

**SS 600:2022**  
(ICS 01.140.30; 47.020)

**SINGAPORE STANDARD**

**Code of practice for bunkering by bunker tankers using tank gauging**



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## Foreword

This Singapore Standard was prepared by the Working Group on SS 600 set up by the Technical Committee for Bunkering (Ambient Liquid Fuels) under the purview of the Chemical Standards Committee.

The precursor to this standard, CP 60 Code of practice for bunkering by bunker tankers, was first published in 1993 and underwent two revisions in 1996 and 2004. CP 60 was based on the second edition of the "Singapore bunkering procedure (for bunkers delivered by bunker barges/tankers to ships)", published by the Singapore National Shipping Association (SNSA), in association with the then Port of Singapore Authority (PSA). The first edition of the Singapore bunkering procedure was published on 1 August 1992.

The Singapore bunker claims procedures (SBC terms) were originally formulated by the Singapore International Arbitration Centre (SIAC) in consultation with the then Port of Singapore Authority (PSA) and the Singapore Shipping Association (SSA) for inclusion in CP 60:1993.

In 2008, SS 600 was introduced and merged the requirements of CP 60:2004, "Code of practice for bunkering by bunker tankers" and CP 77:1999, "Code of practice for bunker surveying" into Chapters 1 and 2. A major revision was carried out in 2014, where Chapters 1 and 2 were combined and a restructuring of the standard according to the bunkering processes (pre-delivery, during delivery and post-delivery) were done.

The 2022 revision of this standard consists of the following main changes:

- a) Aligned with the latest published SS 648:2019 Code of practice for bunker mass flow metering and SS 660:2020 Code of practice for bunker cargo delivery from oil terminal to bunker tanker using mass flow meter;
- b) Specified its use as the standard to be followed in the event of MFM metering system failure;
- c) Aligned the document structure to the updated ISO requirements; and
- d) Updated Annex U on SBC terms and Annex T on Resolution of disputes by the Singapore Chamber of Maritime Arbitration (SCMA), which had taken over responsibility from SIAC, in consultation with the Maritime and Port Authority of Singapore (MPA) and the SSA.

Permission has also been sought from the American Petroleum Institute for the reproduction of materials from their publications into this standard:

- a) Table 4 of API MPMS Chapter 7.2, Portable electronic thermometers, third edition (May 2018), Copyright © 2018 American Petroleum Institute, <https://www.api.org>; and
- b) Table 5 of API MPMS Chapter 7.1, Temperature determination – Liquid in glass thermometers, second edition (2017), Copyright © 2017 American Petroleum Institute, <https://www.api.org>.

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 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.*

# Code of practice for bunkering by bunker tankers using tank gauging

## 0 Introduction

This Singapore Standard is used to determine the quantities of bunkers delivered to vessels by bunker tankers using tank gauging. Tank gauging according to this standard is used to determine the remaining quantity to be delivered in the event of a mass flow metering (MFM) system failure, where delivery by the MFM cannot be continued. When this happens, permission from the implementing authority is sought before proceeding with the tank gauging method and at the end of the delivery, a separate bunker delivery note is issued.

It is important that sufficient time is allocated by shipowners, buyers and suppliers for the thorough measurements required on the bunker tanker and vessel for the proper completion of the bunkering operation.

This standard does not alter the contractual obligations of the parties involved in the bunker delivery.

## 1 Scope

This standard specifies the processes, procedures, requirements, roles and responsibilities of all parties concerned, for the delivery of bunkers by bunker tankers using tank gauging, including documentation, equipment standards and verification processes during a bunkering operation. It covers pre-delivery, during delivery and post-delivery checks and documentation.

Annex A specifies the requirements for volumetric flow meters.

## 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.

ASTM D1250	Standard guide for the use of the joint API and ASTM adjunct for temperature and pressure volume correction factors for generalized crude oils, refined products, and lubricating oils: API MPMS Chapter 11.1
ISO 8217	Petroleum products – Fuels (Class F) – Specifications of marine fuels
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories