

**REGULATION  
OF THE  
TERMINAL  
OF  
ILHA GUAÍBA  
MANGARATIBA - RJ**

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## CHAPTER I

### General Rules

**Art. 1º** – The Regulation of the Terminal of Ilha Guaíba intends to regulate, discipline and organize operations, activities and services performed at the Terminal, under the terms of the Law no.12.815/13, the ANTAQ authorization for Terminal operation and the respective Adhesion Agreement with the Public Power for exploitation of the Terminal for Private Use.

**Art. 2º** – For the purposes of this Regulation, the following definitions are applied:

I – Terminal Administration: Vale S/A, as duly authorized operator of the Terminal of Ilha Guaíba, acting within its authorization limits;

II – Maritime Authority: Brazilian Navy;

III – Adhesion Agreement: the instrument which formalizes the authorization for exploitation by Vale S/A of the Terminal of Ilha Guaíba in the modality of Private Use Terminal (TUP);

IV – DES: Abbreviation of Special Drawing Rights, the monetary unit of the International Monetary Fund, and;

V - ETA: Estimated Time of Arrival.

**Art. 3º** – The Terminal Administration must:

I - comply with the laws, regulations and the Adhesion Agreement and ensure that they are complied with;

II- pre-qualify service providers in the area of the Terminal; III -

collect charges related to Terminal's activities;

III - perform surveillance of the port operation, assuring the performance of the activities according to the legal principles and the Adhesion Agreement regarding regularity, efficiency, safety and respect to the environment;

IV - authorize or determine the entrance and exit, including mooring and unmooring, anchoring and traffic of vessels in the Terminal area, consulting , if applicable, other competent authorities;

V - authorize or determine the movement of the cargo, excepting the competence of the Maritime Authority in situations of assistance to and salvage of vessels and wreck removal , consulting, if applicable, other competent authorities;

VI - under coordination of the Maritime Authority, maintain and operate the beaconing of the access canal and the evolution basin, as well as the dragging of the docking cribs in the Terminal;

VII - under coordination of the Maritime Authority, establish and disclose the maximum draft of operation of the vessels;

VIII - under coordination of the Maritime Authority, establish and disclose the maximum deadweight and the maximum size of the vessels that will be in operation, due to limitations and characteristics of the access to the Terminal and its docking facilities;

IX - arrange for the removal of vessels or vessels hulls that may hinder the access to the Terminal;

X - suspend the port operations that may hinder the functioning of the Terminal, except for the aspects of interest of the Maritime Authority;

XI - establish the functioning hours of the port, under legal and regulatory provisions; XII - apply the penalties provided in this Regulation; and

XII - organize the safety of the terminal.

**Art. 4º** – The Terminal Administration, in light of its duties and legal assignments for provision of port services, is the port authority in exercise at the geographic area of the Terminal, and the vessels, clients and users are subject to its resolutions.

**Art. 5º** – The use of port facilities inside the limits of the Terminal area shall be authorized by the Terminal Administration upon request of shipowners, operators, charterers or shipping agents of the vessels and shall be paid for by its users in accordance with the Terminal's charges.

## **CHAPTER II**

### **Information about the Terminal**

#### **Section 1 Introduction**

**Art. 6º** – Information contained in this Regulation is destined to provide guidance to the shipowners, operators, charterers, masters and shipping agents of the vessels regarding facilities and general conditions of the Terminal, and do not replace or change any of the provisions defined in Brazilian or international official publications destined to the seafarers.

Other information regarding conditions of the Terminal may be obtained upon consultation with the Terminal Administration.

**Art. 7º** – The Terminal Administration is not responsible for delays, expenses, costs, prejudices, losses, accidents or damages arising from errors in using this information or from omission in consulting other national or international publications that may be needed.

## **Section 2. Panoramic View of the Terminal of Ilha Guaíba**



## **Section 3 Location**

**Art. 8º** – The Terminal of Ilha Guaíba is located on the occidental margin of Sepetiba Bay. The island of Guaíba is linked to the continent by a railway bridge through which the Terminal receives the iron ore cargo. There is no motorway link to the continent. The island is part of the municipality of Mangaratiba which is some 70 nautical miles away from the mouth of Guanabara Bay (Rio de Janeiro) and around 3 nautical miles from Mangaratiba.

It is located in the following geographic coordinates:

Latitude: 23º 00'50" South Longitude: 044º 02'05" West

## **Section 4 Nautical Charts**

**Art. 9º** – The access canal, evolution basin, anchoring areas and docking cribs are represented in the following Nautical Charts:

- Charts no. 23100 (INT 2124), 1607, 1620 e 1621 issued by the Brazilian Directorate of Hydrography and Navigation (DHN);

- Charts no. 150, 24.155 e 164 issued by the United States Hydrographic Office (HO).
- Charts no. 970 and 432 of the British Admiralty.

### **Section 5 Meteorological Conditions**

**Art. 10** – About meteorological conditions:

- the weather in the region is of tropical type with steady temperatures throughout the year, rarely never occurring high temperatures or strong and long rainfalls;
- the average of the maximum temperature is of 26°C and of the minimum temperature is of 18°C. The maximum temperature can reach 38°C e the minimum 13°C.
- rainfalls are more frequent during the warmer months, from October to March, with average rainfall level of 250mm. During the less warm months, from April to September, the average monthly rainfall level is inferior to 150mm. The relative humidity of the air is high with average level of over 80%;
- during the spring and summer, the predominant direction of the winds are the northeast (weak to moderate), then, the ENE and ESE (weak to moderate), following by the winds from the south quadrant (weak to moderate), with eventual occurrence of strong SW winds (with cold winds from the south) and NW from the continent (less frequent), followed by the NE for the rest of the periods.

### **Section 6 Currents, Tides and Waves**

**Art. 11** – On currents, tides and waves:

- the currents of the region are governed, in average, by two high tides and two low tides a day, but with considerable inequalities tending to mixed tides;
- the currents along the pier and evolution basin are the result of the movement of the tides;
- the spring tides are responsible for strong current in the North Berth, requiring special attention in the periods of these floods;
- the current general direction during the flood period is for E (east) and the ebb for WSW (west-southwest) and W (west).

### **Section 7 Communications**

**Art. 12** – Communications in VHF channels are as follows:

- General Call, CHANNEL 16

- Maneuvering Ship/Pilotage/Terminal, CHANNEL 13
- Berthed Ship/Terminal, CHANNEL Digital CN/CCO

### **Section 8 Pilotage and Tugboats**

**Art. 13** – The use of pilots and tugboats in the maneuvers of vessels in the Terminal of Ilha Guaíba is mandatory.

### **Section 9 Anchoring**

#### **Sub section 9.1 Exterior Anchoring Area**

**Art. 14** – In case of the anchoring area at Guaíba is busy, the vessels must anchor at the Exterior Anchoring area, located outside Sepetiba Bay to the south of the canal entrance.

#### **Sub section 9.2 Pilots Waiting Area**

**Art. 15** – Position: Latitude 23° 08.65' South and Longitude: 044° 04.6' West for vessels waiting pilots, 23.00 meters deep, sandy bottom.

#### **Sub section 9.3 Internal Anchoring Areas**

**Art. 16** - The anchorage area of the Terminal has capacity to accommodate up to five ships awaiting to berth at the Terminal. The anchorage area with sandy bottom is located on the polygon formed by the following points:

A – Latitude 23°00,0' S and Longitude 044°03,3' W

B – Latitude 23°01,2' S and Longitude 044°03,3' W

C – Latitude 22°02,0' S and Longitude 044°05,8' W

D – Latitude 23°01,3' S and Longitude 044°05,8' W

E – Latitude 23°00,9' S and Longitude 044°05,4' W

F – Latitude 23°00,9' S and Longitude 044°04,3' W

G – Latitude 23°00,0' S and Longitude 044°04,3' W

**Art. 17** – Latitude 23° 00,8'S and Longitude 044° 03,6'W for unloaded ships waiting for repairs or in quarentine, with 15,00 meters depth and sandy bottom.

### **Section 10 Access Canal**

**Art. 18** – The access to the Terminal is through a canal of about nine nautical miles in length, consisting of two rectilinear sections and a bend between them.

**Art. 19** – The access canal is marked by 20 (twenty) light buoys, two canal axis alignments and 03 (three) lights on the pier.

**Art. 20** – The first section of the canal has 04 (four) nautical miles in length e 280,00 meter of width and is dredged to 22,00 meters.

**Art. 21** – The first section is followed by a sharp turn, with about 02 (two) nautical miles in length and width ranging from 310,00 meters to a maximum of 700,00 meters; the depths along the curve is greater than 24,00 meters.

**Art. 22** – The final section, with 03 (three) nautical miles in length, has a width exceeding 320,00 meters and minimum depth of 23,00 meters.

### **Section 11 Evolution Basin**

**Art. 23** – At the end of the canal, in front of the ore pier, is located the evolution basin with 1600,00 meters in length and width of 1000,00 meters, with depths greater than 24,00 meters.

**Art. 24** - The limits of the evolution basin are flagged by three buoys and two beacons installed at the extremity of the external mooring berth.

### **Section 12 Mooring Areas**

**Art. 25** – Particulars of the SOUTH Berth:

- operational length of the pier: 249,00 meters
- maximum mooring dock: 340,00 meters
- maximum length of the vessel: 340,00 meters
- maximum breadth of the vessel: 62,00 meters
- maximum depth of the berth: 20,40m + height of the tide
- minimum depth of the berth: 22,50m + tide
- deadweight (DWT) maximum of 350,000 mt

**Art. 26** – Particulars of the NORTH Berth:

- operational length of the pier: 249,20 meters
- maximum mooring dock: 340,00 meters



- maximum length of the vessel: 295,00 meters
- maximum breadth of the vessel: 47,00 meters
- maximum depth of the berth: 18,50 meters
- minimum depth of the berth: 22,50m + tide
- deadweight (DWT) maximum of 350,000 mt

### **CHAPTER III**

#### **Working Hours of the Terminal**

**Art. 27** – The working hours in the Terminal facilities is fixed by the Terminal Administration, under the legislation in force.

### **CHAPTER IV**

#### **Use of the Anchoring Areas and Docking Facilities**

**Art. 28** – Authorization for docking in public facilities, as well as definition of priorities, shall be granted by the Terminal Administration.

**Art. 29** – Clients and users of the Terminal shall accept promptly the resolutions of the Terminal Administration and competent authorities regarding the priority of service to vessels.

**Art. 30** – Clients and users of the Terminal shall provide all documentation and information required by legal rules and the rules of the Terminal Administration, subject to the penalty of not being authorized to enter or exit, and also mooring or unmooring and moving/shifting of vessels in the Terminal area.

**Art. 31** – The Terminal Administration may suspend or cancel any activity or operation which is not in compliance with the current legislation and with this Regulation or which may otherwise hinder the functioning of the Terminal causing failure to comply with its obligations as authorized by the Public Power.

**Sole Paragraph** – The resolutions of the Terminal Administration for exit or unmooring of the vessel must be complied with, except in special situations, at the first tide and never exceeding the period of twenty four (24) hours.

**Art. 32** – Vessels anchored or moored shall not perform repairs in its main engine and/or equipment preventing them from moving, except in special situations previously authorized

by the Terminal Administration and, if applicable, as instructed by the Maritime Authority.

**Art. 33** – In case of vessels transporting hazardous cargo, the shipowner, operator, charterer, shipping agent or master must provide the following data at least 48 hours in advance:

I - the technical name of the cargo, in Portuguese language, according to the classification code of the International Maritime Organization (IMO), the flash point, when applicable, and its UN number (identification number established by the United Nations Committee);

II - the quantity of hazardous cargo on board, indicating the amount that must be unloaded at the port and the amount that will remain on board the vessel, located on deck or inside the holds;

III - the type of package;

IV - the status of the hazardous cargo and the likelihood of a potential incident to occur;

V - information of whether the vessel has or not any insurance certificates for carriage of hazardous cargo;

VI - other relevant information regarding precautions while handling the cargo and concerning appropriate PPEs.

**Art. 34** – Vessels and their crew members are subjected to the present regulation, during the time in which they remain in the Terminal area.

**Art. 35** – Vessels moored in the dock must readily fulfill the orders given by the Terminal Administration, especially in case of abnormal situations which may compromise the safety of the personnel, facilities and the vessels themselves or which may hinder the good functioning of the port.

**Sole paragraph** – If adverse weather or sea condition whatsoever, including, without limitation, rain, tide, waves or swell and winds arises during the berthing, mooring, loading or discharging operations and the vessel is unable to remain securely moored by its own means, the master of the vessel must request pilotage and towage services in order to immediately remove the vessel from berth. In the event master fails to proceed accordingly, the terminal shall request the pilotage and towage services in order to avoid any risk to the terminal, ship and/or crew of the vessel, in which case all costs related to such pilotage and towage services shall be for the account of and paid directly by the vessel/ship-owner.

**Art. 36** – The master must perform loading operations as programmed and immediately unmooring the vessel after the completion of the operations.

**Art. 37** – The master must follow the best marine and shipping practices during the mooring period and while loading minerals, including, but not limited to:

I - perform the proper mooring arrangements for his vessel, following, as a minimum, the

mooring schemes included in this Regulation;

II – installation of the Micro Drainage System for Vessel - MDSV included in art. 44 of this Regulation.

**Art. 38** – In case of rainfalls during the loading or unloading operation, the master of the vessel must keep closed all hatches which are not being operated by the Terminal.

**Sole paragraph** – In case of hard rainfalls, the Terminal Administration may establish that all hatches, without exception, must be closed.

**Art. 39** – The vessels' wells must be completely drained before mooring for loading, in order not to add humidity to the cargo that will be loaded and to enable the drainage as from the loading operation.

**Sole Paragraph** – The drainage of wells is not allowed in the mooring areas.

**Art. 40** – For loading of mineral fines in the Terminal, vessels must have installed, for navigation safety reasons, the MDSV.

**§ 1** – The Terminal Administration shall arrange for the installation and/or maintenance of the MDSV after anchoring of the vessels and before the beginning of the loading. Installation costs shall be negotiated with the shipowners and/or shippers, as applicable.

**§ 2** – If the vessel already has the MDSV on board, the Terminal Administration shall perform a previous maintenance and re-installation of the equipment. The maintenance and re-installation costs of the equipment shall be negotiated with the shipowners and/or shippers, as applicable.

**Art. 41** – Masters of the vessels programmed to operate in the Terminal must provide to the Terminal Administration, within a minimum of seven (7) days prior to the ETA:

- a) his acceptance in respect to the installation on board of the MDSV and must precisely provide all technical information needed for installation of the system, according to the Attachment I of this Regulation; or
- b) his confirmation that the MDSV device is already available on board and that they agree with its maintenance and re-installation by the Terminal Administration.

**Art. 42** – Removal of the MDSV after the completion of mineral fines transportation is responsibility of the vessel's master, and the equipment may be preserved in case of future shipments of mineral fines in the Terminal.

**Art. 43** – The Terminal Administration will be entitled, at its sole discretion, to reject the nomination and to start loading operation of any vessel which:

- a) is not, in all aspects, ready to receive the cargo in the Terminal; or
- b) has not been approved by the vetting system of the Terminal or of the shipper; or

c) has not followed the provisions in this Regulation regarding the installation of the MDSV on board or which have previously refused the permission for its installation or re-installation;

d) does not meet operational requirements related to vessel's capability to timely unballast compatibly with loading rates;

e) does not meet the specifications for the lashing cables which are recommended considering the deadweight (DWT) of the vessel and the characteristics of the Pier.

**Art. 44** – The Terminal Administration shall not be responsible for any losses, damages, harms and/or expenses arising from ineffective operation of the MDSV due to incorrect information provided by the ship's master under the terms of art. 45 "a" of this Regulation.

**Art. 45** – If the master refuses to proceed with or complete the loading operation as scheduled, the Terminal Administration, at its own discretion, as Local Port Authority, under the provisions of art. 35, may determine the immediate unmooring of the vessel and its shifting to one of the anchoring areas of the Terminal or any other indicated area, until the impasse determining the refusal is solved, in order to prevent prejudice to the regularity, effectiveness and safety of port operations.

**§ 1** – Another refusal by the master in readily complying with the order for shifting/moving the vessel to the anchoring area or to any other indicated area shall subject the shipowner, operator or charterer to a daily fine for interruption of the berth's usage, applicable as from the unmooring order, at the amount equivalent to 58,000 (fifty eight thousand) DES, without prejudice to the their civil liability for damages arising from the master's refusal.

**§ 2º** – In case of refusal to comply with the shifting/moving order to anchoring area or any other indicated area, the Terminal Administration may judicially request the fulfillment of its determination.

## **CHAPTER V**

### **Price of Port Services**

**Art. 46** – The prices for the port services shall be informed by the Terminal Administration upon consultation, except when they are already included in the official Internet website of Vale S.A.

**Art. 47** – Port Services with specific characteristics, adjusted to attend the particular need of the clients and users of the Terminal, as well as its charges/prices, are to be agreed between them and the Terminal Administration.

**Art. 48** – The Terminal Administration is not responsible for services hired by clients and users of the Terminal with third parties. Prices shall be negotiated by clients and users of the Terminal directly with such third parties.

## CHAPTER VI

### Port Security

**Art. 49** – The Terminal operates according to international safety standards and rules of ISPS (*International Ship and Port Facilities Security Code*).

## CHAPTER VII

### Environment Protection

**Art.50** – Vessels, their masters and crew must observe, during their permanence in the Terminal, the rules of harmonious relationship with and preservation of the sea environment contemplated in the applicable legislation.

**Art. 51** – Vessels shall not release oil, residues, garbage or any other materials that may harm or contaminate the waters in the Terminal area.

**Art. 52** – Diving services to clean vessels' hulls or propeller are not allowed in the Terminal area.

**Art. 53** – Release of ballast water is allowed within the terminal area provided that the requirements of competent authorities are complied with in order to prevent environmental pollution and/or changes in the balance of the fauna and flora of the sea.

**Art. 54** – Disposal of sanitary sewage directly into the waters is prohibited, and the ship must keep in operation an effluent treatment system during the permanence in the Terminal.

**Art. 55** – The Terminal authorize, through registered companies, a waste collection service (for garbage, sediments and oily residues) twenty four (24) hours per day.

**Sole Paragraph** – Companies providing the waste collection service may be found at the official website of Vale S.A. and of International Maritime Organization– IMO.

## CHAPTER VIII

### Ballast Water Management (BWM)

**Art. 56** – Vessels shall always be in compliance with the International Convention for the Control and Management of Ships' Ballast Water and Sediments (“BWM Convention”) and any and all applicable implementing measures. Should the vessel be accepted by the Port

Complex Administration and subsequently be found to not comply with the terms of the BWM Convention applicable to it and any and all applicable implementing measures, Port Complex Administration shall have the right to reject the berthing and ship owners shall be responsible for and indemnify the Port Complex Administration for all costs and any time lost as a result of such non-compliance. Ship owners, upon written request from Port Complex Administration, shall provide as promptly as possible electronic copy of a valid International Ballast Water Management Certificate for the nominated ships.

**Art. 57** – Vessels shall always have sufficient ballasting/deballasting capability in relation to loading/unloading capacity. Master to ensure that the loading/unloading and ballast/deballasting are adequately synchronised at all times to maintain the vessel within her limits of stress and stability. In case loading/unloading has to be interrupted or delayed continuously for more than six (6) consecutive hours due to insufficient deballast capacity in relation to cargo loading capacity, noncompliance to the BWM Convention or to any other reason attributable to the vessel, the Port Complex Administration shall have the right to order the vessel to vacate the pier and shift from and back to the berth, at the ship owners' responsibility, time and expenses.

## **CHAPTER IX**

### **Final Provisions**

**Art. 58** – All clients, users, service providers and their representatives and agents must comply with the rules of:

- a) this Regulation;
- b) safety and operation standards established by the Terminal;
- c) regulatory, customs, hygiene, environmental protection, safety and other standards established by the legislation in force.

**Art. 59** – Conditions for entrance, movement, permanence or storage of cargo shall be established by the Terminal Administration, according to the particulars of the cargo.

**Art. 60** – Entrance and flow of vehicles, equipment, cargo or personnel in the Terminal are conditioned to previous authorization by the Terminal Administration. Clients, users, service providers and their representatives and agents must check with the Administration regarding applicable rules reasonably in advance before performing any operation.

**Sole paragraph** – Vehicles must be in conformity with the traffic and transportation current legislation.

**Art. 61** – Clients and users of the Terminal are aware that the Terminal Administration shall inform the competent governmental authorities about the conditions of services provided and operational data, notably regarding the removal of wastes and omissions of the vessels.

**Art. 62** – In case of incident involving a foreign vessel causing damages to the Terminal or prejudicing its activities, the Terminal Administration may require from the respective shipowner and/or operator without assets in Brazil a bank guarantee or any other guarantee at the Terminal's sole discretion that ensures full compensation of all sorts of damages, including but not limited to loss of earnings and applicable fines.

**§ 1** – The bank guarantee must be presented within forty eight (48) hours after its request by the Terminal Administration, however always before the departure of the vessel from the Terminal.

**§ 2** – In case of refusal or failure to provide the bank guarantee, the Terminal Administration may judicially request the seizure/arrest of the vessel until the guarantee is provided.

**Art. 63** – The Terminal Administration shall not be responsible for any delays, expenses, costs and damages to shipowners, operators, charterers, ship masters due to their failure to comply with the provisions of this Regulation.

**Art. 64** – Shipowners, operators, charterers, ship masters are responsible before the Terminal Administration and shippers for the failure to comply with the provisions of this Regulation.

**Art. 65** – Cases not included herein shall be resolved by the Terminal Administration.

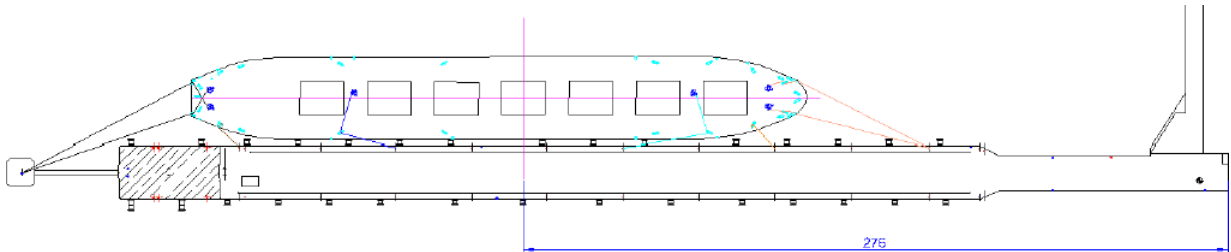
**Art. 66** – This Regulation is issued in two versions, one in Portuguese language and another in English language. In case of any inconsistency among them, the version in Portuguese shall prevail.

# ANNEX

## SHIPS MOORING SCHEME

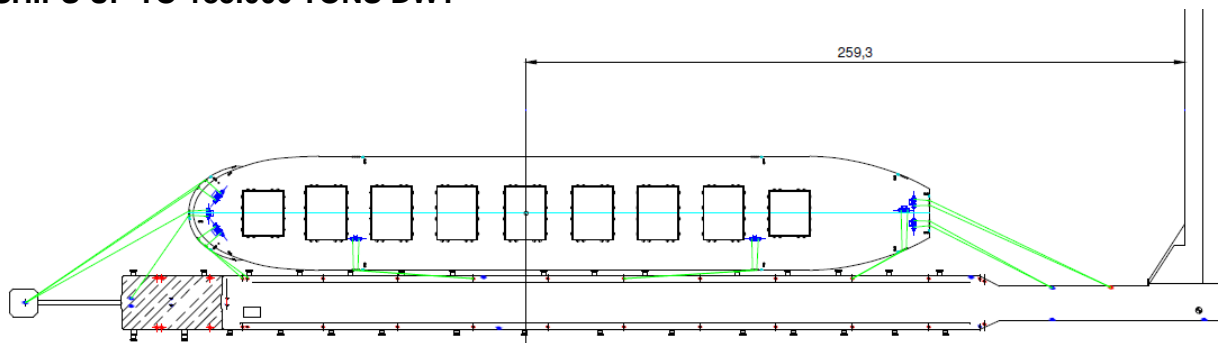
### A) BERTH NORTH

#### SHIPS UP TO 80.000 TONS DWT ON STARBOARD



- ❖ Head line cables forward/aft: 05/05 cables of any kind, mbl 50 tons.
- ❖ Slant cables forward/aft: 03/03 cables of any kind, mbl 50 tons.
- ❖ Spring cables forward/aft: 02/02 cables of any kind, mbl 50 tons.

#### SHIPS UP TO 185.000 TONS DWT



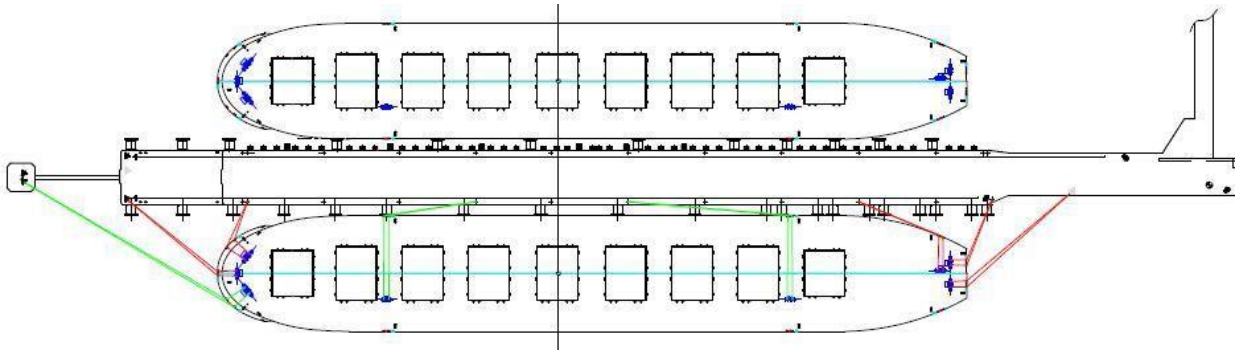
- ❖ Head line cables forward/aft: 05/05 cables of any kind, mbl 72 tons.
- ❖ Slant cables forward/aft: 03/03 cables of any kind, mbl 72 tons.
- ❖ Spring cables forward/aft: 02/02 steel cables of 72 mm in diameter or fiber cables *High Modulus PolyEthylene* (HMPE) with calabrotos 25% MLB stronger.

For this purpose, ships must have twenty (20) cables available on board.



## B) BERÇO SUL

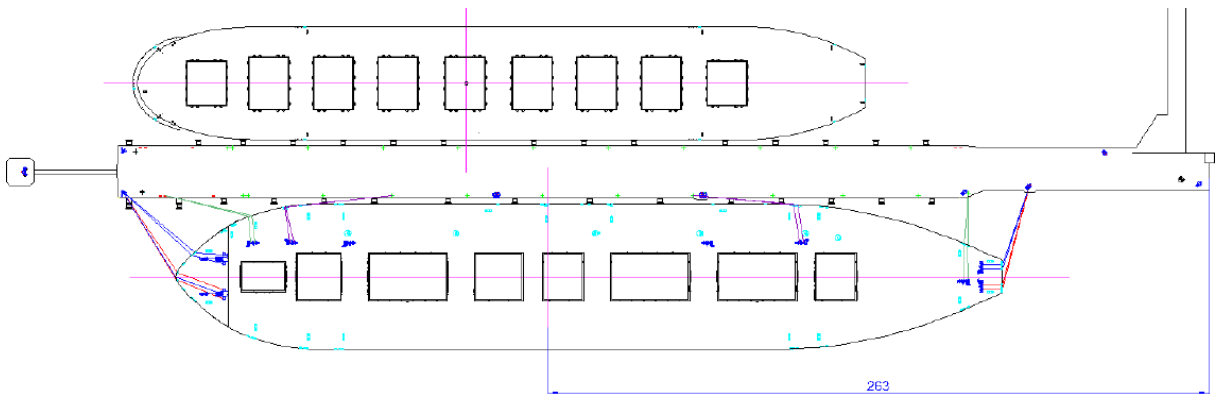
### SHIPS UP TO 180.000 TONS DWT



- ❖ Head line cables forward/aft: 05/05 cables of any kind, mbl 72 tons.
- ❖ Slant cables forward/aft: 03/03 cables of any kind, mbl 72 tons.
- ❖ Spring cables forward/aft: 02/02 steel cables of 72 mm of diameter or fiber cables *High Modulus PolyEthylene* (HMPE) with calabrotes 25% MBL stronger.

For this purpose, ships must have 20 (twenty) cables available on board.

### SHIPS UP TO 350.000 TONS DWT



- ❖ Head line cables forward/aft: 05/05 cables of any kind, mbl 80 tons.
- ❖ Slant cables forward/aft: 03/03 cables of any kind, mbl 80 tons.
- ❖ Spring cables forward/aft: 02/02 steel cables of 42 mm of diameter or fiber cable *High Modulus PolyEthylene* (HMPE) with calabrotes 25% MBL stronger.

For this purpose, ships must have 20 (twenty) cables available on board.