terminologies, these modifications are marked by a margin on the left of the standard. Annex A on "Periodic Checks", Annex B on "Demolition and other special operations", Annex C on "Raising or lowering of persons" of ISO 12480-1 are not applicable in Singapore. Annex D (renamed as Annex A) on "Example of Communication System" is for information only. A complete list of modifications, together with their justifications, is given in Annex ZA.

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Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "mature standards". Mature standards will not be subject to further review, unless there are requests to review such standards.*
2. *An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.*
3. *Compliance with a SS or TR does not exempt users from any legal obligations.*

Foreword

ISO (the International Organization for Standardization) is a world-wide 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 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 12480-1 was prepared by Technical Committee ISO/TC 96, Cranes.

ISO 12480 consists of the following parts, under the general title Cranes - Safe use:

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

Annex C forms an integral part of this part of ISO 12478. Annexes A, B and D are for information only.

Code of practice for tower cranes – Part 1 : General

1 Scope

SS 559-1 establishes required practices for the safe use of cranes, including safe systems of work, management, planning, selection, erection and dismantling, operation and maintenance of cranes and the selection of crane operators, riggers and signalmen.

It does not cover manually operated (non-powered) cranes, cranes in which at least one of its motions is manually operated and cranes mounted on water-borne vessels, except in those circumstances where a land-based crane is temporarily affixed to a vessel.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of SS 559. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this SS 559-1 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.

| | |
|----------|---|
| SS 617 | Code of practice for the lifting of persons in work platforms suspended from cranes |
| SS 559-2 | Code of practice for tower cranes – Part 2: Safe use |
| SS 559-3 | Code of practice for tower cranes – Part 3: Inspection |
| SS 343-2 | Specification for lifting gear - Part 2: Hooks |