

TECHNICAL REFERENCE

# Container depot operations



Published by

**Enterprise**  
**Singapore**

## **TR 53 : 2016**

(ICS 03.220.20; 55.180.10)

---

TECHNICAL REFERENCE

### **Container depot operations**

---

All rights reserved. Unless otherwise specified, no part of this Singapore Standard may be reproduced or utilised in any form or by any means, electronic or mechanical, including photocopying and microfilming, without permission in writing from Enterprise Singapore. Request for permission can be sent to: [standards@enterprisesg.gov.sg](mailto:standards@enterprisesg.gov.sg).

ISBN 978-981-4726-52-8

First published, 2016

**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.*
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 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.*
3. *Compliance with a SS or TR does not exempt users from any legal obligations.*

**Contents**

	<b>Page</b>
Foreword _____	4
1 Scope _____	5
2 Normative references _____	5
3 Definitions _____	6
4 Stacking _____	7
4.1 General requirements _____	7
4.2 Stacking patterns _____	8
5 Survey _____	8
5.1 Location of the survey area _____	8
5.2 Size of the survey area _____	8
5.3 Confirmed spaces _____	11
5.4 Work at heights _____	11
6 Traffic management _____	11
6.1 Gate width _____	11
6.2 Space for equipment maneuvering _____	11
6.3 Pedestrian and truck safety _____	12
6.4 Speed limit _____	12
7 Other layout and safety considerations _____	12
7.1 Equipment capabilities _____	12
7.2 Office safety _____	12
7.3 Maintenance and repair _____	12
7.4 Washing _____	13
7.5 Lighting _____	13
7.6 Dangerous goods storage _____	13
7.7 Fatigue management _____	13
8 Generic process _____	13
8.1 Gate-in _____	13
8.2 Gate-out _____	14
8.3 Stock and quality management _____	15

**Annex**

A Recommended practices in container depot operations _____	16
---	----

**Figures**

1 Example of an acceptable stacking pattern _____	9
2 Example of an unacceptable tower stack _____	10

## **Foreword**

This Technical Reference (TR) was prepared by the Container Depot Operations Working Group (WG) appointed by the Technical Committee on Logistics under the direction of the Manufacturing Standards Committee (MSC). The TR was endorsed by the MSC on 18 July 2016.

While there are existing codes of practice, e.g. “Code of Practice: Guiding Principles of Tank Container Depot-Client Management”, published by the International Tank Container Organisation and “Code of Practice for Container Depots” published by the Hong Kong Container Depot and Repair Association Ltd, their requirements are not specific to our local needs. Hence, taking reference from prevailing local laws and regulations, this TR was developed for the container depot operations in Singapore.

This TR is a provisional standard made available for application over a period of two years. The aim is to use the experience gained to update the TR so that it can be adopted as a Singapore Standard. Users of the TR are invited to provide feedback on its technical content, clarity and ease of use. Feedback can be submitted using the form provided in the TR. At the end of the two years, the TR will be reviewed, taking into account any feedback or other considerations, to further its development into a Singapore Standard if found suitable.

At the time of publication, this TR is expected to be used by container depot operators, depot contractors carrying out repairs and maintenance of containers within the depot premises, visitors to the depot, and contractors engaged by the depot operator to construct, repair, modify or otherwise conduct works on the premises of the depot.

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

- 1) Code of Practice on Street Work Proposal Relating to Development Works (April 2014 edition)
- 2) Workplace Safety and Health (Confined Spaces) Regulations, 2009
- 3) Workplace Safety and Health (Work at Heights) Regulations, 2013
- 4) Environmental Protection and Management Act
- 5) Fire Safety Act

Acknowledgement is made for the use of the above publications.

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

## Technical Reference for container depot operations

### 1 Scope

This Technical Reference (TR) standardises container depot operations with a systematic approach. It is intended for all container depot operations which require data verification/authentication for the acceptance of empty returns and collection of empty containers on the import and export segments of the land logistics supply chain. The standard will include specifications on data entries, including but not limited to, driver, vehicle and delivery details to ensure seamless flow of information to back-end administration.

### 2 Normative references

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

ISO 668	Series 1 freight containers – Classification, dimensions and ratings
SS 510	Code of practice for safety in welding and cutting (and other operations involving the use of heat)
SS 531	Code of practice for lighting of work places Part 1: Indoor Part 2: Outdoor Part 3: Lighting requirements for safety and security of outdoor work places
SS 514	Code of practice for office ergonomics
SS 528	Specification for personal fall-arrest systems Part 1: Full body harnesses Part 2: Lanyards and energy absorbers Part 3: Self-retracting lifelines Part 4: Vertical rails and vertical lifelines incorporating a sliding-type fall arrester Part 5: Connectors with self-closing and self-locking gates Part 6: System performance tests
SS 570	Specification for personal protective equipment for protection against falls from a height – Single point anchor devices and flexible horizontal lifeline systems
TR 39	Technical Reference for freight container equipment interchange receipt