

**RULES
FOR THE CLASSIFICATION OF
SHIPS**

*Part 33 – SHIPS USING GASES OR OTHER
LOW-FLASHING FUEL*

January 2025

Amendments No. 2

January 2026

CROATIAN REGISTER OF SHIPPING

Hrvatska (Croatia) • 21000 Split • Marasovića 67 • P.O.B. 187

Tel.: (...) 385 (0)21 40 81 11

Fax.: (...) 385 (0)21 35 81 59

E-mail: tech.coord@crs.hr

web site: www.crs.hr

By the decision of the General Committee of Croatian Register of Shipping,

Amendments No. 2 to the
RULES FOR THE CLASSIFICATION OF SHIPS
Part 33 – SHIPS USING GASES OR OTHER LOW FLASHING FUEL

have been adopted on 22nd December 2025 and shall enter into force on 1 January 2026

GENERAL TERMS AND CONDITIONS

(March 2022)

Article 1 GENERAL

1.1 CROATIAN REGISTER OF SHIPPING (hereinafter: the *Register*) shall at all times remain an independent contractor and neither the *Register* nor any of its officers, surveyors, auditors, inspectors, agents, appointers, officers or managers shall act as an employee, servant or agent of any other party in the performance of the Services rendered by the *Register*.

1.2 The *Register* acts as a service provider. The Services provided by the *Register* cannot be construed as a commitment by the *Register* to achieve any result or as a warranty.

1.3 The provision of Services is subject to these General Terms and Conditions. No other terms and conditions shall apply, either expressly or by implication, unless expressly agreed in writing between the Parties.

1.4 These General Terms and Conditions shall be incorporated into, or referred to in any Contract and shall prevail over and exclude any other terms and conditions that the Client may wish to impose.

Any amendments to and/or deviations from these General Terms and Conditions, as well as any additional terms and conditions of the Client, shall be binding or valid only if set forth in writing and duly signed by the authorised representatives of both Parties.

1.5 The invalidity of one or more provisions of these General Terms and Conditions shall not affect the remaining provisions.

1.6 The Client acknowledges that the latest version of these General terms and Conditions and the latest version of applicable Rules apply to the Services provided by the *Register*.

1.7 Definitions in these General Terms and Conditions take precedence over other definitions that may appear in other documents issued by the *Register*.

1.8 The Client should at all times be aware of the provisions of these General Terms and Conditions, as they may be further amended, with their latest up to date version available on the web site of the *Register*.

Article 2 DEFINITIONS

2.1 **Certificate** means either a class certificate or statutory certificate, statement, attestation, statement of compliance, and a report following the Services provided by the *Register*.

2.2 **Certification** means the activity of certification in application of international and national standards and international industry practice provided by the *Register*.

Certification is an appraisal given by the *Register* to the Client and cannot be construed as an implied or express warranty of safety, fitness for purpose, seaworthiness of the vessel or its value for sale, insurance or chartering.

The purpose of Certification is to provide classification and statutory services and assistance to the maritime industry, Flag State Administrations, and regulatory authorities relating to maritime safety and pollution prevention.

2.3 **Classification** includes all activities and Services provided by the *Register* in accordance with the Rules. Classification may or may not be accompanied by the issuance of a Certificate of class with reference to the Rules.

Certificate of class is valid only if issued by the *Register*.

However, Certificate of class should not be construed as a guarantee of the safety, fitness for purpose or seaworthiness of the vessel. It is merely an attestation that the vessel complies with the Rules developed and published by the *Register*.

In addition, the *Register* is not a guarantee of the safety of life or property at sea or the seaworthiness of a vessel because, although the classification of a vessel is based on the assumption that the vessel will be properly loaded, operated, and maintained by competent and qualified personnel, the *Register* has no control over how a vessel is operated and maintained between the periodic surveys it conducts.

2.4 **Statutory certification** means certification made by the *Register* on behalf of the Flag State Administrations when and to the extent that the *Register* has been authorised to do so by the respective Flag State.

Statutory certification and services include the assessment of vessels registered by the Flag State and/or ship management companies to determine whether such ships/companies comply with the applicable requirements of international conventions, codes and national legislation, and the issuance of, or assistance in the issuance of, the appropriate certificates and documents.

Statutory certification includes, but is not limited to, certification, survey, and issuance of statutory certificates on behalf of the Flag State.

In cases where the *Register* acts on behalf of Flag State Administrations, the *Register* shall follow guidance issued by IMO (Resolutions, Circulars, etc.) or by IACS through Unified Interpretations (UI), unless otherwise directed by the Flag State.

2.5 **Client** means the shipowner, company, shipyard and/or party requesting Services or taking ownership of a classed vessel. In cases where shipowners have authorized another party to operate the vessel on their behalf, that party shall be considered as the company.

In addition to the above the Client means the person and/or entity that has requested Services from the *Register* and that has entered into a Contract or an agreement for Services with the *Register*.

2.6 **Parties** means the *Register* and Client together.

2.7 **Party** means the *Register* or the Client.

2.8 **Contract** means the contract in the form of a written agreement between the Client and the *Register* requesting Services, including these General Terms and Conditions and the Rules.

The provisions related to the Contract in these General Terms and Conditions shall apply even if there is no written agreement between the Client and the *Register*.

The Client may request the *Register* in writing to make a change to the contracted Services. However, the *Register* shall not be obligated to accept or execute any such change until a written agreement has been signed with the Client regarding the compensation and the possible impact of the change on the schedule as an addendum to the originally contracted Services.

2.9 **Services** shall mean the services specified in 2.2, 2.3 and 2.4, but also other services related to certification, classification and statutory certification, such as, but not limited to: ISM Code certification, ISPS Code, MLC 2006 certification, fuel oil consumption reporting, IHM certification, approval of manufacturers and service providers, certification of materials and products, training activities, conformity assessment, and any other relevant activities such as third party inspections, testing, shore and shipboard trials.

The Services provided by the *Register* are performed on a random basis and in no case include a full inspection of all items.

The *Register* shall provide the Services in accordance with related Contract(s), the provisions of these General Terms and Conditions, Rules, the international and national standards, the international conventions, the EU Regulations, the Flag State requirements and the industry practices applicable to the particular Service and always assuming that the Client is aware of these standards and the industry practices.

When providing Services, the *Register* does not guarantee the accuracy of the information or advice provided.

In providing Services, the *Register* does not assess compliance with standards other than the Rules, international and national standards, international conventions, EU regulations, Flag State requirements and industry practice, to the extent agreed in writing or specified in the Contract.

2.10 The *Register* means the Croatian Register of Shipping, an entity organized and existing under Croatian law, which, according to the Law on the Croatian Register of Shipping (Official Gazette No. 1996/81, 2013/76 and 2020/62) and the Charter of the *Register*, is an independent, not-for-profit, but public welfare oriented, public foundation that performs tasks:

- classification of sea-going ships,
- statutory certification of sea-going ships on behalf of the Flag State Administrations,
- classification of inland navigation vessels,
- statutory certification of inland navigation vessels,
- statutory certification of recreational crafts,
- certification of materials and products,
- conformity assessment of recreational crafts,
- conformity assessment of marine equipment,
- conformity assessment of pressure vessels,
- certification/registration of quality management systems.

2.11 **Vessel** means a ship, vessel, unit or offshore structure of any kind, whether or not connected to the shore or sea/river bed, located at sea or in inland waters and intended for transportation or special operations on the water, as decided by the *Register*.

2.12 **Rules** means the Rules for the classification, guidelines, instructions, or other documented evidence of the *Register* related to the Services provided.

The competent interpretation of the requirements specified in the Rules or other regulations published by the *Register* shall be the exclusive responsibility of the *Register's* Head Office, notwithstanding any possible different interpretations by other parties.

In cases where the Rules do not contain detailed requirements, the specific approval by the *Register* shall be based on the principles of the Rules and shall ensure a safety standard equivalent to that of the Rules.

Article 3 RESPONSIBILITIES

3.1 It is the Client's responsibility to ensure that all surveys required for vessel's class maintenance are conducted in a timely manner and in accordance with the Rules.

3.2 The *Register* may suspend or withdraw the vessel's existing Certificate of class in the event of serious deficiencies and replace it with a new Certificate of class with a shortened period of validity during which the deficiencies are to be rectified.

In addition, the *Register* shall suspend or withdraw a vessel's Certificate of class if the deficiencies are of such a magnitude as to endanger the class of the vessel, its safety and integrity, the safety of the crew, passengers, or the marine environment, and shall require that the vessel is to be inspected at the first port of call where the necessary repairs are to be carried out.

3.3 The Client should inform the *Register*:

- (i) in the event of a change in the intended use of a vessel, a conversion and alteration of the hull, machinery installations and other equipment affecting the Class of the vessel assigned by the *Register*. Conversions and alterations must be made under the supervision of the *Register* and must comply with the requirements of the Rules and/or additional requirements of the *Register*,
- (ii) in cases where the vessel has been damaged to such an extent that the Class of the vessel is likely to be affected and the safety and integrity of the vessel is likely to be compromised. In such cases, the vessel must be surveyed at the first port of call or as further directed by the *Register*. The survey shall be to the extent deemed necessary by the *Register*, by taking into account the extent of the damage.
- (iii) in cases where class-related deficiencies and/or defects are found as a result of a Flag State inspection or Port State Control. Should the Client fail to notify the *Register* of the detention of the vessel by Port State Authorities due to class related deficiencies, the *Register* reserves the right to suspend or withdraw the Certificate of class.

3.4 The *Register* shall have full control over Certificates issued and may suspend or withdraw a Certificate at any time in its sole discretion if the Client fails to comply with the following requirements set forth in the *Rules for the Classification of Ships, Part 1 - General Requirements, Chapter 1 - General Information*, as applicable:

- (i) para. 5.3 - *Maintenance of the validity of Certificate of Class*,
- (ii) para. 5.4 - *Period of Validity*,
- (iii) para. 5.5 - *Extension of the Period of Validity*,
- (iv) para. 5.6 - *Suspension and Reinstatement of Class in the Case of Overdue Surveys*, and
- (v) para. 5.7 - *Withdrawal of Class*.

3.5 The *Register* may suspend or withdraw a Certificate at any time in its sole discretion if the Client fails to comply with the following requirements set forth in the *Rules for the Classification of Inland Navigation Vessels, Part 1 - Classification and Surveys, Chapter I - Principles of Classification*, as applicable:

- (i) para. 2.8 - *Maintenance of the Validity of the Certificate of Class*,
- (ii) para. 2.9 - *Extension of validity of the Certificate of Class*, and following requirements set forth in the *Rules for the Classification of Inland Navigation Vessels, Part 1 - Classification and Surveys, Chapter II - Classification*, as applicable:
- (iii) para. 2.1 - *Suspension of Class*,
- (iv) para. 2.2 - *Withdrawal of Class*.

3.6 In addition to clauses 3.2, 3.4 and 3.5 of this Article, the *Register* reserves the right to terminate the Services and related Contract in the event of a breach of the provisions of these General Terms and Conditions.

3.7 If the Client fails to provide the *Register* with the required access or information at the agreed times or fails to prepare for the Service in a timely manner, the *Register* may suspend the provision of the Service until it receives the Client's instructions for access and/or the required information.

The *Register* shall not be liable for the consequences of such suspension, and the Client shall be responsible for the *Register's* additional fees and other unnecessary costs and expenses incurred by the *Register*.

3.8 The Client is obliged to perform timely payments of the invoices for provided Services. However, the *Register* may retain or withhold any Service or Certificate to the Client in the case of outstanding payments, whether mutually related or not, arising out of the entire business relationship with the Client.

Article 4

HEALTH, SAFETY AND ENVIRONMENT

4.1 Both the *Register* and the Client shall apply reasonable standards to promote safety, health, and environmental protection and to provide a safe working environment for their personnel.

4.2 The Client shall provide the *Register* with all access and information necessary for the safe and efficient performance of the requested Services as required by the Rules.

4.3 During the survey, personnel of the *Register* should have secure access to all work that directly or indirectly affects the Service.

4.4 The *Register* has the right to refuse to conduct an activity or visit an area or site if the *Register* in its sole discretion, believes that relevant risks are unacceptable or are not adequately addressed, contained, or otherwise mitigated.

Such a decision shall suspend the obligations of both Parties under the Contract without incurring any liability or penalty until the Parties agree on how to proceed.

Article 5

THIRD PARTIES AND SUBCONTRACTORS

5.1 Each specific Contract, including any Certificates issued, relates specifically to the Client, and no rights, obligations, interests, claims, benefits or Certificates issued shall extend to any third party without the prior written consent of the *Register*.

5.2 The Client shall not be entitled to grant any right to use the Certificates to any third party without the prior written consent of the *Register*.

5.3 The Client shall not without *Register's* consent, cede, assign, transfer, subcontract or deal in any manner with all or any of its rights or obligations under any Service and related Contract.

5.4 With regard to third party rights to access information and Certificates under confidentiality clause reference is to be made to Article 9.

Article 6

TAXES

6.1 Each Party shall be responsible for and shall bear all taxes, duties or similar governmental charges levied or imposed on any activity of that Party.

6.2 Prices, fees, rates, or remuneration are exclusive of any form of sales tax, value added tax, administrative fees and services tax and/or other similar taxes, including any surcharges. If any such indirect tax is or becomes applicable to the Services provided under the Contract, the Client shall be responsible for the payment of such indirect taxes.

Article 7

PAYMENT OF INVOICES

7.1 The provision of Services by the *Register*, whether complete or not, shall include payment of fees thirty (30) days after issuance of the invoice for the portion of the Services performed.

7.2 In the event that the Client fails to meet the requirements for payment in accordance with the instalments and terms of payment contained herein, the *Register* reserves the right to charge the Client with the interest rate in accordance with the applicable laws of the Republic of Croatia.

7.3 If the Client disputes an invoice or part of an invoice, the Client shall notify *Register* thereof in writing without undue delay. If no notification is received by the due date, Client shall be deemed to have accepted the invoice in full. If only part of an invoice is disputed, the undisputed amount must be paid by the due date.

Consequently, no disputes arising between the *Register* and the Client shall interfere with prompt payment of invoices by the Client. Any rights of lien or retention in favour of the Client or otherwise, are hereby excluded.

7.4 In the event of cancellation of all or part of the Services prior to their final completion, the Client shall pay all costs incurred by the *Register* on pro-rata basis for the portion of the Services provided to date. In such event, the *Register* will not claim the Client for loss of profit or reduced income. All reasonable costs directly attributable to the early termination and all amounts due to the *Register* at that time shall become immediately due and payable.

7.5 In the event of termination of the Service and related Contract, the *Register* shall be entitled to retain any payments, deposits or prepayments of fees made by the Client prior to the date of termination up to the amount to which the *Register* is entitled.

Article 8

TERMINATION

8.1 The Parties shall have the right to terminate the Services and the related Contract(s) by written notice to the other Party, and without prejudice to Article 7, in the following cases:

- (i) if the other Party commits a material breach of these General Terms and Conditions and/or the Contract and fails to rectify such breach in accordance with clause 8.4 of this Article,
- (ii) if the other Party becomes insolvent, is unable to pay its debts as they become due, or becomes subject to bankruptcy proceedings, administration, receivership, dissolution, liquidation, winding up or otherwise ceases to carry on its business; or
- (iii) for convenience, after giving the other Party thirty (30) days' prior written notice of termination.

8.2 The Classification issued for the relevant vessel and the Certificates previously issued shall remain valid until the effective date of termination or, in the event of such termination, immediately, subject to compliance with Article 3 and Article 7.

8.3 If, in the reasonable opinion of the *Register*, the Client breaches or is suspected of breaching Article 14 or Article 15, the *Register* shall have the right to terminate the Service and related Contract with immediate effect.

8.4 Notwithstanding the provisions of clause 8.1 of this Article, the Party intending to terminate Services for non-compliance or breach of the provisions of these General Terms and Conditions shall notify the other Party of the non-compliance or violation of the provisions of these General Terms and Conditions and set a reasonable deadline of 15 (fifteen) days for the other Party to remedy the breaches of the provisions of these General Terms and Conditions.

If the Party fails to remedy the breaches of the provisions of these General Terms and Conditions within the aforementioned period, the other Party shall have the right to terminate Services without further notice.

8.5 Termination of the Service and related Contract pursuant to the provisions of these General Terms and Conditions shall not give either Party the right to claim any additional compensation, indemnity or reimbursement from the other Party as a result of such termination, but such termination shall not affect any rights or remedies available to a Party at the time the termination becomes effective or any obligations or liabilities incurred by a Party.

Article 9 CONFIDENTIALITY

9.1 The Parties agree to keep confidential all facts, data, information, etc. related to the other Party's business that they have learned in the course of providing Services. Such information and data shall not be disclosed by the Parties to any third party and shall not be used or misused to the detriment of the other Party.

9.2 The *Register* will keep confidential any data, plans or other technical information received from the Client and will not disclose it to any third party outside the *Register*, unless authorised by the Client. This obligation shall continue to apply after termination of the Services. This obligation shall not apply to any data, plans or other technical information that was in the possession of the *Register* prior to being disclosed to the *Register* by or on behalf of the Client, or that becomes publicly available through no fault of the *Register*, or is otherwise provided to the *Register* by an independent source that is under no obligation of confidentiality to the *Register*.

9.3 Certificates issued by the *Register* to the Client as a result of the Services provided shall not be covered by the confidentiality Article.

Notwithstanding the foregoing, the Client shall be entitled to disclose any data to its affiliates involved in the transactions related to the Services or the Client's core activities.

9.4 Notwithstanding clause 9.1 and clause 9.2 of this Article, the *Register* shall have the right to disclose the Confidential Information to the following parties if required by regulations of:

- (i) authorised representatives of the Flag State Administration,
- (ii) authorised audit teams (i.e., accreditation body or EC auditors),
- (iii) the International Association of Classification Societies (IACS),
- (iv) a court of competent jurisdiction, government agency, or other relevant public authority, in accordance with applicable law, court order, or other public regulation.

9.5 The Client acknowledges that the *Register* is required to provide access to information to the EU Commission or any person acting on its behalf in accordance with applicable EU requirements and that the Client shall give the EU Commission with unrestricted access to the vessels for the purpose of inspection.

9.6 The obligations in this Article shall survive the conclusion of the Service or the termination of related Contract and shall continue for as long as the relevant information remains confidential.

Article 10 INTELLECTUAL PROPERTY

10.1 Each Party shall be the sole owner of all rights to its Intellectual Property created before or after the effective date of these General Terms and Conditions, whether or not associated with any Contract between the Parties.

10.2 The Intellectual Property developed by the *Register* for the provision of the Services, including but not limited to drawings, calculations and reports, shall remain the exclusive property of the *Register*.

Article 11 PROFESSIONAL ETHICS

11.1 Each of the Parties warrants that, with respect to the matters contemplated herein, neither it nor its affiliates has made or will make, directly or indirectly, any offer, payment, gift or authorization of money to any government official or employee, political party, public official or candidate for the benefit or advantage thereof.

11.2 In providing the Services, the *Register* shall strictly adhere to the requirements of its Code of Ethics relating to business activities.

Article 12 FORCE MAJEURE

12.1 For the purposes of these General Terms and Conditions, the term "Force Majeure" includes any event that directly or indirectly prevents the Parties from fulfilling their obligations due to events beyond their control, such as: strikes, wars, riots, piracy, civil commotion, malicious damage, pandemic, compliance with laws or government orders, rules, regulations or directives, sanctions and embargoes, accidents, defects of plants or machinery, seizures, fires, floods, storms and the like.

12.2 If either Party is prevented or delayed from performing its obligations by Force Majeure, such Party shall promptly notify the other Party in writing of the circumstances of the Force Majeure and its influence and, after such notification, shall not be liable for performance of any obligations prevented by the influence of the Force Majeure during its duration. Upon termination of the influence of the Force Majeure, the same Party should proceed with the planned activities in order to fulfil its obligations.

12.3 If one of the Parties is prevented by Force Majeure in its activities and fulfilment of its obligations and this event lasts continuously for three (3) months, the other Party shall be entitled to terminate the Service and related Contract without liability.

12.4 Neither of the Parties shall be liable for non-compliance with these General Terms and Conditions due to Force Majeure. If one of the Parties is prevented from fulfilling its obligations under these General Terms and Conditions due to Force Majeure, it shall immediately notify the other Party in writing within a reasonable period of time, stating the reasons for the Force Majeure and providing relevant evidence, if any.

Article 13 INDEMNIFICATIONS

13.1 Each Party shall indemnify the other Party against all claims arising out of the performance of the Services in respect of bodily injury, illness or death of any of its employees or other representatives and in respect of loss of or damage to the Party's property.

This provision shall apply whether or not the damage is caused or contributed to by the negligence of the other Party. Both Parties are obliged to take out separate insurances for these liabilities.

13.2 The Client shall indemnify the *Register* from and against all claims arising from the Client's violation of the provisions of these General Terms and Conditions and from the misuse of the Certificates issued by the *Register*.

13.3 The Client shall indemnify the *Register* against any financial responsibility or amounts arising from non-payment, late payment or payment of withholding taxes to the non-relevant tax authority or any other relevant governmental body.

13.4 Each Party shall notify the other Party without undue delay as soon as it becomes aware of any incident that could give rise to a claim against the other Party in respect of the Service provided and related Contract.

Article 14 ANTI-CORRUPTION

14.1 Each Party agrees that in performing its obligations under any Service, it will ensure that its affiliates, employees and/or agents, subsidiaries, subcontractors, consultants, and any other persons providing Services will:

- (i) comply with all applicable anti-bribery and anti-corruption laws (collectively, Anti-Bribery Laws) and, in particular, do not, directly or indirectly, offer, promise, grant, authorise the payment of, or confer any financial or other benefit on any public or government official:
 - to a public or governmental official to obtain or retain business with the intent to influence such official in his or her capacity as an official, if such official is not permitted or required by written law to be influenced by the offer, promise or gift; or
 - to another person with the intent to induce or reward the improper performance of a function or activity or for any other illegal purpose,
- (ii) maintain adequate systems and procedures designed to prevent activities, practises, or conduct in connection with services that would constitute an offence under an anticorruption law; and
- (iii) take reasonable steps to prevent similar acts by customers, contractors, subcontractors, agents and other third parties, persons under its control or influence.

14.2 Any failure by a Party to comply with or ensure compliance with its obligations under this Article shall, notwithstanding anything to the contrary in these General Terms and Conditions, be deemed a breach of these General Terms and Conditions which shall entitle the other Party to suspend and/or terminate the Services by notice in writing with immediate effect without further liability to the other Party except for any liability which may have arisen prior to the date of termination or suspension (as the case may be).

14.3 If a Party elects to suspend the provision of Services under these General Terms and Conditions pursuant to this Article, it shall have the sole and absolute discretion to determine:

- (i) when it will resume performance (if at all); and
- (ii) extend the period for performance of its obligations under the Services in its sole discretion.

Article 15 SANCTIONS

15.1 Each Party shall conduct all activities in compliance with all laws, statutes, rules, economic and trade sanctions (including, but not limited to, U.S. sanctions and EU sanctions) and regulations applicable to such Party, including, but not limited to: child labour, forced labour, collective bargaining, discrimination, abuse, working hours and minimum wages, anti-bribery, anti-corruption, copyright and trademark protection, personal data protection.

15.2 Each Party hereby represents and warrants that it is not or will not be subject to any economic or trade sanctions ("Sanctions") imposed by the United States of America, the European Union, the United Kingdom, any EU Member State, or the United Nations with respect to any country and/or by any sanction giver with respect to any company/individual.

15.3 Each Party represents and warrants that it will strictly comply with all Sanctions.

15.4 Nothing in these General Terms and Conditions shall be construed as causing or obligating either Party to act or refrain from acting in a manner inconsistent with, punishable by, or prohibited by any Sanctions.

15.5 Neither Party shall be obligated to perform any obligation arising under these Terms and Conditions (including, without limitation, the obligation to):

- (i) perform, deliver, accept, sell, purchase, pay or receive any funds to, from or through any person or entity; or
- (ii) engage in any other action whatsoever, if doing so violates or is inconsistent with sanctions and/or recommendations of international (intergovernmental) organisations to combat the financing of terrorism and other criminal activities and/or money laundering or exposes such Party to investigation or penalties.

15.6 In the event that a Party breaches any Sanctions or the Party's Business and/or Transactions arising out of or in connection with these General Terms and Conditions breach any Sanctions or otherwise violate the recommendations of one or more international (intergovernmental) organisations for combating the financing of terrorism and other criminal activities and/or money laundering, the other Party shall be entitled to terminate these General Terms and Conditions by written notice with immediate effect without incurring any liability to the other Party, except for liabilities (if any) incurred prior to the date of termination.

Article 16 LIABILITY

16.1 The *Register* is not, and cannot be considered as, an underwriter, consulting engineer, naval architect, shipbuilder, shipowner, or ship management company, nor can it assume the obligations and responsibilities associated with such functions, although the *Register's* experience may enable it to respond to inquiries about matters not covered by its Rules, policies, instructions, or other documented evidence.

16.2 The practices and procedures of the *Register* shall be selected by the *Register* in its sole and absolute discretion based on its experience and knowledge and in accordance with generally accepted professional standards in the relevant field of classification societies.

16.3 Nothing herein contained shall release any designer, naval architect or engineer, shipbuilder or manufacturer, shipyard, vendor, supplier, contractor or subcontractor, repairer or owner, from any information, report, certificate or similar document issued in connection with the provision of Services by the *Register*, operator, manager or other person or entity from any express or implied warranty or other contractual obligation or responsibility, or from any negligent act, error or omission of any kind whatsoever, nor shall they create any right, claim or benefit for any third party.

16.4 The *Register* shall exercise due care in the selection or appointment of its surveyors and all other employees whose presence and work is necessary for the provision of the Services.

16.5 If any person or entity using the Services of the *Register* suffers any loss, damage or expense that is or is shown to have been caused by a negligent act, omission or error of the *Register's* officers, surveyors, auditors, inspectors, agents, appointees, officers or managers, or those purporting to act in the name of and on behalf of the *Register*, or a negligent inaccuracy, advice, report or evidence given by or in the name of or/and on behalf of the *Register*, then the liability of the *Register* is limited in respect of any direct or indirect claim shall be limited to an amount not exceeding five times the fee charged or to be charged by the *Register* for the relevant Service.

16.6 Any liability for consequential damages is expressly excluded.

For purposes of this clause, consequential damages include, without limitation:

- (i) indirect or consequential damages,

- (ii) loss and/or delay of production, loss of products, loss of use, loss of bargain, loss of revenue, loss of profit or anticipated profit, loss of business and business interruption, in each case directly or indirectly.

16.7 The Parties are not entitled to assign the performance of obligations under these General Terms and Conditions or parts thereof to third parties without the prior written consent of the other Party.

16.8 If during the term of the Contract, there is a transfer of function due to change of status (merger, acquisition, division, etc.), all obligations and rights under these General Terms and Conditions and associated Contract will be transferred to the legal successor of the Party concerned.

Article 17 GOVERNING LAW AND RESOLVING OF DISPUTES

17.1 These General Terms and Conditions and any dispute or claim between the Parties arising from or in connection with it, or the Services provided hereunder, will be governed and interpreted in accordance with the English law.

17.2 The Parties shall use their reasonable efforts to resolve any claim or dispute arising in relation to rendered Service by negotiations within a reasonable time.

17.3 Should the Parties fail to resolve any claim or dispute by negotiations, the dispute shall be exclusively subject to the jurisdiction of the Permanent Arbitration Court with the Croatian Chamber of Economy in Zagreb, Republic of Croatia.

17.4 The Parties agree to keep the any arbitration proceedings confidential.

17.5 Notwithstanding the above, any claim not presented within three (3) months of the completion of the particular Services, or within three (3) months of from the date when the events which are relied on were first discovered by the Client, shall be deemed waived and absolutely time barred.

17.6 Any objections against the line adopted by any of the *Register's* servants in fulfilling their duties or against the conclusions reached are to be raised to the *Register* by the Party as soon as possible.

If the Party is not satisfied with the final conclusions and interpretations by the *Register* the arbitration lays upon the Commission for appeal for Classification and Statutory certification of ships, which is to be formed according to the Regulation 39 of the Charter of the *Register*.

INTRODUCTORY NOTES

These amendments shall be read together with the requirements in the Rules for the Classification of Ships, Part 33 – Ships using gases or other low-flashing fuel, edition January 2025, as last amended by Amendments No. 1 edition July 2025.

Table 1 contains review of amendments, where items changed or added in relating to previous edition are given, with short description of each modification or addition. All major changes throughout the text are shaded.

This Part of the Rules includes the requirements of the following international Organisations:

International Maritime Organization (IMO)

Conventions: International Convention for the Safety of Life at Sea, 1974 (SOLAS 74) and all subsequent and applicable amendments adopted up to MSC 106
Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS PROT 1988)

Codes: International Code of Safety for Ships Using Gases or Other Low-Flashpoint Fuels (IGF Code) as adopted by MSC.391(95), as amended by MSC.422(98), MSC.458(101), MSC.475(102), **MSC.524(106)** and **MSC.551(108)**

Circulars: MSC.1/Circ.1394 (Rev.2, July 2019), MSC.1/Circ.1599 (Rev.3, July 2024), MSC.1/Circ.1647, MSC.1/Circ.1621, MSC.1/Circ.1622 (Rev.1, July 2024), MSC.1/Circ.1666, MSC.1/Circ.1667, MSC.1/Circ.1670

International Association of Classification Societies (IACS)

Unified Requirements (UR):
M78 (Rev.2, Jan 2024), M82 (Mar 2023), W1 (Rev.4, Apr 2021), Z25 (Rev.1 Sep.2017)

Unified Interpretations:
GF1 (Jan 2017), GF2 (Sep 2017) GF3 (Dec 2017), GF4 (Dec 2017), GF5 (Dec 2017), GF6 (Dec 2017), GF7 (Dec 2017), GF8 (Dec 2017), GF9 (Dec 2017), GF10 (Dec 2017), GF11 (Dec 2017), GF12 (Dec 2017), GF13 (Rev.1, May 2023), GFGF14 (July 2018), GF15 (July 2018), GF16 (Nov 2018), GF17 (Dec 2018), GF18 (Feb 2019), GF19 (**rev. 1, June 2025**), GF20 (Jun 2024), **GF21 (Oct 2024)**

Recommendations (Rec.):
No.142 (June 2016), No.146 (Aug 2016), No.148 (Rev.1 Mar 2020)

TABLE 1 – REVIEW OF AMENDMENTS

This review comprises amendments in relation to the Rules for the Classification of Ships, Part 33 – Ships using gases or other low-flashing fuel, edition January 2025, as last amended by Amendments No. 1 edition July 2025.

| <i>ITEM</i> | <i>DESCRIPTION OF THE AMENDMENTS</i> |
|---|--|
| PART A-1, Section 2 - GENERAL | |
| Head 2.2 – DEFINITIONS | New item 2.2.43 is added after item 2.2.42 because of introducing the definition “Ship constructed on or after 1 January 2026” from Resolution MSC.551(108) - Amendments to the IGF Code |
| Head 4.2 –GENERAL REQUIREMENTS | Item 4.2.2 has been amended because of revised references to part and items of the Rules where the risk assessment by 4.2.1 is required, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| PART A-1, Section 5 – SHIP DESIGN AND ARRANGEMENT | |
| Head 5.3 – REGULATION-GENERAL | Sub-items 5.3.3.3 and 5.3.4.4 have been amended because of replacement of phrase “tank containment system” with “fuel containment system”, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| Head 5.12 - REGULATIONS FOR AIRLOCKS | Item 5.12.1 has been amended to clarify position of the sill height of the door in the definition of airlock, and to add phrase “For ships constructed on or after 1 January 2026”, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| PART A-1, Section 6 – FUEL CONTAINMENT SYSTEM | |
| Head 6.4 – REGULATIONS FOR LIQUEFIED GAS FUEL CONTAINMENT | Sub-item 6.4.15.3.1 has been amended because of replacement of the word “cargo” with “fuel” related to relative density in the formula for the design vapour pressure, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code |
| Head 6.7 –REGULATIONS FOR PRESSURE RELIEF SYSTEM | The chapeau of sub-item 6.7.3.1.1 has been amended to clarify the combined relieving capacity of PRVs, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| Head 6.7 –REGULATIONS FOR PRESSURE RELIEF SYSTEM | Sub-item 6.7.3.1.1.2 has been amended because of missing word “tank” related to fire exposure factor F, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| Head 6.9 –REGULATIONS FOR THE MAINTAINING OF FUEL STORAGE CONDITION | The chapeau of sub-item 6.9.1.1 has been amended by adding phrase “For ships constructed on or after 1 January 2026” for control of tank pressure and temperature, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| PART A-1, Section 7 – MATERIAL AND GENERAL PIPE DESIGN | |
| Head 7.3 – REGULATIONS FOR GENERAL PIPE DESIGN | Sub-item 7.3.2.1 has been amended by correction in formula for minimum wall thickness, and adding phrase “For ships constructed on or after 1 January 2026” for calculation of the minimum wall thickness, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| Head 7.4 – REGULATIONS FOR MATERIALS | Table 7.3 has been amended by adding material with heat treatment “High manganese austenitic steel – hot rolling and controlled cooling”, related notes 10 and 11 and reference to the Revised guidelines on the application of high manganese austenitic steel for cryogenic service in the footnote, in accordance with Resolution MSC.524(106) - Amendments to the IGF Code |
| PART A-1, Section 8 – BUNKERING | |
| Head 8.4 – REGULATIONS FOR MANIFOLD | New items 8.4.2 and 8.4.3 have been added and item 8.4.1 has been amended by adding more detailed requirements for the connections at the bunkering station, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| PART A-1, Section 9 – FUEL SUPPLY TO CONSUMERS | |
| Head 9.2 – FUNCTIONAL REQUIREMENTS | Note in Head 9.2 has been amended because of implementation of UI GF20 (Rev.1, June 2025) to express more detailed explanation about possible acceptance of single common flange in fuel supply to consumers. |
| Head 9.3 – REGULATIONS ON REDUNDANCY OF FUEL SUPPLY | Item 9.3.1 has been amended with more details about redundancy in case of fuel leakage, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |

| | |
|---|---|
| Head 9.4 – REGULATIONS ON SAFETY FUNCTIONS OF GAS SUPPLY SYSTEM | Items 9.4.7 and 9.4.8 have been amended with more details about activation of shutdown valves and venting, and replacing phrase “engine” with “gas consumer”, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| Head 9.6 – REGULATIONS FOR FUEL SUPPLY TO CONSUMERS IN GAS-SAFE MACHINERY SPACES | Sub-item 9.6.1.1 has been amended clarifying phrase “gas fuel piping”, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| Head 9.8 – REGULATIONS FOR THE DESIGN OF VENTILATED DUCT, OUTER PIPE AGAINST INNER PIPE GAS LEAKAGE | Items 9.8.1, 9.8.2 and 9.8.4 have been amended with more details about design pressure of outer pipe or duct and pressure test of the duct, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| PART A-1, Section 11 – FIRE SAFETY | |
| Head 11.3 – REGULATIONS FOR FIRE PROTECTION | Item 11.3.1 has been amended that fuel preparation rooms shall, for the purpose of the application of SOLAS regulation II-2/9, be regarded as a machinery space of category A, all in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| Head 11.6 – REGULATIONS FOR DRY CHEMICAL POWDER FIRE-EXTINGUISHING SYSTEM | Item 11.6.1 has been amended by requirement for dry powder fire extinguisher in the fuel preparation room, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| PART A-1, Section 12 – EXPLOSION PREVENTION | |
| Head 12.5 – HAZARDOUS AREA ZONES | Items 12.5.1 and 12.5.2.1 have been amended by inclusion of interbarrier spaces in hazardous area zone 0, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| PART A-1 Section 15 – CONTROL, MONITORING AND SAFETY SYSTEMS | |
| Head 15.4 – REGULATIONS FOR BUNKERING AND LIQUEFIED GAS FUEL TANK MONITORING | Item 15.4.1.3 has been amended by addition of one more type of liquefied gas fuel tank liquid level gauges, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code. |
| PART A-1, Section 16 – MANUFACTURE, WORKMANSHIP AND TESTING | |
| Head 16.3 – WELDING OF METALLIC MATERIALS AND NON-DESTRUCTIVE TESTING FOR THE FUEL CONTAINMENT SYSTEM | Item 16.3.5.1 has been amended because of replacement of phrase “primary tanks” with “primary barriers” related to fuel tanks, in accordance with Resolution MSC.551(108) - Amendments to the IGF Code |
| PART A-1, APPENDIX 1 - INTERIM GUIDELINES FOR THE SAFETY OF SHIPS USING METHYL/ETHYL ALCOHOL AS FUEL (MSC.1/CIRC.1621) | |
| Section 5 - Ship design and arrangement | Item 11.7.1 has been amended because of implementation of UI GF21 (October 2025) about protection of Machinery space and fuel preparation space by an approved fixed fire extinguishing system. |

PART A

2 GENERAL

■ **Head 2.2 – DEFINITIONS**, New item 2.2.43 is added after item 2.2.42 and should be read as follows:

2.2.43 Ship constructed on or after 1 January 2026 means:

- .1 for which the building contract is placed on or after 1 January 2026; or
- .2 in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 July 2026; or
- .3 the delivery of which is on or after 1 January 2030.

■ **Head 4.2 –GENERAL REQUIREMENTS**, Item 4.2.2 has been amended and should be read as follows:

4.2.2 For ships to which part A-1 applies, the risk assessment required by 4.2.1 need only be conducted where explicitly required by paragraphs 5.10.5, 5.12.3, 6.4.1.1, 6.4.15.4.7.2, 8.3.1.1, **8.4.2**, 13.4.1, 13.7 and 15.8.1.10 as well as by paragraphs 4.4 and 6.8 of the annex.

PART A-1 SPECIFIC REQUIREMENTS FOR SHIPS USING NATURAL GAS AS FUEL

5 SHIP DESIGN AND ARRANGEMENT

■ **Head 5.3 – REGULATION-GENERAL**, Sub-items 5.3.3.3 and 5.3.4.4 have been amended and should be read as follows:

5.3.3.3 For independent tanks the protective distance shall be measured to the tank shell (the primary barrier of the fuel containment system). For membrane tanks the distance shall be measured to the bulkheads surrounding the tank insulation.

5.3.4.4 For independent tanks the protective distance shall be measured to the tank shell (the primary barrier of the fuel containment system). For membrane tanks the distance shall be measured to the bulkheads surrounding the tank insulation.

■ **Head 5.12 – REGULATIONS FOR AIRLOCKS**, Item 5.12.1 has been amended and should be read as follows:

5.12.1 For ships constructed on or after 1 January 2026, an air lock is a space enclosed by gastight bulkheads with two substantially gastight doors spaced at least 1.5 m and not more than 2.5 m apart. Unless subject to the requirements of the International Convention on Load Line, the sill height of the door leading to the hazardous area shall not be less than 300 mm. The doors shall be self-closing without any holding back arrangements.

PART A-1 SPECIFIC REQUIREMENTS FOR SHIPS USING NATURAL GAS AS FUEL

6 FUEL CONTAINMENT SYSTEM

■ **Head 6.4 – REGULATIONS FOR LIQUEFIED GAS FUEL CONTAINMENT**, Sub-item 6.4.15.3.1 has been amended and should be read as follows:

6.4.15.3.1.2 The design vapour pressure shall not be less than:

$$P_0 = 0.2 + AC(\rho_r)^{1.5} \text{ (MPa)}$$

where:

$$A = 0.00185 \left(\frac{\sigma_m}{\Delta\sigma_A} \right)^2 \text{ with:}$$

σ_m = design primary membrane stress;

$\Delta\sigma_A$ = allowable dynamic membrane stress (double amplitude at probability level $Q = 10^{-8}$) and equal to:

- 55 N/mm² for ferritic-perlitic, martensitic and austenitic steel;
- 25 N/mm² for aluminium alloy (5083-O);

C = a characteristic tank dimension to be taken as the greatest of the following:

$$h, 0.75b \text{ or } 0.45\ell,$$

with:

h = height of tank (dimension in ship's vertical direction) (m);

b = width of tank (dimension in ship's transverse direction) (m);

ℓ = length of tank (dimension in ship's longitudinal direction) (m);

ρ_r = the relative density of the fuel ($\rho_r = 1$ for fresh water) at the design temperature.

■ **Head 6.7 – REGULATIONS FOR PRESSURE RELIEF SYSTEM**, The chapeau of sub-item 6.7.3.1.1 has been amended and should be read as follows:

6.7.3.1.1 For ships constructed on or after 1 January 2026, the pressure relief system for each liquefied gas fuel tank shall be designed so that, regardless of the state of any one PRV, the capacity of the residual PRVs meets the combined relieving capacity requirements of the system. The combined relieving capacity shall be the greater of the following, with no more than 20% rise in liquefied gas fuel tank pressure above the MARVS. The tank shall not be loaded until the full relieving capacity is restored:

■ **Head 6.7 – REGULATIONS FOR PRESSURE RELIEF SYSTEM**, Sub-item 6.7.3.1.1.2 has been amended and should be read as follows:

6.7.3.1.1 PRVs shall have a combined relieving capacity for each liquefied gas fuel tank to discharge the greater of the following, with not more than a 20% rise in liquefied gas fuel tank pressure above the MARVS:

- .1 the maximum capacity of the liquefied gas fuel tank inerting system if the maximum attainable working pressure of the liquefied gas fuel tank inerting system exceeds the MARVS of the liquefied gas fuel tanks; or
- .2 vapours generated under fire exposure computed using the following formula:

$$Q = FGA^{0.82} \text{ (m}^3\text{/s)}$$

where:

Q = minimum required rate of discharge of air at standard conditions of 273.15 Kelvin (K) and 0.1013 MPa.

F = fire exposure factor for different liquefied gas fuel tank types:

$F = 1.0$ for tanks without insulation located on deck;

...

■ **Head 6.9 -REGULATIONS FOR THE MAINTAINING OF FUEL STORAGE CONDITION**, The chapeau of sub-item 6.9.1.1 has been amended amended and should be read as follows:

6.9.1.1 For ships constructed on or after 1 January 2026, with the exception of liquefied gas fuel tanks designed to withstand the full gauge vapour pressure of the fuel under conditions of the upper ambient design temperature, liquefied gas fuel tanks' pressure and temperature shall be maintained at all times within their design range by means acceptable to the Administration, e.g. by one or more of the following methods:

- .1 re-liquefaction of vapours;
- .2 thermal oxidation of vapours;
- .3 pressure accumulation; or
- .4 liquefied gas fuel cooling.

The method chosen shall be capable of maintaining tank pressure below the set pressure of the tank pressure relief valves for a period of 15 days assuming full tank at normal service pressure and the ship in idle condition, i.e. only power for domestic load is generated.

PART A-1 SPECIFIC REQUIREMENTS FOR SHIPS USING NATURAL GAS AS FUEL

7 MATERIAL AND GENERAL PIPE DESIGN

■ **Head 7.3 – REGULATIONS FOR GENERAL PIPE DESIGN**, Sub-item 7.3.2.1 has been amended and should be read as follows:

7.3.2.1 For ships constructed on or after 1 January 2026, the minimum wall thickness shall be calculated as follows:

$$t = (t_0 + b + c) / (1 - |a|/100) \text{ (mm)}$$

where:

t_0 = theoretical thickness

$$t_0 = PD / (2.0Ke + P) \text{ (mm)}$$

with:

P = design pressure (MPa) referred to in 7.3.3;

D = outside diameter (mm);

K = allowable stress (N/mm²) referred to in 7.3.4; and

e = efficiency factor equal to 1.0 for seamless pipes and for longitudinally or spirally welded pipes, delivered by approved manufacturers of welded pipes, that are considered equivalent to seamless pipes when non-destructive testing on welds is carried out in accordance with recognized standards. In other cases an efficiency factor of less than 1.0, in accordance with recognized standards, may be required depending on the manufacturing process;

b = allowance for bending (mm). The value of b shall be chosen so that the calculated stress in the bend, due to internal pressure only, does not exceed the allowable stress. Where such justification is not given, b shall be:

$$b = D \cdot t_0 / 2.5r \text{ (mm)}$$

with:

r = mean radius of the bend (mm);

c = corrosion allowance (mm). If corrosion or erosion is expected the wall thickness of the piping shall be increased over that required by other design regulations. This allowance shall be consistent with the expected life of the piping; and

a = negative manufacturing tolerance for thickness (%), i.e. where a is the manufacturing tolerance of -5%, $|a|$ is equal to 5 and shall be entered into the formula as 1 - (5/100).

■ **Head 7.4 – REGULATIONS FOR MATERIALS**, Table 7.3 has been amended and should be read as follows:

Table 7.3

| PLATES, SECTIONS AND FORGINGS⁽¹⁾ FOR FUEL TANKS, SECONDARY BARRIERS AND PROCESS PRESSURE VESSELS FOR DESIGN TEMPERATURES BELOW MINUS 55°C AND DOWN TO MINUS 165°C⁽²⁾ Maximum thickness 25 mm^{(3), (4)} | | |
|--|---|------------------------------|
| Minimum design temperature (°C) | Chemical composition ⁽⁵⁾ and heat treatment | Impact test temperature (°C) |
| -60 | 1.5% nickel steel – normalized or normalized and tempered or quenched and tempered or TMCP (see note ⁽⁶⁾) | -65 |
| -65 | 2.25% nickel steel – normalized or normalized and tempered or quenched and tempered or TMCP ^{(6), (7)} | -70 |
| -90 | 3.5% nickel steel – normalized or normalized and tempered or quenched and tempered or TMCP ^{(6), (7)} | -95 |

| PLATES, SECTIONS AND FORGINGS ⁽¹⁾ FOR FUEL TANKS, SECONDARY BARRIERS AND PROCESS PRESSURE VESSELS FOR DESIGN TEMPERATURES BELOW MINUS 55°C AND DOWN TO MINUS 165°C ⁽²⁾ Maximum thickness 25 mm ^{(3), (4)} | | | | | | | | | | |
|---|---|------------------------------|-------------------------|-----------------------|-------------|-------------------------------|-------------|----------------------------------|-------------|-------------------------------|
| Minimum design temperature (°C) | Chemical composition ⁽⁵⁾ and heat treatment | Impact test temperature (°C) | | | | | | | | |
| -105 | 5% nickel steel – normalized or normalized and tempered or quenched and tempered ^{(6), (7), (8)} | -110 | | | | | | | | |
| -165 | 9% nickel steel – double normalized and tempered or quenched and tempered ⁽⁶⁾ | -196 | | | | | | | | |
| -165 | Austenitic steels, such as types 304, 304L, 316, 316L, 321 and 347 solution treated ⁽⁹⁾ | -196 | | | | | | | | |
| -165 | High manganese austenitic steel – hot rolling and controlled cooling ^{(10), (11)} | -196 | | | | | | | | |
| -165 | Aluminium alloys; such as type 5083 annealed | Not required | | | | | | | | |
| -165 | Austenitic Fe-Ni alloy (36% nickel) Heat treatment as agreed | Not required | | | | | | | | |
| TENSILE AND TOUGHNESS (IMPACT) TEST REGULATIONS | | | | | | | | | | |
| Sampling frequency | | | | | | | | | | |
| ▶ Plates | Each 'piece' to be tested | | | | | | | | | |
| ▶ Sections and forgings | Each 'batch' to be tested | | | | | | | | | |
| Toughness (Charpy V-notch test) | | | | | | | | | | |
| ▶ Plates | Transverse test pieces. Minimum average energy value (KV) 27J | | | | | | | | | |
| ▶ Sections and forgings | Longitudinal test pieces. Minimum average energy value (KV) 41J | | | | | | | | | |
| NOTES: | | | | | | | | | | |
| ⁽¹⁾ The impact test required for forgings used in critical applications shall be subject to special consideration by the Administration. | | | | | | | | | | |
| ⁽²⁾ The regulations for design temperatures below –165°C shall be specially agreed with the Administration. | | | | | | | | | | |
| ⁽³⁾ For materials 1.5% Ni, 2.25% Ni, 3.5% Ni and 5% Ni, with thicknesses greater than 25 mm, the impact tests shall be conducted as follows: | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Material thickness (mm)</th> <th>Test temperature (°C)</th> </tr> </thead> <tbody> <tr> <td>25 < t ≤ 30</td> <td>10°C below design temperature</td> </tr> <tr> <td>30 < t ≤ 35</td> <td>15°C below design temperature or</td> </tr> <tr> <td>35 < t ≤ 40</td> <td>20°C below design temperature</td> </tr> </tbody> </table> | | | Material thickness (mm) | Test temperature (°C) | 25 < t ≤ 30 | 10°C below design temperature | 30 < t ≤ 35 | 15°C below design temperature or | 35 < t ≤ 40 | 20°C below design temperature |
| Material thickness (mm) | Test temperature (°C) | | | | | | | | | |
| 25 < t ≤ 30 | 10°C below design temperature | | | | | | | | | |
| 30 < t ≤ 35 | 15°C below design temperature or | | | | | | | | | |
| 35 < t ≤ 40 | 20°C below design temperature | | | | | | | | | |
| The energy value shall be in accordance with the table for the applicable type of test specimen. For material thickness of more than 40 mm, the Charpy V-notch values shall be specially considered. | | | | | | | | | | |
| ⁽⁴⁾ For 9% Ni steels, austenitic stainless steels and aluminium alloys, thickness greater than 25 mm may be used. | | | | | | | | | | |
| ⁽⁵⁾ The chemical composition limits shall be in accordance with recognized standards. | | | | | | | | | | |
| ⁽⁶⁾ Thermo-mechanical controlled processing (TMCP) nickel steels will be subject to acceptance by the Administration. | | | | | | | | | | |
| ⁽⁷⁾ A lower minimum design temperature for quenched and tempered steels may be specially agreed with the Administration. | | | | | | | | | | |
| ⁽⁸⁾ A specially heat-treated 5% nickel steel, for example triple heat treated 5% nickel steel, may be used down to –165°C, provided that the impact tests are carried out at –196°C. | | | | | | | | | | |
| ⁽⁹⁾ The impact test may be omitted subject to agreement with the Administration. | | | | | | | | | | |
| ⁽¹⁰⁾ The use of the material shall be subject to the required conditions specified by the Administration based on the Guidelines developed by the Organization *. | | | | | | | | | | |
| ⁽¹¹⁾ The impact test may not be omitted for high manganese austenitic steel. | | | | | | | | | | |

* Refer to the Revised guidelines on the application of high manganese austenitic steel for cryogenic service (MSC.1/Circ.1599/Rev.3).

PART A-1 SPECIFIC REQUIREMENTS FOR SHIPS USING NATURAL GAS AS FUEL

8 BUNKERING

■ **Head 8.4 – REGULATIONS FOR MANIFOLD**, New items 8.4.2 and 8.4.3 have been added and item 8.4.1 has been amended and should be read as follows:

8.4.1 The bunkering manifold shall be designed to withstand the external loads during bunkering. The connections at the bunkering station shall be arranged in order to achieve a dry-disconnect operation in one of the followings ways:

- .1 a dry-disconnect / connect coupling in accordance with a standard at least equivalent to those acceptable to the Organization;¹⁾ or
- .2 a manual connect coupler or hydraulic connect coupler, used to connect the bunker system to the receiving vessel bunkering manifold presentation flange;²⁾ or
- .3 a bolted flange to flange assembly²⁾

¹⁾ Refer to the recommendations by the International Organization for Standardization, in particular publication: ISO 21593:2019, Ships and marine technology — Technical requirements for dry-disconnect/connect couplings for bunkering liquefied natural gas.

²⁾ Refer to the recommendations by the International Organization for Standardization, in particular publication: ISO 20519:2021 - Ships and Marine Technology - Specification for Bunkering of Liquefied Natural Gas Fuelled Vessels.

C8.4.1 (as referred in ISO 21593 for Emergency Release Coupling, or ISO 16904 for Quick connect / disconnect coupling).

8.4.2 When intended to use either of the connections specified in paragraphs 8.4.1.2 and 8.4.1.3, these shall be combined with operating procedures that ensure a dry-disconnect is achieved. The arrangement shall be subject to special consideration informed by a bunkering arrangement risk assessment² conducted at the design stage and considering dynamic loads at the bunkering manifold connection to a recognized standard acceptable to the Administration, the safe operation of the ship and other hazards that may be relevant to the ship during bunkering operation. The fuel handling manual required by 18.2.3 shall include documentation that the bunkering arrangement risk assessment was conducted, and that special consideration was granted under this requirement.

8.4.3 An emergency release coupler (ERC) / Emergency Release System (ERS) or equivalent means shall be provided, unless installed on the bunkering supply side of the bunkering line, and the said means shall be in accordance with a standard equivalent to those acceptable to the Organization;¹⁶⁾ it shall enable a quick physical disconnection "dry break-away" of the bunker system in an emergency event.

¹⁶⁾ Refer to the recommendations by the International Organization for Standardization, in particular publication: ISO 20519:2021 - Ships and Marine Technology - Specification for Bunkering of Liquefied Natural Gas Fuelled Vessels.

PART A-1 SPECIFIC REQUIREMENTS FOR SHIPS USING NATURAL GAS AS FUEL

9 FUEL SUPPLY TO CONSUMERS

■ **Head 9.2 – FUNCTIONAL REQUIREMENTS**, Note in Head 9.2 has been amended and should be read as follows:

NOTE: (UI GF19, Rev.1 June 2025) To comply with part A-1, paragraphs 9.2.2, 9.6.1 and 7.3.6.3 of the IGF Code, two independent safety barriers shall be in place, while, as far as practicable, using a minimum of flange connections. There shall be, no single common flange or other component where one single failure itself may overcome both primary and secondary barriers and may result in a gas leak into the surrounding area causing danger to the persons on board, the environment or the ship.

A single common flange (ensuring ventilation flow with two sealing systems) may be accepted at the fuel connection to the gas consumers including internal combustion engines, GCUs, boilers and components, such as gas valve units provided that the technical justification is submitted to the Administration or its recognized organization demonstrating:

- .1 the impracticability of the installation of a double flange connection (two independent flanges, one on the gas pipe and one on the secondary enclosure), and*
- .2 compliance of single common flange with the safety criterion in paragraph 9.2.2 of the IGF Code (i.e. no leak from the piping system into the surrounding area in case of failure of one sealing system), including at least the consideration of the rupture or loosening of bolts, depending on arrangement of components which should not result in flange failure when piping is exposed to a sudden movement (e.g. hog and sag of the ship or excessive vibration).*

■ **Head 9.3 – REGULATIONS ON REDUNDANCY OF FUEL SUPPLY**, Item 9.3.1 has been amended and should be read as follows:

9.3.1 For ships constructed on or after 1 January 2026, for single fuel installations the fuel supply system shall be arranged with redundancy and segregation, so that a leakage in one system, or failure of one of the fuel supply essential auxiliaries, does not lead to an unacceptable loss of power. In the event of a leakage or failure, and in accordance with SOLAS regulation II-1/26.3, the Administration, having regard to overall safety considerations, may accept a partial reduction in propulsion capability from normal operation.

■ **Head 9.4 – REGULATIONS ON SAFETY FUNCTIONS OF GAS SUPPLY SYSTEM**, Items 9.4.7 and 9.4.8 have been amended and should be read as follows:

9.4.7 For ships constructed on or after 1 January 2026, in cases where the master gas fuel valve is automatically shut down when the safety system as required in 15.2.2 is activated, the complete gas supply pipe between this master gas fuel valve and the double block and bleed valves and between the double block and bleed valves and the consumer shall be automatically vented.

9.4.8 For ships constructed on or after 1 January 2026, there shall be one manually operated shutdown valve in the gas supply line to each gas consumer upstream of the double block and bleed valves to assure safe isolation during maintenance on the gas consumer.

■ **Head 9.6 – REGULATIONS FOR FUEL SUPPLY TO CONSUMERS IN GAS-SAFE MACHINERY SPACES**, Sub-item 9.6.1.1 has been amended should be read as follows:

9.6.1 Gas fuel piping in gas-safe machinery spaces shall be completely enclosed by a double pipe or duct fulfilling one of the following conditions:

- .1** the gas fuel piping shall be a double wall piping system with the gas fuel contained in the inner pipe. The space between the concentric pipes shall be pressurized with inert gas at a pressure greater than the gas fuel pressure. Suitable alarms shall be provided to indicate a loss of inert gas pressure between the pipes; or

■ **Head 9.8 – REGULATIONS FOR THE DESIGN OF VENTILATED DUCT, OUTER PIPE AGAINST INNER PIPE GAS LEAKAGE**, Items 9.8.1, the chapeau of item 9.8.2 and 9.8.4 have been amended and should be read as follows:

9.8.1 For ships constructed on or after 1 January 2026, the design pressure of the outer pipe or duct of fuel systems shall not be less than the maximum working pressure of the inner pipe. Alternatively, the design pressure of the outer pipe or duct may be calculated in accordance with 9.8.2.

9.8.2 For ships constructed on or after 1 January 2026, alternatively to 9.8.1, the design pressure of the outer pipe or duct shall be taken as the higher of the following:

PART 33*AMENDMENTS No. 2*

9.8.4 For ships constructed on or after 1 January 2026, the duct shall be pressure tested to show that it can withstand the expected maximum pressure at fuel pipe rupture.

PART A-1 SPECIFIC REQUIREMENTS FOR SHIPS USING NATURAL GAS AS FUEL

11 FIRE SAFETY

■ **Head 11.3 - REGULATIONS FOR FIRE PROTECTION**, Item 11.3.1 has been amended and should be read as follows:

11.3.1 For ships constructed on or after 1 January 2026, fuel preparation rooms shall, for the purpose of the application of SOLAS regulation II-2/9, be regarded as a machinery space of category A.

■ **Head 11.6 - REGULATIONS FOR DRY CHEMICAL POWDER FIRE-EXTINGUISHING SYSTEM**, Item 11.6.2 has been amended and should be read as follows:

11.6.2 In addition to any other portable fire extinguishers that may be required elsewhere in IMO instruments, one portable dry powder extinguisher of at least 5 kg capacity shall be located near the bunkering station and in the fuel preparation room.

For ships constructed before 1 January 2026, the portable dry powder extinguisher shall be provided in the fuel preparation room not later than the first survey on or after 1 January 2026.

PART A-1 SPECIFIC REQUIREMENTS FOR SHIPS USING NATURAL GAS AS FUEL

12 EXPLOSION PREVENTION

■ **Head 12.5 – HAZARDOUS AREA ZONES**, Items 12.5.1 and 12.5.2.1 have been amended, and should be read as follows:

12.5.1 Hazardous area zone 0

For ships constructed on or after 1 January 2026, this zone includes, but is not limited to, the interiors of fuel tanks, any pipework for pressure relief or other venting systems for fuel tanks, pipes and equipment containing fuel, and interbarrier spaces as defined by paragraph 2.2.15.2.

12.5.2 Hazardous area zone 1 ²²⁾

This zone includes, but is not limited to:

.1 ships constructed on or after 1 January 2026, tank connection spaces and fuel storage hold spaces ²³⁾;

...

...

²²⁾ Instrumentation and electrical apparatus installed within these areas should be of a type suitable for zone 1.

²³⁾ Fuel storage hold spaces for type C tanks are normally not considered as zone 1.

...

PART A-1 SPECIFIC REQUIREMENTS FOR SHIPS USING NATURAL GAS AS FUEL

15 CONTROL, MONITORING AND SAFETY SYSTEMS

■ **Head 15.4 – REGULATIONS FOR BUNKERING AND LIQUEFIED GAS FUEL TANK MONITORING,**
Item 15.4.1.3 has been amended, and should be read as follows:

- ...
- .3 For ships constructed on or after 1 January 2026, liquefied gas fuel tank liquid level gauges may be of the following types:
- .1 indirect devices which determine the amount of fuel by means such as weighing or in-line flow metering;
 - .2 closed devices which do not penetrate the liquefied gas fuel tank, such as devices using radio-isotopes or ultrasonic devices; or
 - .3 closed devices which penetrate the liquefied gas fuel tank but which form part of a closed system and keep the gas fuel from being released. Such devices shall be considered as tank connections. If the closed gauging device is not mounted directly onto the tank, it shall be provided with a shutoff valve located as close as possible to the tank.
- ...

PART B-1

16 MANUFACTURE, WORKMANSHIP AND TESTING

■ **Head 16.3 - WELDING OF METALLIC MATERIALS AND NON-DESTRUCTIVE TESTING FOR THE FUEL CONTAINMENT SYSTEM**, Item 16.3.5.1 has been amended and should be read as follows:

16.3.5.1 For all fuel tanks and process pressure vessels except membrane tanks, production weld tests shall generally be performed for approximately each 50 m of butt-weld joints and shall be representative of each welding position.

For secondary barriers, the same type production tests as required for primary barriers shall be performed, except that the number of tests may be reduced subject to agreement with the Administration. Tests, other than those specified in 16.3.5.2 to 16.3.5.5, may be required for fuel tanks or secondary barriers.

APPENDIX 1 - INTERIM GUIDELINES FOR THE SAFETY OF SHIPS USING METHYL/ETHYL ALCOHOL AS FUEL (MSC.1/CIRC.1621)

11 FIRE SAFETY

- **Head 11.7 – PROVISION FOR FIRE EXTINGUISHING OF ENGINE-ROOM AND FUEL PREPARATION SPACE**, Item 11.7.1 has been amended and should be read as follows:

11.7.1 Machinery space and fuel preparation space where methyl/ethyl alcohol-fuelled engines or fuel pumps are arranged should be protected by an approved fixed fireextinguishing system in accordance with SOLAS regulation II-2/10 and the FSS Code. In addition, the fire-extinguishing medium used should be suitable for the extinguishing of methyl/ethyl alcohol fires.

NOTE: (UI GF21, Oct 2024):

.1 Where CO₂ fire extinguishing system are used as fixed gas fire-extinguishing system for Machinery space or fuel preparation space in methyl/ethyl alcohol fuelled vessels, the quantity of CO₂ carried is to be sufficient to give a minimum volume of free gas equal to 50% of the gross volume of the largest space protected, including the machinery space casing.

.2 As an alternative to 1, aspects, such as, but not limited to the inventory of methanol and the expected duration of a potential methanol fire in the space considered, may be considered in the risk assessment to confirm the suitability of the fire-extinguishing arrangements in machinery space, including both the fixed gas fire-extinguishing system (required by SOLAS II-2/10.5.2) and the fixed local application fireextinguishing system (required by SOLAS II-2/10.5.6). Such alternative may be subject to approval by the Administration.