



**Juridi's Review of Ship Building and Measurement Based on Shipping Standards at the Ministry of Transportation and Ports of Batam City**

**Elvani Syafril <sup>1</sup>**  
**Syah Iskandar <sup>2</sup>**

- <sup>1)</sup> Legal Studies Study Program Students , Faculty of Law, Social and Political Sciences, Open University  
<sup>2)</sup> Legal Studies Study Program Advisor , Faculty of Law, Social and Political Sciences, Open University

[elvani.syafril@gmail.com](mailto:elvani.syafril@gmail.com)  
[syahiskandarabubakar@gmail.com](mailto:syahiskandarabubakar@gmail.com)

**ABSTRACT**

*The standard ship measurement method uses a ship measurement method in accordance with the International Convention on Tonnage Measurement of Ships, Legal Basis for Law Number 5 of 1983 concerning the Indonesian Exclusive Economic Zone. Law Number 21 of 1992 concerning Shipping; Law Number 31 of 2004 concerning Standards. Decree of the Minister of Maritime Affairs and Standards Number 10 of 2002 concerning Standard Business Licensing. Minister of Transportation Regulation Number KM 6 of 2005 concerning Ship Measurements. This research uses the normative legal research method, which is conceptual legal research as contained in statutory regulations and conceptual existing in other legal rules that exist in society regarding a particular legal problem. Conclusions in research on legal regulations for measuring vessels in shipping standards at the Ministry of Transportation, Batam Port, Regulations of the Minister of Transportation and Regulations of the Director General of Land Transportation which aim to improve the safety of river, lake and ferry transportation, identification and measurement of standard vessels and to increase understanding and awareness of registration officers. and physical examiner and standard ship documents regarding Standard Ship Identification and Measurement procedures.*

**Say key :** Ship Measurements, Service Standards, Juridical Review

**Introduction**

The Indonesian state which was proclaimed on August 17 1945 stated that the state is based on law. This statement is clearly seen in the explanation of the 1945 Constitution of the Unitary State of the Republic of Indonesia, namely that the State is based on law and not based on mere power. The consequence of this recognition implies the existence of a judicial institution because this judicial institution must exist and is a requirement for every country that calls itself a rule of law or a country based on law. Indonesia is a maritime country so sea



transportation has an important role in connecting the archipelago and driving the economy. Sea transportation functions to serve the mobility of people, goods and services that connect economic activities between islands and international relations.

The role of transportation, especially sea transportation, is that all activities related to sea transportation need to be regulated by the state, so that the implementation of sea transportation activities can be carried out in an orderly manner and protect the interests of all parties involved in it. Law Number 17 of 2008 concerning shipping was created to accommodate all interests relating to sea transportation, and according to the explanation of Law Number 17 of 2008 concerning shipping, it is intended that the implementation of shipping as a system can provide maximum benefits to all people, nation and state, foster and develop a maritime spirit by prioritizing the public interest and environmental sustainability, coordination between the center and regions as well as national security defense.

Shipping is a means of smoothing the wheels of the economy, strengthening national unity and unity, in strengthening the realization of the archipelago outlook, improving and supporting national defense and security, which in turn can strengthen relations between nations. Apart from that, shipping also plays a role as a supporter, driver and driver for the growth of the Indonesian economy. Shipping businesses in carrying out these business activities certainly require large amounts of capital. The provision of capital is carried out by financial institutions, and is of course accompanied by guarantees. The term collateral law comes from the translation *zakerhei-dessteling* or *security of low*. In a seminar by the National Legal Development Agency on Mortgage and Other Guarantee Institutions, which was held in Yogyakarta, from 20 to 30 July 1977, it was stated that guarantee law includes the definition of both material guarantees and individual guarantees. This legal definition of guarantee refers to the type of guarantee, not the legal definition of guarantee. The essence of collateral law is the legal provisions that regulate the legal relationship between the guarantor (debtor) and the collateral recipient (creditor) as a result of the imposition of a particular debt (credit) with a collateral (certain object or person). Guarantee law not only regulates legal protection for creditors as debt providers, but also regulates legal protection for debtors as debt recipients. In other words, collateral law not only regulates creditors' rights regarding



debt repayment, it also regulates debtors' rights regarding guarantees for debt repayment.

In Article 1131 of the Civil Code (KUHP) it is determined that "all movable and immovable property belonging to the debtor, whether existing or future, shall be collateral for the debtor's obligations." This provision means that every agreement made which then gives rise to certain debts or performance obligations guaranteed to be fulfilled by all assets belonging to the debtor in the future. Then in Article 1132 of the Civil Code (KUHP) it is stated that "the object becomes a joint guarantee for all those who owe it, the income from the sale of the object is divided according to the balance, namely according to the size of each receivable. , unless there are valid reasons for priority among the debtors." This article implicitly states that the principle of equality between creditors can be overridden by the existence of the right to precedence among creditors. This occurs when creditors who share a creditor have *preferential rights* , so that the creditor in question becomes or has the position of *preferred creditor* .

A guarantee that aims to secure credit, until the realization of the credit agreement is carried out in accordance with the agreement. This guarantee will provide legal certainty to the creditor. The guarantee given to the creditor in this case is a sea vessel. According to Government Regulation Number 51 of 2002 on Shipping, ships are water vehicles of any shape and type, which are propelled by mechanical energy, wind energy, or towed, including vehicles with dynamic carrying capacity, vehicles under the surface of the water, as well as floating devices and floating buildings which does not move around. Meanwhile, an Indonesian ship is any sea vessel that has met the requirements to become an Indonesian ship, thus becoming an Indonesian national ship. Ships with a minimum size of 20 m<sup>3</sup> (twenty cubic meters) gross can be registered in a ship register and such ships can be mortgaged.

The Commercial Code (KUHD) differentiates ships into two groups, namely ships as moving objects and ships as immovable objects. Ships as moving objects are unregistered ships (Article 314 of the Commercial Code). A ship as an immovable object is a ship that has a size of at least twenty cubic meters of gross content and is registered at the office of the Harbor Master and Port Authority of the Directorate General of Sea Transportation, Ministry of Transportation, and with this registration has the nationality of an Indonesian Ship. As a ship, as an immovable object, collateral can be placed on it only in the form of a mortgage.



Mortgages are regulated in Book II of the Civil Code (KUHPer) Chapter XXI Articles 1162 to 1232.

Ports are one of the infrastructures in the transportation system that have an important role in supporting economic activities. The condition of Indonesia, which is an archipelagic country, means that the existence of ports plays a big role in supporting goods distribution activities via sea routes. Goods distribution activities using sea transportation are carried out for goods distribution activities between islands in Indonesia spread from Sabang to Merauke and also for goods distribution between Indonesia and other countries. Seeing the important role it has and port *traffic* which is constantly changing, ports need to have development plans for the short term, medium term and long term so that the port can keep up with developments that occur. The development plan is translated into a master plan or port master plan. The port master plan contains port spatial arrangements in order to meet future needs. Batu Ampar Harbor is one of the ports on Batam Island, Riau Islands Province. Seeing its location in an industrial area, close to the Strait of Malacca, and opposite Singapore, this port has port traffic that continues to grow and encourages the government to develop this port. In this research, an evaluation of the Batu Ampar Port Masterplan was carried out which was determined by the Ministry of Transportation with number KM 77 of 2009. The evaluation was carried out to determine the suitability of the masterplan to the developments that occurred and to provide suggestions regarding the space and equipment requirements of the port by taking into account the realization of traffic and port development. occurred after the enactment of the master plan in 2009.

Ship transportation has a very important role in several Indonesian regions which have large water areas, especially in inland areas that cannot be reached by land transportation. Currently, the development of sea transportation is experiencing a decline in users due to the rapid development of land transportation. Indonesia's water area of 7.9 km<sup>2</sup> can make Indonesia a country with a people's shipping power base to develop its economy. However, unfortunately, Indonesian shipping has led to a shortage of incoming foreign exchange due to payment of shipping costs to companies owned by other countries. This shortage is an obstacle to the development of shipping in Indonesia. The sea transportation system cannot be separated from the general transportation system, as well as other activities



owned by the region and has a regional development process that will expand the marketing reach of service funds in supporting various sectors of socio-economic activities at every point and stimulate the emergence of new activities in the region. regional economy. River and inter-island traffic systems in Indonesia is a transportation system that is traditionally used for various purposes both from the interior (*rural*) to the river mouth and then connected with small-scale ship traffic between islands.

In the planning, infrastructure improvements and suggestions will be made so that people's services can revive and become the mainstay of public transportation in areas where accessibility to other areas must be via river. The development of land transportation and sea transportation is not always a competition, this is because there are several areas that cannot be reached by land transportation, namely inland areas considering the location of areas that are still small islands. Many rivers dry up in the dry season making them unnavigable, while many land roads are damaged due to excessive loads received by the roads. Water transportation is widely relied on by industrial and agricultural circles to carry merchandise to inland areas. Another problem that arises is the decline in the number of passenger and goods transportation from year to year.

Based on the description above, the problem formulation can be drawn as follows: How to fulfill standards in shipping requires several stages, including *Fiberglass Reinforced Plastics (FRP)*, which is a composite formed from a combination of two or more forming materials. What are the obstacles in the non-homogeneous mixing process with the mechanical nature of each of the constituent materials being different? From this mixing process, Fiberglass Reinforced Plastics (FRP) material is produced which has different mechanical properties and characteristics from the material from which it is made.

### **Research methods**

In carrying out this research, the researcher used a type of normative legal research. Normative legal research is conceptual legal research as contained in statutory regulations and conceptually existing in other legal rules that exist in society regarding a particular legal problem. In this research, researchers used a type of normative research, namely research carried out by reviewing statutory regulations or other regulations applied in resolving a





particular legal problem. Normative research is often called doctrinal research where the object of study is are statutory regulatory documents and library materials which constitute basic data which in research science is classified as secondary data. According to Soerjono Soekanto, legal research can be divided into: Normative Legal Research, consisting of:

1. Research into legal principles
2. Research on legal systematics
3. Research on the level of legal synchronization
4. Legal history research
5. Comparative legal research

In accordance with the type of research, namely normative legal research (normative juridical), more than one approach can be used. In this research, a statutory approach and a concept approach are used . The legislative approach is carried out to examine the statutory regulations that regulate. In the perspective of legal theory, justice is the main goal of the natural law school. Where the natural law school holds the view that law is universal and eternal.

## **Results And Discussion**

**How to fulfill standards in shipping requires several stages, including Fiberglass Reinforced Plastics (FRP), which is a composite formed from a combination of two or more forming materials.**

Ship standard construction. Thickness measurements must be carried out in accordance with approved methods, by authorized persons or companies. Rust and contamination must be removed from components to be inspected. The surveyor has the right to request inspection of measurements or more detailed measurements to be carried out in his presence. Thickness measurements must be witnessed by a surveyor on board the vessel to the extent necessary to control the measurement process. Personnel or companies entrusted with thickness measurements must be approved by BKI for this purpose. The validity period of the approval given depends on continuous qualifications. The approval must be renewed after a period of not more than 3 years. Furthermore, sometimes there is a problem with the scope of measurement, where the scope of this measurement includes the construction



elements of the main hull. In all updates to the plate thickness class of the main hull, the construction elements must be checked by measurement. The number of measurements depends on the maintenance conditions of the vessel and is in accordance with the surveyor's assessment. Minimum requirements for thickness measurements on class renewal survey occasions depend on the age of the vessel. Respective thickness measurements to determine the general level of corrosion should be carried out.

The thickness measurement limit may be reduced provided that during close inspection the surveyor is satisfied that there is no structural containment, and that the protective layer, if installed, remains active. The surveyor can expand the thickness measurements as deemed necessary. This is applied especially in areas with a lot of corrosion. Cross sections, on the other hand, are selected in places where a high level of corrosion is suspected or which is visible from measuring the thickness of the deck plate. If thickness measurements produce corrosion and wear values that exceed those specified, the relevant hull construction part must be replaced with a new one. The values listed must be considered as reference values. Where necessary BKI reserves the right to modify the figures found by referring to the maximum tolerance permitted for extensive surface corrosion. Where a reduction in material thickness is permitted for new buildings (an effective corrosion protection system), then the corrosion tolerance specified permitted shall be based on regulatory thickness without deduction.

Furthermore, regarding the importance of monitoring the shipping standards of the ship. Successful or accomplished people are usually those who have high discipline. Likewise, an orderly, safe and orderly environment is obtained by implementing discipline well. Discipline that comes from a sense of awareness and awareness will make someone carry out things in an orderly, smooth and orderly manner without having to be directed by other people. Even more than that, the person concerned will feel embarrassed or uncomfortable if they do things that are not in accordance with the applicable organizational regulations. This is what is expected of every employee through employee supervision and coaching. There are various factors that make supervision increasingly necessary for every organization, direct supervision, carried out by a manager or leader when activities are being carried out, supervision in the form of direct inspection, namely supervision carried out



directly by superiors on subordinates when activities are carried out, to find out the truth situation in the field. Making direct corrections, if errors occur in the implementation of work when the direct inspection is carried out. On-site reports, namely reports submitted directly by subordinates when superiors carry out direct inspections of activities carried out. Indirect supervision, supervision from a distance through reports submitted by subordinates in the form of written reports, namely reports submitted by subordinates to superiors in the form of required activity reports, reported periodically. Oral reports, namely reports submitted directly by subordinates to superiors regarding obstacles faced when carrying out activities, whether in the form of deviations or suggestions.

**What are the obstacles in the non-homogeneous mixing process with the mechanical nature of each of the constituent materials being different? From this mixing process, Fiberglass Reinforced Plastics (FRP) material is produced which has different mechanical properties and characteristics from the material from which it is made.**

The weakness of indirect supervision is that subordinates often only report positive things. In other words, subordinates have a tendency to only report things that they think will please the leader. In fact, a good leader will require his subordinates to report things both positive and negative. The reason is that if only positive things are reported, the leader will not know the real situation, the result is that he will draw the wrong conclusions. This indirect supervision is also an effort to provide encouragement for the improvement and perfection of all aspects of management, both which concerns policy and planning, organization, procedures, manuals, standards, criteria and benchmarks, so that an effective and efficient process of achieving goals can be realized. So indirect supervision of activities carried out is limited to the results of reports made periodically, either in the form monthly, quarterly reports and yearly recapitulation. Each work unit is required to carry out an evaluation according to the achievements achieved, and then make a report as required. Supervision will not run well if it only relies on reports. Therefore indirect supervision is not enough. It would be wise for organizational leaders to combine direct and indirect monitoring techniques in carrying out this monitoring function. In our opinion, as long as we use the crossing monitoring services provided by DISHUB, they are quite good, they have always controlled





the crossing since the accident occurred at that time. And as far as we know, DISHUB also appeals to captains to always pay attention to the situation so that undesirable mistakes occur. If we talk about supervision, it's quite important, if you look at the supervision, it's really good that they always control the course of shipping at the port, and so that ship owners can comply with the rules. Although sometimes they like to cat and mouse the officers... so in our opinion the supervision needs to be more stringent so that accidents like that time don't happen again due to overloading.

From the results of interviews with the public regarding supervision carried out by the Ministry of Transportation, it can be concluded that the supervision carried out by Ministry of Transportation officers is quite optimal even though there are still individuals from ship owners who commit violations. So supervision must be tightened even more so that ship owners do not dare to commit violations. Apart from the obstacles mentioned above, the many regulations implemented by the Customs and Excise office also function in monitoring ship shipping standards, the Batam Type B Customs and Excise Main Service Office is a combination of the Batam Type A3 Customs and Excise Supervision and Service Office, Type A3 Yellow Face and Type D Sekupang. The working area of the Batam Type B Main Service Office covers Batam Island covering an area of 415 km<sup>2</sup>. Meanwhile, the working area boundaries of the Batam Type B Customs and Excise Main Service Office are Singapore (North West), Bintan Island (East) and Malaysia (North). Considering the working area is quite extensive and covers the entire island, so the Batam Type B Main Service Office has 12 Customs Service Auxiliary Offices and Customs Control Posts or commonly called hangars spread across Batam Island. These hangars are placed at sea and air ports designated as KPBPB (Area Free Trade and Free Ports), namely Batu Ampar Container Port, Sarana Citranusa Kabil Port/PT. SembCorp Logistics Citra Nusa, Sewu/Beton Sekupang Industrial Area Port and Hang Nadim Airport. Apart from the Free Trade Zone and Free Port, the hangar of the Batam Type B Customs and Excise Main Service Office is also located at the Batam Center Customs Post Office and official sea ports that have permits from the Ministry of Transportation, namely:

1. Sekupang Domestic Ferry Port;
2. Telaga Punggur Domestic Ferry Port;



3. Batam Center International Ferry Port;
4. Harbor Bay International Ferry Terminal;
5. Nongsa Pura International Ferry Port;
6. Sekupang International Ferry Port;
7. Senimba Bay, Tanjung Uncang and Sagulung Ferry Ports.

### **Conclusion**

Legal regulations for measuring vessels in shipping standards at the Ministry of Transportation, Batam Port, Regulations of the Minister of Transportation and Regulations of the Director General of Land Transportation which aim to improve the safety of river, lake and crossing transportation, organizers of infrastructure and facilities as well as human resources in the field of river, lake and crossing transportation. violate the requirements for transportation safety, Standard Ship Identification and Measurement and to increase the understanding and awareness of registration officers and physical examiners and standard ship documents regarding Standard Ship Identification and Measurement procedures.

What obstacles are faced by ship measurements in shipping standards at the Ministry of Transportation, Batam Port. Checking the strength of the hull construction was not carried out using an Ultrasonic Wall Thickness Gauge, which can provide results in the form of plate thickness of the hull construction.

### **Suggestion**

The port is a place for government activities and business activities which is used as a place for ships to dock, boarding and disembarking passengers, and/or loading and unloading of goods, in the form of terminals and ship berths equipped with shipping safety and security facilities and port supporting activities as well as a place for internal transfers. – and intermodal transportation , can run well.

Direct inspections carried out by Ministry of Transportation officers by visiting the field during working hours or operating hours are intended to ascertain whether the ship captain is implementing the regulations for crossings, such as the ship's loading capacity. and



to find out directly about the activities being carried out in the field , they should always be carried out.

## **LIST REFERENCES**

### **Book**

Assqol Hany, ahmed, 2019, *simulation model of crossing ferry transportation system Third Edition Faculty of Law, Airlangga University*

Atmodimoro, 2022 , *Transport Planning* . Department of Panology Bandung ITB, Second Edition Department of Panology Bandung Institute of Technology

Fathur, Rohman. ( 2022 ). *Foundations in Ship Measurements* , An Anthology of a Decade of the Faculty of Engineering, Batam International University.

Judge, Lukmanul. (2019). *Shortcut to Becoming a PHP Master* . Lokomedia. Yogyakarta.

Hendri Kusworo. ( 2019 ). *License to Manufacture Ship Measurements* , 6th Printing, Faculty of Engineering, Jayabaya University

### **Journal**

Kamaludin, rustian 2023 *Transportation Economics* . The Light of Justice Journal, Edition 7 Volume 2 Putera Batam University, Ghalia Indonesia Publisher

Kasnowiharjo, et al (ed), 2023 , *Sea Harbors and Community Life in the Riau Islands* : Journal of the Association of Indonesian Archaeologists, West Sumatra Regional Committee.

M. fathoni, a glimpse of ASDP\_the world of river, lake and crossing transportation'.Html (online) (03/04/2023) Raja Ali Haji Maritime University online journal

Nugroho, Bunafit. 2024 *Dynamic Web Programming Applications with PHP and MySQL*. Yogyakarta. Journal of Land and Sea Transportation Systems, Batam International University

Suwardjoko Wardani, 2020, *Planning a Water Transport System originating from sea ports*, Selat Panjang Journal, Karimun University

Warpani, Suwardjoko, 2020. *Planning a Transportation System*. Karimun University Strait Panjang Journal



**Law Journal Borobudur International**  
**Vol 1 No 1, July 2024**

**ISSN: 2809-9664**

**Legislation**

Code of Civil law

Commercial Law Book

Law of the Republic of Indonesia number 21 of 1992 concerning Shipping

Law of the Republic of Indonesia number 8 of 2008 concerning Shipping

LAW JOURNAL BOROBUDUR INTERNATIONAL