

TR 129-4:2024
(ICS 47.020; 47.040)

TECHNICAL REFERENCE

Methanol bunkering

– Part 4: Competency requirements for personnel



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Foreword

This Technical Reference (TR) was prepared by the Working Group on Methanol Bunkering set up by the Technical Committee on Bunkering (Ambient Liquid Fuels) under the purview of the Chemical Standards Committee.

TR 129 consists of the following parts under the generic title “Methanol bunkering”:

- Part 1: General introduction
- Part 2: Requirements for custody transfer
- Part 3: Safety procedures and bunker tanker specifications
- Part 4: Competency requirements for personnel

While this TR has been developed as a four-part series, it is essential for the user to refer to all four parts, for a complete understanding of methanol bunkering.

TR 129-2, TR 129-3, and TR 129-4 were developed based on IMO Resolution MSC.1/Circ.1621, “Interim guidelines for the safety of ships using methyl/ethyl alcohol as fuel” and the experience gained from Singapore's preparation and execution of the world's first ship-to-containership methanol bunkering operation, as well as the first simultaneous methanol bunkering and cargo operation.

This TR is a provisional standard made available for application over a period of three 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 three 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.

It is presupposed that in the course of their work, users will comply with all relevant regulatory and statutory requirements. Some examples of relevant regulations and acts are listed in the Bibliography. The Singapore Standards Council and Enterprise Singapore shall not be responsible for identifying all of such legal obligations.

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

1. SS 532:2024 – Code of practice for the storage of flammable liquids
2. SS 600:2022 – Code of practice for bunkering by bunker tankers using tank gauging
3. TR 56-4:2020 LNG bunkering – Part 4: Competency requirements for personnel
4. IBC Code: International code for the construction and equipment carrying dangerous chemicals in bulk
5. IMO Interim guidelines for the safety of ships using methyl/ethyl as fuel (MSC.1/Circ.1621)
6. Introduction to methanol bunkering technical reference (LR, July 2020)
7. ISM Code: International safety management code IMO
8. Maritime and Port Authority of Singapore: Standards for port limit bunker tankers
9. Methanol safe handling manual (Methanol Institute. 5th Edition)
10. SENDA D4.4 CWA on methanol bunkering processes

11. STCW: International convention on standard of training, certification and watchkeeping for seafarers

Attention is drawn to the possibility that some of the elements of this TR 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.*

Methanol bunkering – Part 4: Competency requirements for personnel

1 Scope

This part of the TR covers the competencies and knowledge required by personnel involved for safely and efficiently delivering methanol bunkers to ships. It also specifies the appropriate training required to meet the requirements set out in this TR.

2 Normative references

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

TR 129-1	Methanol bunkering – Part 1: General introduction
TR 129-3	Methanol bunkering – Part 3: Safety procedures and bunker tanker specification