

SS 559-3:2022
(ICS 53.020.20)

SINGAPORE STANDARD

Code of practice for tower cranes

– Part 3 : Inspection



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Foreword

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

This is a revision of SS 559:2010, 'Code of practice for safe use of tower cranes'. The revised SS 559 now consists of the following three parts, under the general title 'Code of practice for tower cranes':

- Part 1: General (Modified adoption of ISO 12480-1:1997)
- Part 2: Safe use (Modified adoption of ISO 12480-3:2020)
- Part 3: Inspection

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

The focus of this standard is on various check, preparation, inspection, testing and examination of tower cranes, covering the whole life cycle of the project, from initial site planning up to final dismantling of tower cranes at site. It provides requirements and recommendations for the check during planning stage, pre-delivery, post-delivery, pre-erection, post-erection, post tieback and/or jacking, after adverse incidents and pre-dismantling. It covers who should check, what to check, how to check and why they should be checked at various stages of tower crane usage at site.

In preparing this standard, reference was made to the following publications:

- | | | |
|----|--------------------------|----------------------------------------------------------------------------------------------------------------------------|
| 1. | BS EN 14439:2006+A2:2009 | Cranes – Safety – Tower cranes |
| 2. | ISO 4306-3:2016 | Cranes – Vocabulary – Part 3 : Tower cranes |
| 3. | ISO 4310:2009 | Cranes – Test code and procedures |
| 4. | SS 559-1:2022 | Code of practice for tower cranes – Part 1 : Safe use |
| 5. | SS 595-3:2014 | Steel wire ropes for hoisting – Code of practice for the care, inspection and maintenance of steel wire ropes for hoisting |

Acknowledgement is made for the use of information from the above publications.

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 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.*

Code of practice for tower cranes – Part 3 : Inspection

1 Scope

This standard specifies requirements for the checking and inspection to be carried out on tower cranes. It covers checking and inspection in all aspects of tower crane usage, from the initial planning stage, pre-delivery check at the workshop, pre and post erection check on-site, periodic inspection, pre-operational check, end-of-the-day check, inspection before and after tieback and/or jacking, inspection in exceptional cases and inspection before dismantling.

2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN 14439	Cranes – Safety – Tower cranes
ISO 4306-3	Cranes – Vocabulary – Part 3: Tower cranes
ISO 4310	Cranes – Test code and procedures
SS 551	Code of practice for earthing
SS 559-1:2022	Code of practice for tower cranes – Part 1: General
SS 559-2:2022	Code of practice for tower cranes – Part 2: Safe use
SS 638	Code of practice for electrical installations
SS 650-1	Code of practice for temporary electrical installations – Part 1: Construction and building sites