

# RULES FOR CLASSIFICATION(STEEL SHIPS)

(Guidance for Pt 7 Ch 5)

-External Opinion Inquiry-

2022.09.



Hull Rule Development Team

## - Main Amendments -

(1) Enter into force on 1 July 2023 (the contract date for ship construction)

● To reflect Request for Establishment/Revision of Classification Technical Rules

- To reflect the revision item of MSC.1-Circ.1599/Rev.2

Present	Amendment	Reason
<p><b>CHAPTER 5 SHIPS CARRYING LIQUEFIED GASES IN BULK</b></p> <p><b>Section 1 ~ Section 3 &lt;Omitted&gt;</b></p> <p><b>Section 4 Cargo Containment</b></p> <p>402. ~ 418. &lt;Omitted&gt;</p> <p>419. Materials [See Rule]</p> <p>1. ~ 8. &lt;Omitted&gt;</p> <p><b>9. Materials of primary and secondary barriers</b></p> <p>(1) The high manganese austenitic steel for cargo tank <del>for the carriage of liquefied natural gases</del> is to comply with <b>Annex 7A-4</b>. (2020)</p> <p>420. ~ 428. &lt;Omitted&gt;</p> <p><b>Section 5 ~ Section 19 &lt;Omitted&gt;</b></p>	<p><b>CHAPTER 5 SHIPS CARRYING LIQUEFIED GASES IN BULK</b></p> <p><b>Section 1 ~ Section 3 &lt;Same as the present Guidance&gt;</b></p> <p><b>Section 4 Cargo Containment</b></p> <p>402. ~ 418. &lt;Same as the present Guidance&gt;</p> <p>419. Materials [See Rule]</p> <p>1. ~ 8. &lt;Same as the present Guidance&gt;</p> <p><b>9. Materials of primary and secondary barriers</b></p> <p>(1) The high manganese austenitic steel for cargo tank is to comply with <b>Annex 7A-4</b>. (2020)</p> <p>420. ~ 428. &lt;Same as the present Guidance&gt;</p> <p><b>Section 5 ~ Section 19 &lt;Same as the present Guidance&gt;</b></p>	<p>MSC.1/Circ.1599/Rev.2 expands cargo from LNG to Butane, Butane-propane mixture, Carbon dioxide, Ethane, Ethylene, Methane(LNG), Pentane, Propane.</p>

Present	Amendment	Reason
<p><b>Annex 7A-1 ~ Annex 7A-3 &lt;Omitted&gt;</b></p> <p><b>Annex 7A-4 High manganese austenitic steel for Cryogenic Service</b></p> <p><b>Section 1 General</b></p> <p>101. Scope</p> <p>1. &lt;Omitted&gt;</p> <p>102. Application</p> <p>1. This Annex provides the designer and manufacturer with practical information on the design and construction of cargo tanks using high manganese austenitic steel for cryogenic service to comply with the Design Conditions defined in Pt7, Chapter 5, 418.</p> <p>2. High manganese austenitic steel for cryogenic service is used for only domestic voyage. When high manganese austenitic steel for cryogenic service is used for international voyage, it is to be approved by the relevant administration.</p> <p>3. &lt;New&gt;</p> <p><b>&lt;Below Omitted&gt;</b></p>	<p><b>Annex 7A-1 ~ Annex 7A-3 &lt;Same as the present Guidance&gt;</b></p> <p><b>Annex 7A-4 High manganese austenitic steel for Cryogenic Service</b></p> <p><b>Section 1 General</b></p> <p>101. Scope</p> <p>1. &lt;Same as the present Guidance&gt;</p> <p>102. Application</p> <p>1. This Annex provides the designer and manufacturer with practical information on the design and construction of cargo tanks using high manganese austenitic steel for cryogenic service to comply with the Design Conditions defined in Pt7, Chapter 5, 418.</p> <p>2. High manganese austenitic steel for cryogenic service is used for only domestic voyage. When high manganese austenitic steel for cryogenic service is used for international voyage, it is to be approved by the relevant administration.</p> <p>3. <u>High manganese austenitic steel is applicable to cargo tanks such as Butane(all isomers), Butane-propane mixture, Carbon dioxide(High Purity and reclaimed quality), Ethane, Ethylene, Methane(LNG), Pentane(all isomers) or Propane.</u></p> <p><b>&lt;Below Same as the present Guidance&gt;</b></p>	<p>MSC.1/Circ.1599/Rev.2 expands cargo from LNG to Butane, Butane-propane mixture, Carbon dioxide, Ethane, Ethylene, Methane(LNG), Pentane, Propane.</p>

# RULES FOR CLASSIFICATION(STEEL SHIPS)

## (Guidance for the Classification of Ships Using Low-flashpoint Fuels)

-External Opinion Inquiry-

2022.09.



Hull Rule Development Team

## - Main Amendments -

(1) Enter into force on 1 July 2023 (the contract date for ship construction)

● To reflect Request for Establishment/Revision of Classification Technical Rules

- To reflect the revision item of MSC.1-Circ.1599/Rev.2

Present	Amendment	Reason
<p><b>CHAPTER 1 ~ CHAPTER 5 &lt;Omitted&gt;</b></p> <p><b>CHAPTER 6 FUEL CONTAINMENT SYSTEM</b></p> <p>Section 3 &lt;Omitted&gt;</p> <p>Section 4 Liquefied Gas Fuel Containment</p> <p>404. ~ 412. &lt;Omitted&gt;</p> <p>413. Materials (2019)</p> <p>1. ~ 6. &lt;Omitted&gt;</p> <p>7. The high manganese austenitic steel for fuel tank <del>for the carriage of liquefied natural gases</del> is to comply with Annex 4. (2020) of this Rules may be of TMCP. 【See Rules】</p> <p>414. ~ 415. &lt;Omitted&gt;</p> <p>Section 7 ~ Section 9 &lt;Omitted&gt;</p> <p><b>CHAPTER 7 ~ CHAPTER 16 &lt;Omitted&gt;</b></p>	<p><b>CHAPTER 1 ~ CHAPTER 5 &lt;Same as the present Guidance&gt;</b></p> <p><b>CHAPTER 6 FUEL CONTAINMENT SYSTEM</b></p> <p>Section 3 &lt;Same as the present Guidance&gt;</p> <p>Section 4 Liquefied Gas Fuel Containment</p> <p>404. ~ 412. &lt;Same as the present Guidance&gt;</p> <p>413. Materials (2019)</p> <p>1. ~ 6. &lt;Same as the present Guidance&gt;</p> <p>7. The high manganese austenitic steel for fuel tank is to comply with Annex 4. (2020) of this Rules may be of TMCP. 【See Rules】</p> <p>414. ~ 415. &lt;Same as the present Guidance&gt;</p> <p>Section 7 ~ Section 9 &lt;Same as the present Guidance&gt;</p> <p><b>CHAPTER 7 ~ CHAPTER 16 &lt;Same as the present Guidance&gt;</b></p>	<p>MSC.1/Circ.1599/Rev.2 expands cargo from LNG to Butane, Butane-propane mixture, Carbon dioxide, Ethane, Ethylene, Methane(LNG), Pentane, Propane.</p>

Present	Amendment	Reason
<p align="center"><b>Annex 1 ~ Annex 3 &lt;Omitted&gt;</b></p> <p align="center"><b>Annex 4 High Manganese Austenitic Steel for Cryogenic Service</b></p> <p align="center"><b>Section 1 General</b></p> <p>101. Scope</p> <p>1. &lt;Omitted&gt;</p> <p>102. Application</p> <p>1. This Annex are not intended to replace any requirements of the Rules. They are intended as complementary guidelines on how to utilize high manganese austenitic steel in the design and fabrication of fuel tanks complying with the Rules.</p> <p>2. High manganese austenitic steel for cryogenic service is used for only domestic voyage. When high manganese austenitic steel for cryogenic service is used for international voyage, it is to be approved by the relevant administration.</p> <p>3. &lt;New&gt;</p> <p align="center"><b>&lt;Below Omitted&gt;</b></p>	<p align="center"><b>Annex 1 ~ Annex 3 &lt;Same as the present Guidance&gt;</b></p> <p align="center"><b>Annex 4 High Manganese Austenitic Steel for Cryogenic Service</b></p> <p align="center"><b>Section 1 General</b></p> <p>101. Scope</p> <p>1. &lt;Same as the present Guidance&gt;</p> <p>102. Application</p> <p>1. This Annex are not intended to replace any requirements of the Rules. They are intended as complementary guidelines on how to utilize high manganese austenitic steel in the design and fabrication of fuel tanks complying with the Rules.</p> <p>2. High manganese austenitic steel for cryogenic service is used for only domestic voyage. When high manganese austenitic steel for cryogenic service is used for international voyage, it is to be approved by the relevant administration.</p> <p>3. <u>High manganese austenitic steel is applicable to fuel tanks such as Butane(all isomers), Butane-propane mixture, Carbon dioxide(High Purity and reclaimed quality), Ethane, Ethylene, Methane(LNG), Pentane(all isomers) or Propane.</u></p> <p align="center"><b>&lt;Below Same as the present Guidance&gt;</b></p>	<p>MSC.1/Circ.1599/Rev.2 expands cargo from LNG to Butane, Butane-propane mixture, Carbon dioxide, Ethane, Ethylene, Methane(LNG), Pentane, Propane.</p>