



Republic of the Philippines
Department of Transportation
MARITIME INDUSTRY AUTHORITY
Bonifacio Drive cor. 20th Street, Port Area, Manila



MEMORANDUM CIRCULAR NO. SR 2021-01

TO : ALL PHILIPPINE SHIP OWNERS/ OPERATORS/ CHARTERERS/ MANAGERS/ OF PHILIPPINE-REGISTERED SHIPS; ALL CONCERNED REGISTERED NAVAL ARCHITECTS, RECOGNIZED ORGANIZATIONS AND ALL OTHERS CONCERNED

SUBJECT : REVISED RULES AND REGULATIONS ON THE TONNAGE MEASUREMENT OF PHILIPPINE-REGISTERED SHIPS

Pursuant to the provisions of Presidential Decree No. 474, Executive Order No. 125/125-A, and Republic Act No. 9295 and its amendments, the following Rules and Regulations for the Tonnage Measurement of Philippine-registered ships in accordance with the International Tonnage Convention, 1969, as amended, and other applicable rules and regulations as stated on this Circular are hereby adopted and prescribed:

I. OBJECTIVE:

1. To provide rules, regulations and guidelines for the Tonnage Measurement of Philippine-registered ships, specifically their Gross and Net Tonnages.
2. To ensure that all Philippine-registered ships are admeasured/re-admeasured in accordance with the International Convention on Tonnage Measurement of Ships, 1969, as amended, and other applicable rules and regulations as stated on this Circular.

II. COVERAGE:

This Circular shall cover all Philippine-registered ships or to be registered under Philippine flag, engaged in both domestic and international operations, except for the following:

- ships of war;
- government ships not engaged in commercial trade;
- recreational boats under MC DS 2019-01 and its subsequent amendments; and,
- fishing vessels 3GT and below.

III. DEFINITION OF TERMS:

1. "Administration" refers to the Maritime Industry Authority (MARINA).

2. **"Alteration"** refers to the process of changing the configuration of ships or ships dimensions which affect the original approved plans; lengthening; and other similar process.
3. **"Tonnage Surveyor"** refers to the RENA of MARINA or of RO's conducting admeasurement/re-admeasurement and other surveys for the issuance of the Tonnage Measurement Certificate.
4. **"Breadth"** is the maximum breadth of the ship, measured amidships to the moulded line of the frame in a ship with a metal shell and to the outer surface of the hull in a ship with a shell of any other material.
5. **"Conversion"** - refers to the process of changing ship type and service; increasing maximum allowable draft; and, other similar process.
6. **"Contracting Government"** refers to the government of a country which has accepted the International Convention on Tonnage Measurements of Ships, 1969 (ITC1969).
7. **"Electronic Copy of Ship's Plans and Specifications"** refers to the digital document file of the approved ship's plans and specification by the Administration in file format supported by any marine software, AutoCAD or Adobe Portable Document, clear and readable stored in CD or USB/ flash drives.
8. **"Length (Registered)"** means 96% of the total length on a waterline at 85% of the least moulded depth measured from the top of the keel, or the length from the fore side of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this length is measured shall be parallel to the designed waterline.
9. **"Gross Tonnage"** refers to the measure of the overall size of a ship determined in accordance with the provisions of this Circular.
10. **"Modification"** refers to the process of replacing major propulsion machinery to include major auxiliaries; modifying the superstructure such as construction of additional deck above main deck; and other similar process.
11. **"Moulded Depth"** refers to the following:
 - (a) The moulded depth is the vertical distance measured from the top of the keel to the underside of the upper deck at side. In wood and composite ships the distance is measured from the lower edge of the keel rabbet. Where the form at the lower part of the midship section is of a hollow character, or where thick garboards are fitted, the distance is measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel.

- (b) In ships having rounded gunwales, the moulded depth shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwales were of angular design.
 - (c) Where the upper deck is stepped and the raised part of the deck extends over the point at which the moulded depth is to be determined, the moulded depth shall be measured to a line of reference extending from the lower part of the deck along a line parallel with the raised part.
- 12. "Net Tonnage" refers to the measure of the useful capacity of a ship determined in accordance with the provisions of this Circular.
 - 13. "RENA" refers to the Registered Naval Architect.
 - 14. "Recognized Organization (RO)" refers to an organization that has been assessed by the Administration and has complied with Memorandum Circular No. 2018-01 and the RO Code and has entered into a Memorandum of Agreement (MOA) with the Administration.
 - 15. "Rebuilding" refers to an existing ship subjected to changes specifically the re-plating of its hull/superstructure and replacement of its main engine in order to substantially prolong its operating life to such an extent of at least 85% of its total hull has been replaced including its main engine.
 - 16. "Upper Deck" refers to the uppermost complete deck exposed to weather and sea, which has permanent means of weathertight closing of all openings in the weather part thereof, and below which all openings in the sides of the ship are fitted with permanent means of watertight closing. In a ship having a stepped upper deck, the lowest line of the exposed deck and the continuation of that line parallel to the upper part of the deck is taken as the upper deck.
 - 17. "Year Built" refers to the year at which the new construction survey process is completed.

IV. GENERAL PROVISIONS:

- 1. All Philippine-registered ships covered by this Circular whether engaged in domestic or international operations must always have in possession on board a Tonnage Measurement Certificate issued by the Administration for ships in domestic operation or an International Tonnage Measurement Certificate issued by a Recognized Organization for ships in international operation.
- 2. All Philippine-registered ships, except for 15 meters and below in length and motorbancas with outriggers, shall be admeasured in accordance with the applicable provisions of the International Tonnage Convention (ITC) of 1969, as amended. For Philippine-registered

international ships, they can be admeasured and certified by a Recognized Organization, but the International Tonnage Measurement Certificate shall adopt such calculations and be issued by the Administration.

3. The International Convention on Tonnage Measurement of Ships, (ITC 1969) as amended, is hereby adopted as an integral part of this Circular.
4. Ships acquired from abroad through importation, lease or charter, whether second-hand or newly built, which have already been admeasured in accordance with the ITC 1969, as amended, may be re-issued a Tonnage Measurement Certificate by the Administration, subject to the submission of a duly-notarized affidavit from the applicant company/ operator/ manager, that the ship was not altered/modified/converted since its previous measurement. However, the Administration may conduct re-admeasurement when it deems necessary.
5. Locally constructed ships and newly built ships acquired from abroad not admeasured in accordance with the ITC 1969, as amended, shall be subjected to an admeasurement to be undertaken by a Registered Naval Architect from the Administration in the case of domestic ships while Recognized Organizations (ROs) in the case of the international ships. The corresponding Tonnage Measurement Certificate shall be issued by the Administration for ships in domestic operation or an International Tonnage Measurement Certificate issued by a Recognized Organization for ships in international operations.
6. Any alteration, modifications and/or Conversion which affect the internal volume that would cause an increase/decrease in the gross or net tonnage, the existing Tonnage Measurement Certificate shall cease to be valid and shall be delivered up to and cancelled by the Administration. The said ship shall be subjected to the re-admeasurement and issuance of new Tonnage Measurement Certificate in the case of domestic ships while Recognized Organizations (ROs) in the case of the international ships.
7. The Administration may, at the request of another Contracting Government, determine the gross and net tonnages of a ship and issue or authorize the issue of an International Tonnage Certificate (1969) to the ship in accordance with the present Convention. A copy of the certificate and a copy of the calculations of the tonnages shall be transmitted as early as possible to the requesting Government. No International Tonnage Certificate (1969) shall be issued to a ship which is flying the flag of a State the Government of which is not a Contracting Government.
8. The certificate issued under the authority of a Contracting Government in accordance with the present Convention shall be accepted by the other Contracting Governments and regarded for all purposes covered

by the present Convention as having the same validity as certificates issued by them.

V. SPECIFIC PROVISIONS AND CONDUCT OF TONNAGE MEASUREMENT

1. The owner and/or the master of a ship to be admeasured shall make it available during the conduct of tonnage measurement by the MARINA Tonnage surveyor and provide all necessary facilities for its survey and admeasurement and shall submit Administration-approved plans, drawings, specifications and other documents relating to the ship that the surveyor may require for his use or retention.
2. The ship should be completely constructed based on approved plans prior to the conduct of Tonnage measurement. There should be no on-going construction allowed that would affect the result of the Gross and Net Tonnages of the ship.
3. Upon completion of the tonnage measurement survey, calculation and submission of all required documents, the Tonnage Measurement Certificate shall be issued by the Administration for ships engaged in domestic operation or an International Tonnage Measurement Certificate issued by a Recognized Organization for ships engaged in international operation.
4. Other Safety Certificates shall not be issued/renewed to a ship which has no Tonnage Measurement Certificate, or if such Certificate ceases to be valid.
5. If the Tonnage Measurement Certificate is invalidated by the Administration or its Recognized Organization after due process, the other Safety Certificate(s) issued to such ship shall automatically be suspended, and the ship shall be under "no sail condition".
6. For domestic ships of above 15m in length except motorbancas with outriggers, the format of Tonnage Measurement Certificate shall be the one provided in Annex A of this Circular. For domestic ships 15m and below in length and motorbancas with outriggers, the format of Tonnage Measurement Certificate shall be the one provided in Annex B of this Circular. For Philippine-Registered ships engaged in international trade, the format of Tonnage Measurement Certificate prescribed in the ITC69 Convention shall be used.
7. Re-Issuance of Tonnage Measurement Certificate includes the following cases:
 - 7.1 Change of Name of Ship
 - 7.2 Change of Homeport/ Port of Registry of ship
 - 7.3 Loss of Original Certificate
 - 7.4 If the vessel undergoes Alteration, Modification, Conversion and/or Re-building

VI. DETERMINATION OF GROSS AND NET TONNAGES OF SHIPS:

1. Measurement and Calculation

- 1.1. All measurement used in the calculation of volume shall be taken to the nearest thousandth of a meter.
- 1.2. The volume shall be calculated by generally acceptable methods for the space concerned and with an accuracy acceptable to the Administration.
- 1.3. The calculation shall be sufficiently detailed to permit easy checking.
- 1.4. The final figure determined for the result of Gross and Net Tonnage stated in the Tonnage Measurement Certificate should be given in rounded down figures without decimals for vessel having a length above 15 meters. For those vessels having a length of 15 meters and below and motorbancas regardless of length, the result of the Gross and Net Tonnage shall be remained without rounding down with a two(2) decimal as provided on the Tonnage Measurement Certificate.

2. Calculation of Volumes

- 2.1 All volumes included in the calculation of gross and net tonnages shall be measured, irrespective of the fitting of insulation or the like, to the inner side of the shell or structural boundary plating in ships constructed of metal, and to outer surfaces in ships constructed of any other material.
- 2.2 Enclosed spaces above the upper deck, appendages and spaces open to the sea not exceeding 1 m³ should not be measured.

3. Gross Tonnage

The Gross Tonnage (GT) of a ship shall be determined by the following formula:

$$GT = K_1 V$$

Where:

V = Total Volume of all enclosed spaces of the ship in cubic meters,
K₁ = 0.2 + 0.02 log₁₀V (or as tabulated in Appendix 2 of ITC69 Convention)

4. Net Tonnage

The Net Tonnage (NT) of a ship shall be determined by the following formula:

$$NT = K_2 V_c (4d/3D)^2 + K_3 (N_1 + N_2/10)$$

in which formula:

- 4.1. the factor $(4d/3D)^3$ shall not to be taken as greater than unity,
- 4.2. the term $K_2 V_c (4d/3D)^3$ shall not to be taken as less than 0.25 GT;
and,
- 4.3. NT shall not to be taken as less than 0.30 GT, and in which:

Where:

V_c = total volume of cargo spaces in cubic meters,

K_2 = $0.2 + 0.02 \log_{10} V_c$ (or as tabulated in Appendix 2 of ITC69 Convention)

K_3 = $1.25 (GT + 10,000/10,000)$

D = moulded depth amidships in meters,

d = moulded draught amidships in meters,

N_1 = number of passengers in cabin with not more than 8 berths,

N_2 = number of other passengers,

$N_1 + N_2$ = total number of passengers the ship is permitted to carry as indicated in the ship's passenger certificate; when $N_1 + N_2$ is less than 13, N_1 and N_2 shall be taken as zero,

GT = gross tonnage of the ship

5. The moulded draught (d) referred to above shall be one of the following draughts:

- 5.1. for ships to which the International Convention on Load Lines in force applies, the draught corresponding to the Summer Load Line (other than timber load lines) assigned in accordance with that Convention;
- 5.2. for passenger ships, the draught corresponding to the deepest subdivision load line assigned in accordance with the International Convention for the Safety of Life at Sea in force, or other international agreement, where applicable
- 5.3. for ships to which the International Convention on Load Lines does not apply but which have been assigned a load line in compliance with national requirements, the draught corresponding to the summer load line so assigned;
- 5.4. for the ships to which no load line has been assigned but the draught of which is restricted in compliance with national requirements, the maximum permitted draught;
- 5.5. for other ships, 75 percent of the moulded depth amidship.

6. For smaller ships of 15 meters and below, the Gross Tonnage (GT) shall be determined as follows:

$$\text{Gross Tonnage (GT)} = K_1 \times V$$

Where:

$$\begin{aligned} K_1 &= 0.2 + 0.02 \log_{10} V \\ V &= \text{hull volumes plus the superstructure (Vh + Vs);} \\ V_s &= \text{total volume of superstructure} \\ \text{Hull volumes can be estimated using the following formulas:} \\ V_h &= \text{L.O.A} \times \text{Breadth of main hull} \times \text{Depth} \times C_b \end{aligned}$$

The following Block Coefficient (Cb) should be based on the hull form and the values of Cb are provided below:

$$\begin{aligned} C_b &= 0.9 \text{ (Barge \& Box Type)} \\ C_b &= 0.7 \text{ (all other type of ship)} \end{aligned}$$

$$\text{Net Tonnage (NT)} = 0.3 \times \text{GT}$$

7. For motorbancas with outriggers, the Gross Tonnage (GT) shall be determined as follows:

$$\text{Gross Tonnage (GT)} = \frac{\text{LOA} \times \text{Breadth of main hull} \times \text{Depth @ mid} \times 0.7}{2.83}$$

$$\text{Net Tonnage (NT)} = 0.3 \times \text{GT}$$

VII. DOCUMENTARY REQUIREMENTS:

A. Issuance of Tonnage Measurement Certificate

1. Letter- application
2. Duly notarized Builder's Certificate (for new building)
3. Previous International Tonnage Measurement Certificate (for imported ships)
4. Affidavit of Ownership (for new building)
5. Construction Certificate issued by the Administration, if applicable
6. Vessel Name Clearance, if necessary
7. DSS Clearance for permanent/temporary registration of ships under Philippine flag, if necessary
8. The following Administration approved as built-plans shall be submitted to be used in the computation/ calculation of tonnage measurement, if necessary
 - 8.1. General Arrangement Plan
 - 8.2. Construction Plan
 - 8.3. Midship Plan
 - 8.4. Lines Drawing
 - 8.5. Capacity Plan
 - 8.6. other plans as needed for the Volume Computations, GT and NT

B. Re-issuance of Tonnage Measurement Certificate

1. Letter- application
2. Previous Tonnage Measurement Certificate
3. Affidavit from the applicant company/operator/manager, that the ship was not altered/modified/converted since its previous admeasurement, if applicable; and
4. Affidavit of Loss, if applicable
5. The following Administration approved as built-plans shall be submitted to be used in the computation/ calculation of tonnage measurement, if necessary
 - 5.1. General Arrangement Plan
 - 5.2. Construction Plan
 - 5.3. Midship Plan
 - 5.4. Lines Drawing
 - 5.5. Capacity Plan
 - 5.6. other plans as needed for the Volume Computations, GT and NT

Note: All applications including submission of documentary requirements can be filed and processed through online to the Integrated Domestic Shipping Information System (IDSIS) at <https://idsis.marina.gov.ph>.

VIII. FEES AND CHARGES:

A. Domestic Tonnage Certificate

3.00 GT	-	and below	₱ 700.00
3.01 GT	-	14.99 GT	₱ 800.00
15 GT	-	34.99 GT	₱ 1,100.00
35 GT	-	99.99 GT	₱ 2,100.00
100 GT	-	249.99 GT	₱ 7,300.00
250 GT	-	499.99 GT	₱ 9,800.00
500 GT	-	and above	₱ 9,800.00 plus ₱ 6.00/GT in excess of 500 GT

Re- issuance of Certificate - ₱ 700.00

B. International Tonnage Measurement Certificate (ITC)

Below 50 GT	-		₱ 700.00
50 GT	-	99.99 GT	₱ 1,400.00
100 GT	-	249.99 GT	₱ 2,800.00
250 GT	-	499.99 GT	₱ 4,200.00
500 GT	-	999.99 GT	₱ 5,600.00
1,000 GT	-	1,499.99 GT	₱ 7,200.00
1,500 GT	-	and above	₱ 7,200.00 plus ₱ 9.60/GT in excess of 1,500 GT

Re-issuance of Certificate - P 6,600.00

IX. FINES AND PENALTIES:

1. Spurious, and tampered Certificate

Size Ranges	Violation	
	First	Second & Succeeding
15 GT & below	P 10,000	Plus 200% of first violation fines
Above 15 to below 35 GT	P 15,000	
35 to below 100 GT	P 20,000	
100 to below 250 GT	P 25,000	
250 to below 500 GT	P 30,000	
500 to below 1000 GT	P 35,000	
1000 to below 2500 GT	P 40,000	
2500 GT and above	P 40,000 plus P10.00/GT in excess of 2,500 GT	

2. Violation of any provisions of Section IV under this Circular

Size Ranges	Violation	
	First	Second & Succeeding
15 GT & below	P 5,000	Plus 200% of first violation fines
Above 15 to below 35 GT	P 10,000	
35 to below 100 GT	P 15,000	
100 to below 250 GT	P 20,000	
250 to below 500 GT	P 25,000	
500 to below 1000 GT	P 30,000	
1000 to below 2500 GT	P 35,000	
2500 GT and above	P 35,000 + P10/GT in excess of 2500 GT	

X. TRANSITION CLAUSE

All Philippine-Registered Ships, whether new or existing ships, shall comply these Rules and Regulations upon the effectivity of this circular.

Existing ships having a format of the previous Tonnage Measurement Certificate shall be reviewed, revalidated and issued/re-issued based on the prescribed new format of Tonnage Measurement Certificate under Annex A & B of this Circular during the renewal of Load Line Certificate or next drydocking period within the five (5) year period after the effectivity of this Circular.

XI. REPEALING CLAUSE:

MARINA MC 2007-04 is hereby repealed and other issuances which are inconsistent herewith are hereby repealed and modified accordingly.

XII. SEPARABILITY CLAUSE

Should any provision or part of this Circular be declared by competent authorities to be invalid or unconstitutional, the remaining provisions or parts thereof shall remain in full force and effect and shall continue to be valid and effective.

XIII. EFFECTIVITY:

This Memorandum Circular shall take effect after fifteen (15) days after its publication in a newspaper of general circulation in the Philippines.


Manila, Philippines, AUG 03 2021 2021.

BY THE AUTHORITY OF THE BOARD:


VADM ROBERT A EMPEDRAD AFP (Ret)
Administrator

SECRETARY'S CERTIFICATE

This is to certify that Memorandum Circular No. SR-2021-01 was approved by the MARINA Board of Directors during its 285th Regular Meeting on 26 May 2021.


ATTY. EUSEBIA A. CADLUM-BOCO
Board Secretary

Published on 10 August 2021 at Business Mirror.
Copy filed with the UP Law Center on _____

(FRONT)**MRO FORM MC-xx-21****TONNAGE MEASUREMENT CERTIFICATE**

Issued under the provisions of the International Convention on Tonnage Measurement of ships, 1969, Philippine Merchant Marine Rules and Regulations (PMMRR) 1997 and/or MARINA Circular No. SR-2021-xx by the Government of the Republic of the Philippines for which Convention came into force on July 18, 1982.

Name of Ship	Type of Ship	Port of Registry	Year Built

MAIN DIMENSIONS

Length (Article 2 (8))	Breadth (Regulation 2 (3))	Moulded Depth amidships to Upper Deck (Regulation 2 (2))

THE TONNAGES OF THE SHIP ARE:**GROSS TONNAGE** _____**NET TONNAGE** _____

This is to certify that the tonnages of this ship have been determined in accordance with the provisions of the International Convention on Tonnage Measurement of ships, 1969, Philippine Merchant Marine Rules and Regulations (PMMRR) 1997 and/or MARINA Circular No. SR-2020-xx.

Issued at _____ this _____ day of _____

The undersigned declares that he is duly authorized
by the Government of the Republic of the Philippines
to issue this Certificate.

Admeasurer

FOR THE ADMINISTRATOR:

Director II
Shipyards Regulation Service

(BACK)

SPACES INCLUDED IN TONNAGE

GROSS TONNAGE			NET TONNAGE		
Name of Space	Location (Frame)	Length (m)	Name of Space	Location (Frame)	Length (m)
			Number of Passengers (Regulation 4(1))		
			Number of passengers in cabin With not more than 8 berths —		
			Number of other passengers —		
EXCLUDED SPACES (Regulation 2(5)) An asterisk (*) should be added to those spaces listed above which comprise both enclosed and excluded spaces.			MOULDED DRAUGHT (Regulation 4(2))		
Date and Place of Original measurement :					
Date and Place of last previous re-admeasurement :					
REMARKS :					

(FRONT)**MRO 00001MCH-xx-21****TONNAGE MEASUREMENT CERTIFICATE**

Issued under the provisions Philippine Merchant Marine Rules and Regulations (PMMRR) 1997 and/or MARINA Circular No. SR-2021-xx by the Government of the Republic of the Philippines.

Name of Ship	Type of Ship	Port of Registry	Year Built

MAIN DIMENSIONS

L.O.A	Breadth	Depth

THE TONNAGES OF THE SHIP ARE:**GROSS TONNAGE** _____**NET TONNAGE** _____

This is to certify that the tonnages of this ship have been determined in accordance with the provisions of the Philippine Merchant Marine Rules and Regulations (PMMRR) 1997 and/or MARINA Circular No. SR-2020-xx.

Issued at _____ this _____ day of _____

The undersigned declares that he is duly authorized by the Government of the Republic of the Philippines to issue this Certificate.

Admeasurer**FOR THE ADMINISTRATOR:**_____
**Director II
Shipyards Regulation Service**

(BACK)

SPACES INCLUDED IN TONNAGE

GROSS TONNAGE			NET TONNAGE		
Name of Space	Location (Frame)	Length (m)	Name of Space	Location (Frame)	Length (m)
			Number of Passengers (Regulation 4(1))		
			Number of passengers in cabin With not more than 8 berths		
			Number of other passengers		
EXCLUDED SPACES (Regulation 2(5)) An asterisk (*) should be added to those spaces listed above which comprise both enclosed and excluded spaces.			MOULDED DRAUGHT (Regulation 4(2))		
Date and Place of Original measurement :					
Date and Place of last previous re-admeasurement :					
REMARKS :					

TONNAGE SURVEY REPORT

I. Ship's General Information	
Name of Ship:	
Type of Ship:	
Type of Service:	
Trading:	
Owner:	
Business Address:	
Port of Intended Registry:	
Date when Keel was laid:	
Builders:	
Place of Built:	
Date of Launching:	
Date of Delivery:	
II. Ship's Construction Data	
Hull Material:	
No. of Decks:	
No. of Mast(s):	
No. of Kingpost(s):	
Type of Stem:	
Type of Stern:	
III. Ship's Propelling Data	
No. of Main Engine:	
Main Engine Make:	
Horsepower :	
No. of Cylinders:	
No. of Cycles:	
Serial Number:	
No. of Auxiliary Engine:	
Auxiliary Engine Make:	
IV. Admeasurement Data	
Length	
Breadth	
Molded Depth	
Molded Draught	
No. of passengers for whom accommodations certified in cabins of not more than 8 berths	
Number of other passengers	
Remarks:	

Name and Signature of Surveyor

Date and Place of Survey