
	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 1 of 23

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## SUMMARY

1. APPLICATION.....	3
2. LAT/LONG .....	4
2.1 CATAMARAN (FLOATING PIER) .....	4
2.2 RECEIPT OF (SOLID BULK) .....	5
2.3 WAREHOUSE (DRY BULK) .....	5
2.4 EXPORT OF (SOLID BULK) .....	6
3. ANCHORAGE AREA .....	6
4. BERTHING/UNBERTHING CRITERIA .....	8
5. ADDITIONAL INFORMATIONS OF OPERATION .....	8
6. PARTICULARITY OF TERMINAL – TGSA .....	9
7. INTEGRATED MANAGEMENT POLICY OF TGSA (ISO 9001; ISO 14.001; ISP-CODE) ....	10
8. ACCOUNTABILITY .....	10
9. SHIP LOADER.....	10
10. THE IMPORTANT SPECIFICS FOR MANOEUVRES .....	13
11. TERMINAL RESTRICTIONS .....	15
12. TUGBOATS .....	15
13. COMMAND TABLE .....	16
14. TYPE OF VESSELS – AUTHORISED TO BERTH AT THE TGSA .....	18
15. DRAFT APPROVAL .....	18
16. RIGHT TO SUE ANY OPERATIONS .....	19
17. PRECAUTIONS AGAINST POLLUTION .....	19
18. BALLAST AND DEBALLAST .....	19
19. DOCUMENTATION .....	20
19.1. BEFORE START LOADING OPERATION .....	20
19.2. COMPLETION LOADING OPEATION .....	20
20. SAFETY AND SECURITY INFORMATION .....	21
21. EMERGENCY CONTACTS .....	22
22. MATERIAL SAFETY .....	22
23. CERTIFICATE FOR ROPE – TERMINAL TGSA .....	23

	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 2 of 23

## OBJECTIVE

Provide information and procedures for operations carried out in the TGSA.

### 1. Application


This procedure applies to the Agricultural Solid Bulk Terminal - TGSA.



The TGSA – Agricultural Solid Bulk Terminal, located on the left bank of the Amazon River, in Novo Remanso, Rural Zone of Itacoatiara City, located 72 km (38 nautical miles) upstream of Itacoatiara-Am and 148 km (80 nautical miles) downstream of the city of Manaus in the state of Amazonas. TGSA has a static storage capacity of 90,000 tons, operationalizing the *Receiving, Storage and Export* of Agricultural Solid Bulk. Itacoatiara is the third largest city in the state of Amazonas and is located 44 nautical miles downstream to the mouth of the Madeira River. The TGSA is located 17 nautical miles upstream from the mouth of the Madeira River.

The location of the TGSA was strategically developed mainly for its high and flat topography of the terrain and the characteristics of the Amazon River, given that its proximity to the mouth of the Madeira River where it joins the Amazon River. The entire structure is above the flood areas of the seasonal floods of the Amazon River.

The terminal has its smallest depth of the river, cataloged on the *PortSide* – port *bow* / *bow* of the TGSA Terminal – type (Catamaran) can reach up to 22 meters during the *ebb* and the greatest depth recorded during the *flood* can reach about 39 meters. However, there are draught restrictions at the mouth of the Amazon River (Barra Norte) – 11.70 meters.

	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 3 of 23

In addition, in parallel to the Terminal – type (Catamaran), the Amazon River passes 80 meters in the middle channel during the rainy season, with current reaching up to 6 knots. The current near the terminal descends between 2 and 2.5 knots of speed at most, the Terminal consists of two floating structures joined by gantries (Catamaran) composing the floating pier, with 107 meters long by 42.5 meters wide (mouth), with 1 (one) stationary Shiploader with loading rate of 2,000 ton / h of (*Soybean / Corn / Meal*), with parking for receiving Barge Convoy of up to (50 barges x 2,000 ton/each). The bulk barges are moored in the internal structure of the Catamaran at the floating pier and their cargo transferred to the bulk warehouse on land or directly to the cargo holds of the vessel and / or in both directions, measured by flow scales (Toledo do Brasil) in the Catamaran, and the Unloader (Unloader / Siwertell) can move up to 1,700 ton / h of cargo (*Soybean / Corn / Farelo*).

The System is capable of loading *POST PANAMAX*, *PANAMAX* and *HANDYSIZE* vessels, through 01 (one) (Shiploader). The loading operation are made by transport system via land-to-ship conveyor belts or ship barges or both simultaneously, allowing for a *mix/blend* if is necessary.

## 2. LAT/LONG DO TGSA:

The TGSA – Terminal of Solid Agricultural Bulk is located, according to **LATITUDE (03° 13' 52.82" S) and LONGITUDE (58° 59' 57.23"W) and** consists of:

- 2.01 CATAMARAN (FLOATING PIER);
- 2.02 RECEIPT OF (SOLID BULK);
- 2.03 WAREHOUSE (SOLID BULK);
- 2.04 EXPORT OF (SOLID BULK);
- 2.05 EMERGENCY CONTACTS OF THE (PUBLIC/PRIVATE AUTHORITY).

### 2.1 CATAMARAN - (FLOATING PIER).

The Catamaran vessel was strategically considered due to the seasonal variation of level of the Amazon River to which it is subject to the rainy season that occurs from December to June in this region. The Shiploader/TMSA was precisely built on the Catamaran Pier – (floating pier) to which the earth structure is connected by a bridge transport system (Cargo Carrier), the Catamaran vessel is held in position by a mooring system in cable-stayed winches for 06 weights of 37.5 ton with mooring racks of 64 mm (2. 1/2 IN.), Grade 3, with mesh and 6 dead-weights with 110 m with 64 mm (2.1/2 in) mooring rackets, Grade 2, with mesh. The vessel in loading operation does not dock-moored to the Catamaran (floating pier), and is properly cabled to the frame of buoys (08 buoys) with weights of 42.5 ton, with 165.0 m, with (barracks) varied moorings of 70 mm (2. 3/4 IN.), Grade 2, with mesh. The vessels are positioned at a distance of 5 to 10 meters from the Catamaran using the tension in the various mooring ropes.

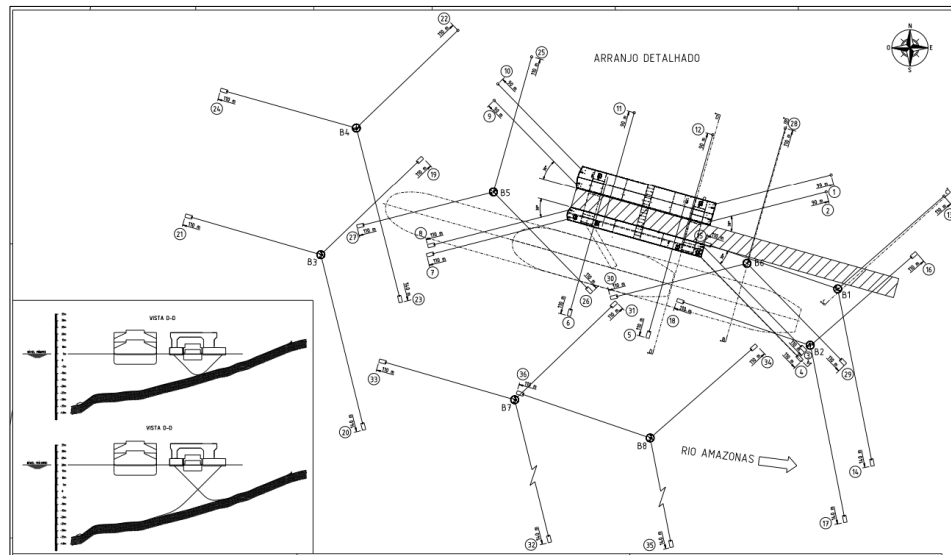


Figure 01 -- Detailed anchoring system of the Catamaran and the mooring buoys of vessels.


## 2.2 RECEIPT - (SOLID BULK).

Strategically, for the Receipt of products such as *Soybean, Corn and meal* are offered through a system of bulk barges, similar to the models in the region of Mississippi / USA (bulk barges racked and / or box), already used in the region of the Brazilian Multimodal Logistics Export Corridor of the North Arc, in the corridor of water transport through bulk barges and with Pushers. The convoys are composed of several barge formats, as shown in the following examples: (9) nine barges; 12 (twelve) barges; 16 (sixteen) barges and 20 (twenty) barges and/or 25 (barges) or more, being transported by the Madeira, Tapajós and Amazonas Rivers to which will be arranged in the parking of barges with 4 (four) buoys with weight of 42.5 ton, with 165.0 m, with (barracks) varied mooring of 70 mm (2. 3/4 IN).

The ports of the region of Porto Velho/RO, the main point of origin, are approximately 1,148 km, about 620 (NM) from Novo Remanso. The transported products sail through the Madeira and Amazon Rivers with protected bulk barges with cover and the cargoes are sampled, tested by the quality of the company before being stored and/or loaded onto the vessels.

## 2.3 WAREHOUSE - (SOLID BULK).

The bulk warehouse, the TGSA, is 216 m long, 35 m wide and 25 m high, internally, whose storage capacity reaches 90,000 tons. This has in its base structure (bottom) in "V" shape of reinforced concrete; Metal structure makes up the elaborate roof with galvanized metal tiles. The walkway that gives access to the Cargo Conveyor belt, the distributor and the grain spreaders is

	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 5 of 23

located in the upper internal area (*tripper*), allowing better visualization of the grain mass and possible evidence of abnormalities inside.

The safety of employees is a matter of extreme importance and responsibility on the part of TGSA, having the environment totally healthy and equipped with signs from *paintings, plates, steel cables, procedures, standards and goals*. In addition, this "V" formact Warehouse was built and taken with an adequate plan of drainage and infiltrated water to the sides, there not presence of excess moisture and in contact with the fixed structure.

Preventive and effective measures such as intense cleaning and structural spraying before receiving material have become the best solution to the problem, as well as *Thermometry cables* are installed according to NORMATIVE INSTRUCTION No. 29, of June 8, 2011, of MAPA, which says: "The number of reading points must be compatible with the type of structure and the static capacity of the storage unit. At least one reading point should be used for every 150 m<sup>3</sup> of static capacity, and the points should be evenly distributed."

In the internal part of the warehouse there are cameras connected at various points to monitor the flow of the product of input / output of the products (*Soybean/Corn/Farelo*), *in addition to managing the presence of gutters, and a constant monitoring in the stored product and by our quality team*.

## 2.4 EXPORT - (SOLID BULK)

The general framework of export of solid bulk (*Soybean / Corn / Meal*), requires a lot of care and attention to the specific legislation, the contents and the main information that deserve focus during the export is the SISCOMEX / ISPS - Code. However, we work with a fully integrated operating system (*Administrative / Operation*) (Log.One) *that controls and facilitates the entire system, ensuring point by point the quality of the products and all fiscal and accounting process (Soybean / Corn / Farelo)* that need attention. In addition, we work with a Board/Loading Rate, as follows:


- Soybeans – 2,000 t/h nominal available and/or stock in the Warehouse, that is, a logistics flow of 2,000 t/h;
- Corn – 2,000 t/h nominal available and/or stock in the Warehouse, that is, a logistic flow of 2,000 t/h;

## 3. ANCHORAGE

In the event that the vessel needs to anchor, the secondary embarkation station will take place in the anchorage area, which is located 2.5 nautical miles northwest of the TGSA.

The pilotage service on the Amazon River is distributed in areas of competence, as follows:

- Zone ZP 1: Located between the city of Fazendinha (approximate position 00°03'05"S and 051° 07'02" W) and Itacoatiara (approximate position of 3°09'15.88"S and 58°25'84.82"W);

	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 6 of 23

- Zone ZP 2: Located between Itacoatiara and Manaus (approximate position of 3°08'07"S and 59°55'09"W).

There is an area of anchorage/anchorage on the right bank of the Amazon River in front of Novo Remanso, whose use will be exclusively for inter-river traffic. The depth of the water in the anchorage/anchorage should vary according to the season of the year and the place where it is anchored, which is a maximum of 38.0 meters deep, and a minimum of 25.0 meters.

The TGSA terminal is located on the left bank of the Amazon River – considering the direction from upstream to downstream – in a place of low current, even in times of high water. Three evolution basins and two anchorage areas are planned for the turning and anchoring of vessels berthing or unberthing in the TGSA. One of the evolution basins is immediately in front of the terminal and the other is upstream of the river in relation to the terminal.

One of the anchorage areas is upstream of the river in relation to the terminal and the other two are downstream, on the right bank, considering the upstream and downstream direction of the Amazon River. These areas were illustrated in Figures 02 and 03, as follows:

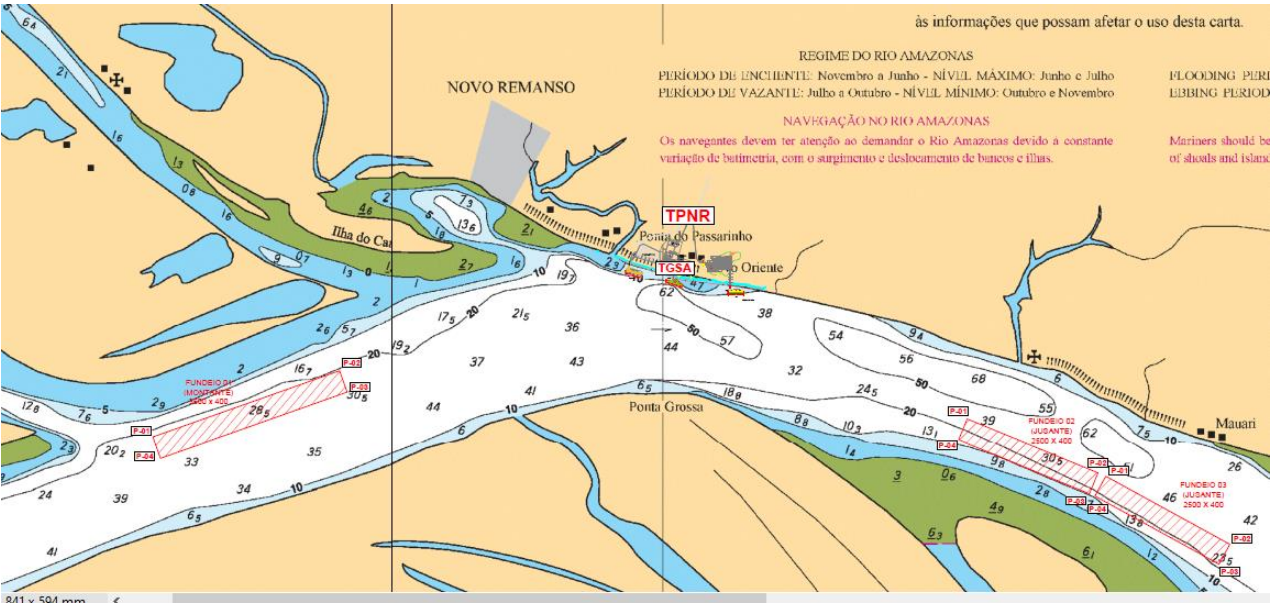


Figure 02 – Detailing of the areas of evolution and the areas of foundry.



**TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA**  
**AGRICULTURAL SOLID BULK TERMINAL**  
*Operational Instruction*  
**PORT INFORMATION**

PRO.01.015

REV. 00

Page 7 of  
23

QUADRO DE COORDENADAS - ÁREA DE FUNDEIO 01				
PONTO	COORD N	COORD E	LATITUDE	LONGITUDE
P-01	9.639.842,516	268.534,869	3°15'22.53" S	59°04'58.80" W
P-02	9.641.012,566	271.833,502	3°14'44.67" S	59°03'11.90" W
P-03	9.640.635,580	271.967,222	3°14'56.95" S	59°03'07.60" W
P-04	9.639.465,530	268.668,589	3°15'34.81" S	59°04'54.49" W
DATUM = SIRGAS 2000			FUSO = 21M - MC = -57°	

QUADRO DE COORDENADAS - ÁREA DE FUNDEIO 02				
PONTO	COORD N	COORD E	LATITUDE	LONGITUDE
P-01	9.640.165,905	282.928,385	3°15'12.95" S	58°57'12.66" W
P-02	9.639.209,379	285.238,159	3°15'44.23" S	58°55'57.92" W
P-03	9.638.839,815	285.085,115	3°15'56.25" S	58°56'02.90" W
P-04	9.639.796,342	282.775,341	3°15'24.97" S	58°57'17.64" W
DATUM = SIRGAS 2000			FUSO = 21M - MC = -57°	

QUADRO DE COORDENADAS - ÁREA DE FUNDEIO 03				
PONTO	COORD N	COORD E	LATITUDE	LONGITUDE
P-01	9.639.147,569	285.374,268	3°15'46.25" S	58°55'53.52" W
P-02	9.637.943,983	287.565,575	3°16'25.56" S	58°54'42.62" W
P-03	9.637.593,386	287.373,008	3°16'36.96" S	58°54'48.88" W
P-04	9.638.796,972	285.181,701	3°15'57.65" S	58°55'59.77" W
DATUM = SIRGAS 2000			FUSO = 21M - MC = -57°	


Figure 03 – Coordinates of the tables of the anchorage areas

**4. BERTHING / UNBERTHING CRITERIA:**

- Berthing (on arrival)
  - Maximum Wind Speed and Direction Limits - 15 knots Northeast of Terminal-TGSA.
- Unberthing (at the departure)
  - Maximum Wind Speed and Direction Limits – 15 knots Northeast of Terminal - TGSA.

**5. ADDITIONAL INFORMATION OF THE OPERATION:**

- Use of two tugs, ASD - (Azimuth Stern Drive) with a tractive force of at least 60 Bollard Pull.
- Berthing/unberthing maneuvers (should occur with winds of less than 15 knots and current at most 5 knots);
- The teams (Terminal Operators) from TGSA are trained – Available 24 hours / day and standby at the Terminal, as well as support vessels.
- Terminal has available lines that can be used after previous alignments with the Officers of the vessel, evaluated the necessary length that the vessel has available for each mooring point, the use of the ropes of the terminal does not imply in additional cost.


	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 8 of 23

- The lines coming with the vessel are required to have an actual breaking load of 74kn minimum equipped with Anti Snap Back (ASB) technology and lines certificates, send previously the certificates with the pertinent information to the cables for evaluation of the terminal staff;
- Terminal will use; 38mm High Modulus Polyethylene (HMPE) Line, Minimum Breaking Load (seamless): 121.45 tons – 1191.42 KN, Weight per meter 0.80 kg/m.

**BUNKERS:** N/A – There is no supply of bunkers in the terminal

**FRESH WATER:** N/A – The terminal does not provide, but the Maritime Agencies make available companies / companies that have for vessels to negotiate, either in Belém and / or Manaus.




	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 9 of 23

## 6. PARTICULARITY OF THE TERMINAL – TGSA

### PARTICULARITY OF THE TERMINAL – TGSA

Type of vessel	- Bulk Carrier
Number of classes employed / classes and working hours of the teams.	Three classes are employed (15 people), and (occasionally can be used simultaneously) / There are 3 classes of 07:20 hours of work / 24 hours of operation, depending on the amount for each basement.
LOA (m) / Maximum vessel length (m)	- 229 m
Maximum Beam (m)	- 32,26 m
Maximum air draught of the vessel	- 20,0 m
Maximum air draught to loading cargo holds Full	- 16,0 m
Draught at loading location	- 22,0 m
Maximum Navigation Draught	- 11.70 meters - F.W. Density 0.996~0.998.
The vessel may leave with a draft of 11.81 meters due to the limitation of Barra Norte. With an increase in the cost of practicing, you can load up to 11.70 meters.	- Restricted in (BARRA NORTE) 11,70 mts. FW - Operational Draft to sailing from terminal 11,81.
To draft test of sailing, the vessel can load until 11,96 meters of draft, arriving at Barra Norte 11,85 of draft mark.	- Entrance of the AMAZONAS RIVER
Loading rate: - 01 ShipLoader can reach 2,000 t/h for grain.	-Soya - 2,000t/h nominal in ship loader -Corn -2,000t/h nominal in ship loader
Official weighing method	Flow balance (Decision order <b>RFB 212-2024</b> )
Working Period	- 24 Hours Saturday/Sunday/Holiday included.
Periods of maneuvers – Berthing (dock-mooring) - Only during daylight. Unberthing (undocking) – During 24h.	- Berthing – From 05:30 hrs to 18:00 hrs - Unberthing – From 06:00 hrs to 17:30 hrs vessels biggest than 210meters of LOA - Unberthing Vessels until 210 meters of LOA - Without restriction.
Stowage Factor	- Soja - SF 49.00 ~ 49.50 cft/mt - Corn - SF 46.50 ~ 47.00 cft/mt
Freshwater supply	- Not Available (*)
Rain season	- December to June

Attention! Obey the criteria of stevedoring factors, terminal does not provide employees to go on board to carry out reloading in the holds.

	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 10 of 23

## 7. INTEGRATED MANAGEMENT POLICY of the TGSA (ISP-Code)

Service of port operations, storage and handling of solid agricultural bulk: Soybeans and Corn for export adopting the following principles:

- Continuous improvement of the effectiveness of the Integrated Management System;
- Customer satisfaction meeting their requirements;
- Prevention of accidents, injuries, diseases and occupational health and safety risks, pollution of the environment and various environmental impacts;
- Compliance with current legislation and regulatory standards and other requirements by the Organization;
- Commitment to the promotion of Sustainable Development of the Region;
- Engagement with the following principles of Social Responsibility, Sustainable Development Goals for the collectivity, accountability, transparency, ethical behavior, respect for the interests of stakeholders, international norms of behavior, eradicate poverty, inequality and climate change, the latter topic being possible with sustainable constructions.

## 8. ACCOUNTABILITY

All information contained in these Regulations is correct at the time of its issuance. The TGSA ensures that the information contained guarantees the reliability provided, in order to ensure the best satisfaction of its customers, thus meeting the ideal accuracy for the market.

## 9. SHIP LOADER

It has a ship loading system, operated by the *Log.One* production automation and control system at CCO (Operation Control Center), operated with quality, precision by its operators. In addition, it is known that the Ship Loader is stationary at its fixed base on the bow / Port side of the Catamaran. However, in their operation they rotate and operate at a range of 18 to 26 meters, thus reaching the cargo holds of the Handysize/Panamax/Post Panamax vessels.

To explain the loading, here are images (figures 04 to 09) showing the technology in motion for loading holds. Facilitating the understanding of the running technology is understood the order of the basements from 01 to 07 from left to right of the reader.

The loading operation in the TGSA happens one hold at a time, with the ship moving using the mooring lines when necessary. There is the possibility of loading holds that are side by side, for example: After loading hold #5, it is possible to load hold #4 or #6. After loading hold #2 it is possible to load hold #1 or #3. When using this procedure, it is not possible to load the corners of 1 hold that you are positioned in, for example: it is possible to load cargo hold #5 full 100% but it is not possible to load hold #6 100% full in the same position without moving the mooring lines. Therefore,



it is recommended that this method be used only when one of the two holds is not loaded 100%, when the vessel moored at the terminal, it is recommended that the chief mate and the loading master discuss the loading sequence when there are doubts or possible improvements.

To explain loading operation, below are images (figures 04 and 06) showing the technology in motion loading the cargo holds. To facilitate the understanding of the technology in execution, the order of holds 01 to 07 from the reader's left to right is understood.

### Ship Loader/TGSA

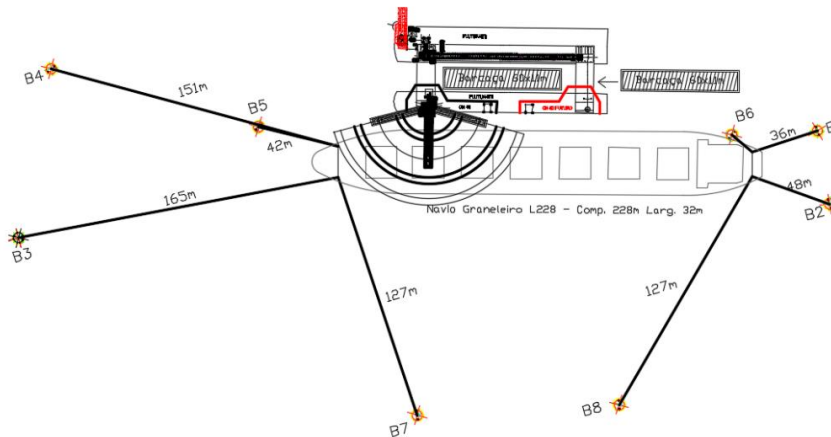


Figure 04 – Shiploader TMSA – Technology in Handling for loading in the hold 02 – Ship Loader 2000 t/h, 228m long and 32m wide

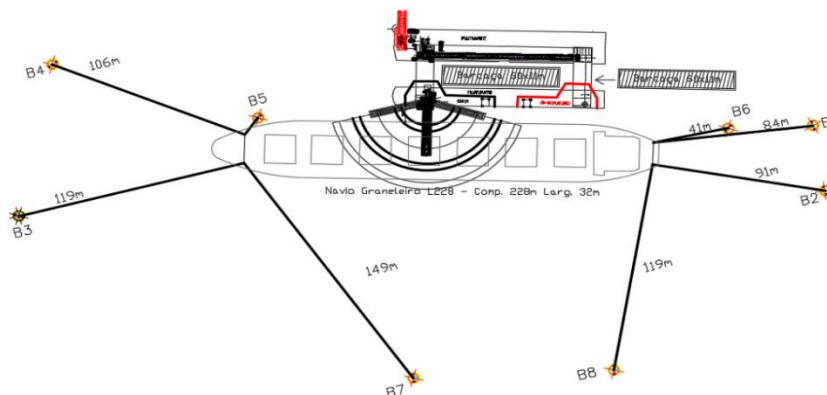


Figure 05- Shiploader TMSA - Technology in Movement for loading in the hold 04 - Ship Loader 2000 t / h, 228m long and 32m wide



**TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA**  
**AGRICULTURAL SOLID BULK TERMINAL**

*Operational Instruction*  
**PORT INFORMATION**

**PRO.01.015**

REV. 00

Page 12 of  
23

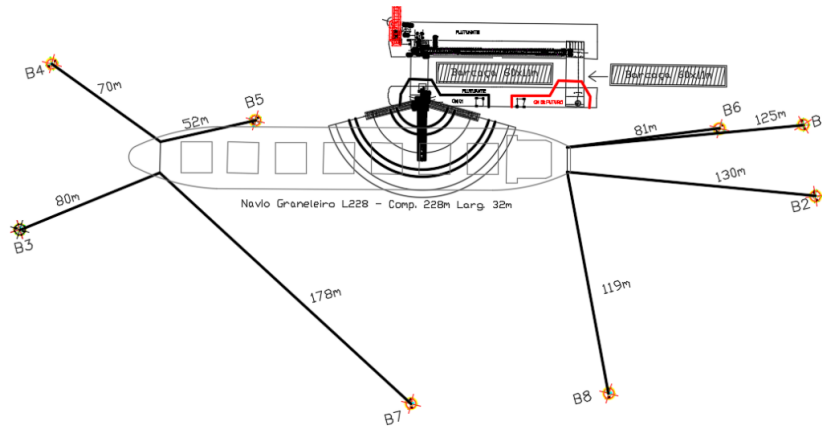


Figure 06- Shiploader TMSA - Technology in Movement for loading in the hold 06 - Ship Loader 2000 t / h, 228m long and 32m wide.

#### 10. THE IMPORTANT SPECIFICS FOR MANEUVERS.

- To proceed berthing maneuver on TGSA, the vessel will sail upstream (starting from the anchorage area downstream of the river, in relation to the terminal) and, at the best viewing angle, will turn the edge, initiating the maneuver to the floating (Catamaran) pier, where it will dock by the edge of it;
- In addition to the TGSA support team and tugboats, there will also be two (2) boats to maintain the safety of the maneuvering area (both in mooring and unmooring maneuvers), avoiding the approach of regional vessels, which may eventually cross the port area;
- Before unberthing maneuver, the terminal responsible for mooring, the vessel's commander and the pilot will combine all the maneuvers for the vessel to leave the buoy frame (mainly the sequence of cable retrieval) and its navigation to the turning and anchoring area (if applicable);
- If you need to anchor down after unberthing, this will occur in the anchorage area upstream of the Amazon River, in relation to the terminal;
- The spin (turn) will take place at the exit of the vessel. If you do not need to anchor down, the turning will take place in the basin in front of the terminal. If you need to anchor after unmooring, the turn will occur in the basin upstream of the river (in relation to the terminal);
- At this terminal, the vessel arrives empty and leaves loaded.



**TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA**  
**AGRICULTURAL SOLID BULK TERMINAL**

*Operational Instruction*  
**PORT INFORMATION**

**PRO.01.015**

REV. 00


Page 13 of  
23



Figure 11 - Approach to the Grain Terminal (TGSA)



Figure 12 - Simulated 3D environment - vessel's approach to the Grain Terminal (TGSA)

	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 14 of 23

**11. TERMINAL RESTRICTIONS:**

- It is forbidden for a vessel/ship to keep moored at the Terminal. The Ship is mooring in the buoy frame in the freight at the terminal.
- It is forbidden to boat/ship with prop (vertical pole near the edge of a deck that supports lifelines);
- It is forbidden vessel/ships over 20 years old
- It is forbidden boat/ships (Twin Deck) – Tweendeckers) are general cargo ships with two or sometimes three decks.

Before including the vessel in the line-up to terminal, send the *particulars ship's* for TGSA terminal approval.

**12. TUITIONS**

In the maneuvers with ships, two (2) 60TBP port ASD tugs were considered.

The commanders of the tugboats have the control station (*joystick*), which are tugboats in self-command mode, considering the times of action, movement of the river with current (banzeiro), performance losses as a function of the speed of advance, current. The ASD type tugs - Azimuth Stern Drive operating in push-pull mode.



Figure 13 – Example of ASD Tug – for Port Support of 60TBP.

### 13. COMMAND TABLE/BASE MANEUVERABILITY STUDY

Command	Buoyancy
All Real Force	100 %
All Force Simulator	80%
Half Force	50%
Slowly	25%
Very Slow	10%
Standing	0%

(*Applied Practical* on board the vessel and *the Master* of the Tugboats)

#### Maneuverability Study (USP) Mooring Maneuver – Bulk Carriers

<b>Vessel:</b> Bulk carrier L228B32 T6.6m	<b>Current:</b> 2.0kn W p/E
<b>Draught:</b> 6.6 m	<b>Wind:</b> E 20 kn
<b>Maneuver:</b> TGSA berthing from the downstream anchorage	<b>Then:</b> ----
<b>Scenario:</b> Full + Wind E	<b>Tide:</b> 11.5 m

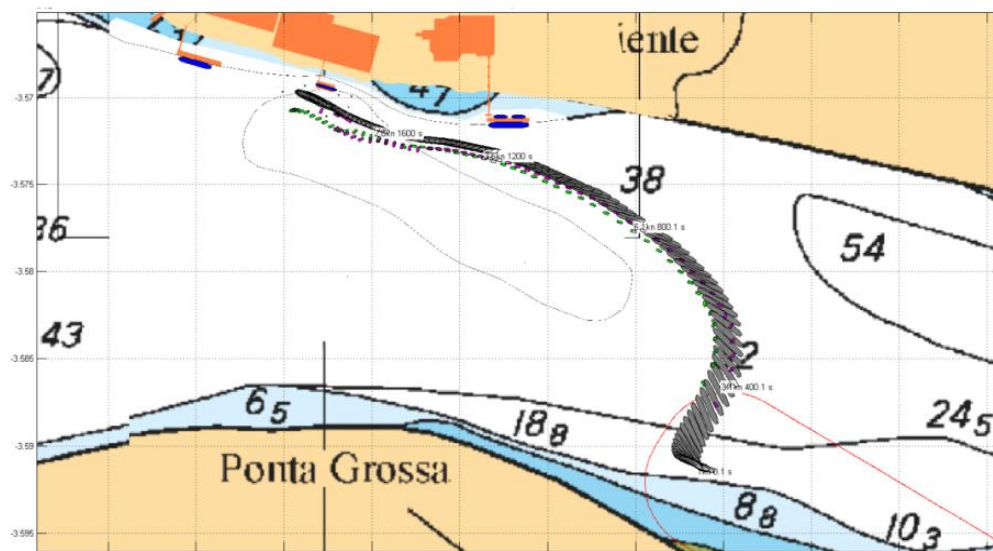


Figure 14 - Vessel trajectory / simulated study base / USP – Dec / 2020

#### Maneuverability Study (USP) Unmooring Maneuver – Bulk Carriers

<b>Vessel:</b> Bulk carrier L228B32 T11.5m	<b>Current:</b> 2.0kn W p/E
<b>Draught:</b> 11.5 m	<b>Wind:</b> E 20 kn
<b>Maneuver:</b> Undocking and Turning in front TGSA	<b>Then:</b> ----



Scenario: Full + Wind E

Tide: 11.5 m

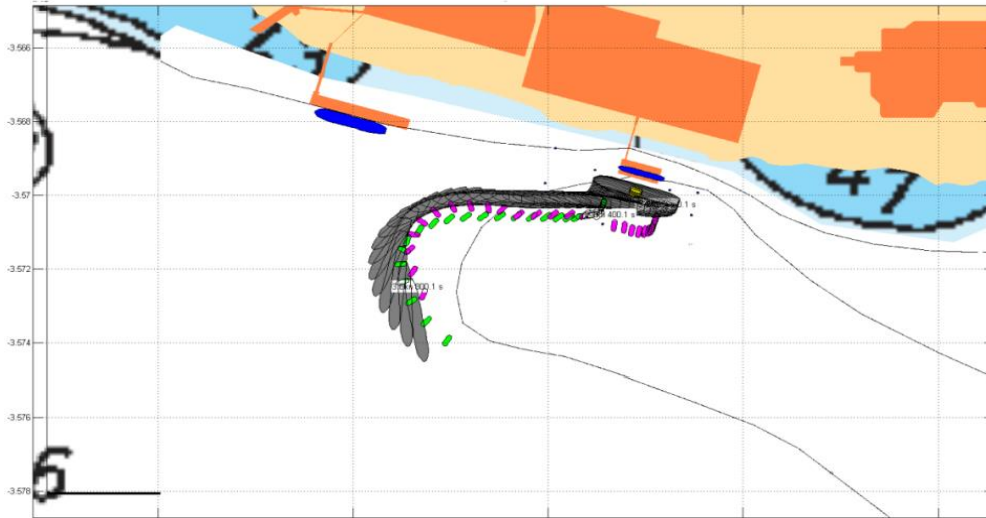


Figure 15 - Vessel trajectory / simulated study base / USP – Dec / 2020

#### 14. TYPE OF VESSELS – AUTHORISED TO DOCK AT THE TGSA:

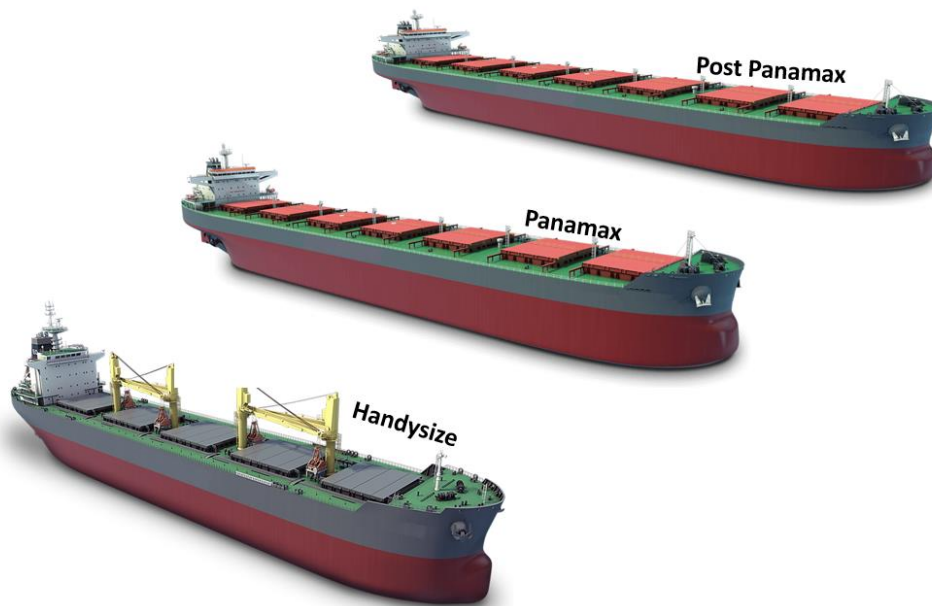



Figure 16 - Vessel types: Post Panamax, Panamax and Handysize

#### 15. DRAFT APPROVAL

The maximum draught approved by the Brazilian Navy is 11.50m. Vessels can sail from Itacoatiara with 11.50m of fresh water to transit in the strait of **BARRA NORTE**, with a draft of 11.70m



	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 17 of 23

of salt water (1.003 ~ 1.006). Based on CONCIERGE Nº 132/CFAOC, DE 31 DE JULHO DE 2024, TGSA is authorized to load vessels gain 11 centimeters on drafts executed.

Examples:

Target of 11.50 cm for the crossing at Barra Norte, the TGSA's departure draft will be 11.61 cm without additional pilotage cost. (normal draft).

For target drafts of 11.70 cm, the TGSA departure draft will be 11.81 cm. With pilotage cost.

For a test draft at Barra Norte of 11.85 cm, the vessel's exit draft will be 11.96 cm. With additional cost for pilotage.

11 centimeters will always be added to the draft of ships loaded in the TGSA towards Barra Norte, for the reasons presented in the report when arriving at BN the ship will have a draft 11 centimeters less, thus reaching its target to crossing.

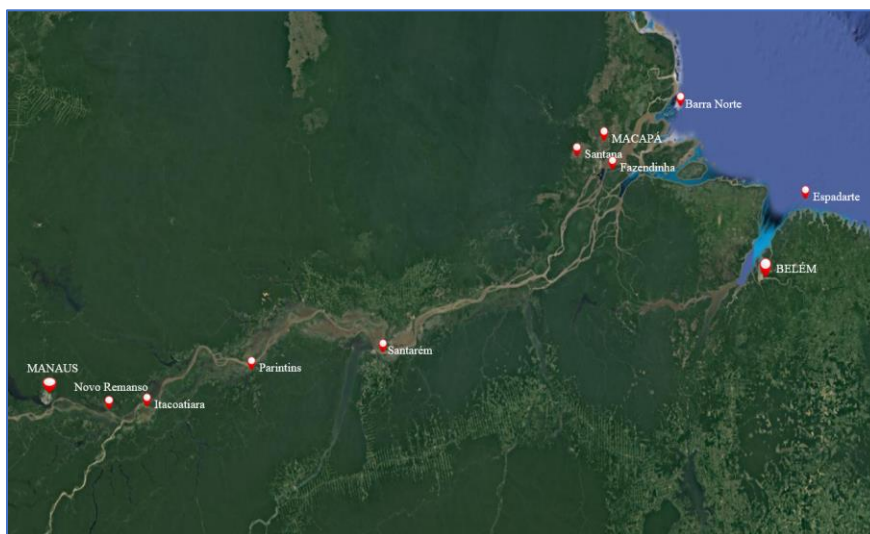



Figure 19 - Important cities – Port of destination – TGSA / Novo Remanso

## 16. RIGHT TO SUE TRANSACTIONS

The Terminal and Vessels are expected to operate in a safe, non-destructive and environmentally friendly manner. TGSA reserves the right to suspend operations and proceed with the withdrawal of any vessel/ships from the Terminal in the following circumstances:

- For violation, or non-compliance with the guidelines of the Terminal;
- For defects associated with the vessels, which may present risks in / or to the terminal;
- When the unsatisfactory performance of the vessel may cause inefficiency and significant restrictions on the operations of the terminal;
- If there is, for any reason, the safety of the Terminal, personnel, the environment or the vessel may cause concern;
- Risk of death of any person either on the vessel / vessel, or in the terminal or vessel;

	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 18 of 23

- When there not accord between involved (Terminal – vessel) putting terminal and vessel on probably risk;

#### **17. PRECAUTIONS AGAINST POLLUTION:**

The TGSA Terminal complies with environmental standards.

The TGSA Operations/Coordination and Supervision Manager will make the final decision.

**Note:** TGSA does not receive solid and liquid waste from the vessel under any circumstances.

#### **18. BALLAST AND BALLAST**

In compliance with national legislation. The operations carried out at the TGSA Terminal basically consist of unloading barges and loading vessels.

The shipowner must have the Ballast Water Management Plan, and make available to ANVISA, data in an appropriate form and designated by this regulatory agency; Law No. 9,966 of April 28, 2000 that regulates the prevention, supervision and control of pollution caused by the release of oil and other harmful or dangerous substances into waters.

For cargo operation (eventual), the shipowner must follow the rules and legislation below:

- NORMAN-20/2005 of the DPC (Directorate of Ports and Coasts):
- ANVISA-RDC Resolution 72/2009;
- Federal Law 9.966/2000.
- Inform the Maritime Agency of such Procedure;
- International law.
- The Shipowner must follow the rules of ISGOTT (6th Edition).


#### **19. DOCUMENTATION**

List of applicable documents to be completed and signed prior to the commencement of vessel loading operations during the pre-transfer security meeting:

##### **19.1.1 BEFORE THE START OF THE OPERATION**

##### **19.1.2 DOCUMENTATION FOR THE TERMINAL**

- Notice of Readiness;
- Certificate of Inspection of Cargo Holds;
- Particularities of the Ship;
- List of Crew Members;
- List of Last 10 Ports Mentioning Operation and Cargo;

	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 19 of 23

- Certificates of the Mooring Cables of the Ship;
- Initial Load Plan;
- Loading Sequence According to the Immediate - Stability of the Ship To a Loader (A Flow).
- Check list before berthing

#### **19.2.1 DOCUMENTATION OF THE PORT'S INTERNATIONAL SECURITY SYSTEM (IN ACCORDANCE WITH ISPS-CODE)**


- International Ship Insurance Certificate;
- RN4 Science Statement;
- Proforma of information before the Arrival of the RN8 Ship;
- Safety Notification before Docking (New Backwater);
- Particularities of the Ship;
- List of Crew Members;
- List of Last 10 Ports Mentioning Operation and Cargo;
- First Official Notice – Anti-Prostitution RFB;
- Second Official Notice - Trade and Illicit RFB.

#### **19.2.2 TERMINATION OF LOADING**

- Statement of Facts;
- Proof of Receipt of Cargo on Board.
- Agency must send to terminal the copies of the certificates of sealing of the basements.

#### **20. SAFETY AND SECURITY INFORMATION**


- All visitors must be identified at the entrance of the Terminal (TGSA) and upon completion will be familiar with site guidelines.
- Visitors must be accompanied by a legal representative (Coordinator/Supervisor) of the TGSA when on site and will be required to go through the on-site orientation process every 12 months.
- Orientation also involves seeing a brief safety dialogue and filling out an orientation form. Access to areas beyond the floating (Catamaran) pier will be prohibited unless the Coordination and Supervision grant permission.
- All persons entering must respect TGSA safety, health, environmental and safety standards. Personal protective equipment.

	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 20 of 23

- All persons entering the floating (Catamaran) pier must wear a helmet, safety boots, safety goggles and a reflective vest or equivalent. Personal Flotation Devices ("DFPs") are mandatory anywhere in the TGSA Speed Limit of no more than 20 km/h (Vehicle);
- All traffic signs and speed limits must be obeyed, and is not allowed in the operational area. The maximum speed limit at the terminal is 20 km / h.
- All non-operational jobs require a permit to perform work safely on the terminal.
- **Vehicles:** All vehicles entering this TGSA Terminal are subject to search. Vehicles are not allowed in operational areas without permission from the TGSA manager.
- If permission is granted, vehicles must go to the designated parking lot.
- Vehicles must be locked when left unattended.
- In this place, work vehicles must have a functional alarm system.
- All vehicles must be in good working order.
- For example, there should be no leaks in the exhaust, oil leaks, etc.
- The owner must remove the vehicles from the terminal before the vessel moves away.
- Prohibitions Play, fighting, gambling, theft and grooming are prohibited;
- Rules for Smokers: It is forbidden to smoke in the Terminal (TGSA).
- The vessel's master may designate smoking areas on board the vessel. Alcohol/Drugs Alcohol and illicit drugs are prohibited in the Terminal (TGSA).
- Any person who is demonstrably found under the influence, or in possession, of either alcohol or drugs will be prohibited from entering and/or will be removed from the premises.
- Firearms/knives, the use or possession of firearms in the TGSA Terminal is strictly prohibited for any person who is not a uniformed officer of enforcement agencies, such as the Police Authority; Private Security.

## 21 EMERGENCY CONTACTS - (PUBLIC/PRIVATE POWER).


Entity	Contact	Emails	Mobile/Phone
TGSA			
CCO – Operational Control Center	Controler Operator	<a href="mailto:cco@tgsabrasil.com.br">cco@tgsabrasil.com.br</a>	+55 92 99127-3838
Main Gatehouse (Security)	Reception	<a href="mailto:portaria01.tgsa@gruposimoes.com.br">portaria01.tgsa@gruposimoes.com.br</a>	-
Secondary Ordinance (Security)	Warehouse/Terminal	<a href="mailto:us.tgsa@gruposimoes.com.br">us.tgsa@gruposimoes.com.br</a>	+5592 9 9170-5436
PFSO	Gislaine Lima	<a href="mailto:gislaine.souza@tgsabrasil.com.br">gislaine.souza@tgsabrasil.com.br</a>	+55 21 99762-6420
General of Port Operations	Fábio Eduardo de Souza	<a href="mailto:fabio.souza@tgsabrasil.com.br">fabio.souza@tgsabrasil.com.br</a>	+55-21 99762-6420
Operations Coordinator	Raimundo Sousa	<a href="mailto:raimundo.sousa@gruposimoes.com.br">raimundo.sousa@gruposimoes.com.br</a>	+55-66 99623-1709
Operation Supervisors	Eliandro Cursino	<a href="mailto:eliandro.macedo@tgsabrasil.com.br">eliandro.macedo@tgsabrasil.com.br</a>	+55-92 99602-0273

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Operation Supervisors	Jonas F. Rodrigues	<a href="mailto:jonas.rodrigues@gruposimoes.com.br">jonas.rodrigues@gruposimoes.com.br</a>	+55 92 99375-2603
Operation Supervisors	Rayberte Araujo	<a href="mailto:rayberte.araujo@gruposimoes.com.br">rayberte.araujo@gruposimoes.com.br</a>	+55 92 99408-9288
Operation Supervisors	Wirleson Pena	<a href="mailto:wirleson.pena@gruposimoes.com.br">wirleson.pena@gruposimoes.com.br</a>	+55 92 99113-5329
Plan Analyst	Alafan Lima	<a href="mailto:alafan.lima@tgsabrazil.com.br">alafan.lima@tgsabrazil.com.br</a>	+55 92 99395 6208
Plan Analyst	Diego Santos	<a href="mailto:diego.santos@tgsabrazil.com.br">diego.santos@tgsabrazil.com.br</a>	+55 92 99466 9707
Loading Masters	Loading Masters	<a href="mailto:tecnico.portuario@tgsabrazil.com.br">tecnico.portuario@tgsabrazil.com.br</a>	+55 92 9935 46825
Public / Private Contact			
Amazon Maritime Agency	Jorge Chacon	<a href="mailto:operations@amazonica.com.br">operations@amazonica.com.br</a>	+55 92 99445-7871
North Star Maritime Agency	Marcelo Bastos / Erick Verli	<a href="mailto:amazon@nsshopping.com.br">amazon@nsshopping.com.br</a>	55 92 3014-2454 55 92 99444-4318 55 92 98145-8700 55 92 99196-0447
Alphamar Maritime Agency	To be defined	<a href="mailto:operation.ita@alphamar.com.br">operation.ita@alphamar.com.br</a>	+55 92 3521 6712
Pilotage Zone I UNIPILOT	To be denified	<a href="mailto:gerencia@unipilot.com.br">gerencia@unipilot.com.br</a>	+55 91 3223-0844 +55 91 3233-5077 +55 91 9914-06947
Pilotage Zone II MANAUS PILOT	To be denified	<a href="mailto:plantaio@manauspilots.com.br">plantaio@manauspilots.com.br</a>	+55 92 3664-6634
Pilotage Zone II PROA PILOT	To be denified	<a href="mailto:proa@promanaus.com.br">proa@promanaus.com.br</a>	+55 92 3624-0041 +55 92 3521-2073
Military Police – Itacoatiara	Cmte	-	+55 92 <b>190</b> +55 92 3521-3190
Military Fire Department	Cmte	-	+55 92 – <b>193</b> +55 92 99487-9536
SAMU	To be defined	-	+55 92 3521-4373
SEMMAS – Sec. Mun. Environment	To be defined	<a href="mailto:semma.pmi@outlook.com">semma.pmi@outlook.com</a>	+55 92 991745678
Captaincy - Itacoatiara River Agency – Maritime Authority	Cmte	<a href="mailto:secom@agitac.mar.mil.br">secom@agitac.mar.mil.br</a>	+55 92 3521-1131

## 22. MATERIAL SAFETY

- The Shippers' Cargo Declaration will be available at the Terminal upon request according to the provisions of the INTERNATIONAL MARITIME SOLID BULK CARGO CODE (IMSBC).
- Restricted Area Access control procedures have been put in place to try to control that no outsider or unauthorized person on the (Catamaran) – floating pier can have access to the vessel while it is docked.

	<b>TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA</b> <b>AGRICULTURAL SOLID BULK TERMINAL</b> <i>Operational Instruction</i> <b>PORT INFORMATION</b>	<b>PRO.01.015</b>
		REV. 00
		Page 22 of 23

- The (Catamaran) – floating pier, including all buildings and equipment located on it, are parts of the restricted area.
- The fence of the restricted area acts as a second line of defense to control a radius of 600 meters (600m) from the vessel's location.
- **Security:** Maritime Safety (ISPS-Code) The levels inform the maritime community and the public of the level of risk to the maritime elements of the national transport system. The Level will be designated and will determine the level of security for the facilities.
- Level 1 – Normal operational level for safety;
- Level 2 – Increased risk of transportation security incident. There is some identified threat, but no specific target;
- Level 3 – A transportation security incident is likely or imminent.

All persons entering the premises are required to have positive identification (badge). All persons must complete the terminal entry registration before entering or exiting.

**Note:** The captain must inform all crew members of the Safety information before allowing them access to the terminal (TGSA).



**TERMINAL DE GRANÉIS DE SÓLIDOS AGRÍCOLAS-TGSA**  
**AGRICULTURAL SOLID BULK TERMINAL**

*Operational Instruction*  
**PORT INFORMATION**

**PRO.01.015**

**REV. 00**

Page 23 of  
**23**

**23. CERTIFICATE FOR ROPE – TERMINAL TGSA:**

**Lankhorst Euronete Brasil**  
 A WinCC® Worldwide Brand

Certificate number: 157F\_LB\_22\_REV.00

**CERTIFICATE OF SYNTHETIC ROPES** 1 of 1

Manufacturer : LANKHORST EURONETE BRASIL  
 Purchaser : J. DE A. GUERREIRO  
 Purchase Order : 6211  
 Delivery Date : 24/10/2022  
 Production Order : 20220894  
 Product Description : LANOPLINE Synthetic Rope – Braided 12 Strands  
 Diameter : 38mm (Design) /38mm (measured)  
 Quantity : 2 Units  
 Product Standard : ABNT NBR ISO 10125/2013  
 Inspection Standard : ABNT NBR ISO 2307/2012  
 Material and Type : HMPE – HIGH MODULUS POLYETHYLENE  
 Splice Type : Tuck  
 Jacket : Rope with jacket  
 Chemical Composition : 100% HMPE - High Modulus Polyethylene  
 Minimum Breaking Load (MBS) : 121,45 ton - 1191,42 kN  
 Breaking Strength Result (MSR) : 121,73 ton - 1194,17 kN  
 Weight per Meter : 0,80 kg/m  
 Scope of Inspection : Visual and dimensional examination  
 Linear density measurement  
 Breaking Load

**Rope Identification and Length:**

Item	Batch number	TAG (Seal No)	Weight Kg	Length (m)
01	221013069234NE	719159	79,0	70
02	221013069234NE	719163	82,0	70

Remarks:  
 • Inspected thoroughly before re-use  
 • Protect ropes shrap and rough surfaces  
 • Protect from heat  
 • Do not exceed working load limit  
 • Do not use damaged ropes

Issued By: Alexandre Soares  
 Chief Inspector

Approved By: Alexandre Torres  
 Technical and Project Manager

The company is ISO 9001:2015 certified

**Lankhorst Euronete Brasil – Indústria e Comércio Ltda**  
 Rua Nelson de Aguiar, 1400 - Jd. São Roberto - São Paulo - SP - 04032-000  
 Tel: (11) 2611-2000 Fax: (11) 2611-2001  
 www.lankhorst.com.br

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Certificate number: 157F\_LB\_22\_REV.00

**CERTIFICATE OF SYNTHETIC ROPES** 1 of 1

Manufacturer : LANKHORST EURONETE BRASIL  
 Purchaser : J. DE A. GUERREIRO  
 Purchase Order : 6211  
 Delivery Date : 24/10/2022  
 Production Order : 20220894  
 Product Description : LANOPLINE Synthetic Rope – Braided 12 Strands  
 Diameter : 38mm (Design) /38mm (measured)  
 Quantity : 3 Units  
 Product Standard : ABNT NBR ISO 10125/2013  
 Inspection Standard : ABNT NBR ISO 2307/2012  
 Material and Type : HMPE – HIGH MODULUS POLYETHYLENE  
 Splice Type : Tuck  
 Jacket : Rope with jacket  
 Chemical Composition : 100% HMPE - High Modulus Polyethylene  
 Minimum Breaking Load (MBS) : 121,45 ton - 1191,42 kN  
 Breaking Strength Result (MSR) : 121,73 ton - 1194,17 kN  
 Weight per Meter : 0,80 kg/m  
 Scope of Inspection : Visual and dimensional examination  
 Linear density measurement  
 Breaking Load

**Rope Identification and Length:**

Item	Batch number	TAG (Seal No)	Weight Kg	Length (m)
01	221013069234NE	719115	100,0	160
02	221013069234NE	719128	190,0	160
03	221013069234NE	719123	171,0	160

Remarks:  
 • Inspected thoroughly before re-use  
 • Protect ropes shrap and rough surfaces  
 • Protect from heat  
 • Do not exceed working load limit  
 • Do not use damaged ropes

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Manufacturer : LANKHORST EURONETE BRASIL  
 Purchaser : J. DE A. GUERREIRO  
 Purchase Order : 6211  
 Delivery Date : 24/11/2022  
 Production Order : 20220907  
 Product Description : Eurosteel VDE Synthetic Rope – Braided 8 Strands  
 Diameter : 38mm (Design) /38mm (measured)  
 Quantity : 2 Coil  
 Product Standard : ABNT NBR ISO 10572/2013  
 Inspection Standard : ABNT NBR ISO 2307/2012  
 Material and Type : Mixed Polypropylene  
 Splice Type : Tuck  
 Jacket : Rope without jacket  
 Chemical Composition : 70% Polyethylene 75% Polypropylene  
 Minimum Breaking Load (MBS) : 121,35 ton – 1190,44 kN  
 Breaking Strength Result (MSR) : 122,08 ton – 1205,49 kN  
 Weight per Meter : 3,51 kg/m  
 Scope of Inspection : Visual and dimensional examination  
 Linear density measurement  
 Breaking Load

**Rope Identification and Length:**

Item	Batch number	TAG (Seal No)	Weight Kg	Length (m)
01	221013069070N1	719209	523,0	660
02	221013069070N1	719211	583,0	160

Remarks:  
 • Inspected thoroughly before re-use  
 • Protect ropes shrap and rough surfaces  
 • Protect from heat  
 • Do not exceed working load limit  
 • Do not use damaged ropes

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 Purchaser : J. DE A. GUERREIRO  
 Purchase Order : 6211  
 Delivery Date : 24/10/2022  
 Production Order : 20220894  
 Product Description : LANOPLINE Synthetic Rope – Braided 12 Strands  
 Diameter : 38mm (Design) /38mm (measured)  
 Quantity : 5 Units  
 Product Standard : ABNT NBR ISO 10125/2013  
 Inspection Standard : ABNT NBR ISO 2307/2012  
 Material and Type : HMPE – HIGH MODULUS POLYETHYLENE  
 Splice Type : Tuck  
 Jacket : Rope with jacket  
 Chemical Composition : 100% HMPE - High Modulus Polyethylene  
 Minimum Breaking Load (MBS) : 121,45 ton - 1191,42 kN  
 Breaking Strength Result (MSR) : 122,39 ton - 1199,68 kN  
 Weight per Meter : 0,80 kg/m  
 Scope of Inspection : Visual and dimensional examination  
 Linear density measurement  
 Breaking Load

**Rope Identification and Length:**

Item	Batch number	TAG (Seal No)	Weight Kg	Length (m)
01	221013069179NE	719144	211,5	200
02	221013069179NE	719128	264,0	200
03	221013069179NE	719112	217,0	200
04	221013069179NE	719113	213,0	200
05	221013069179NE	719162	207,0	200

Remarks:  
 • Inspected thoroughly before re-use  
 • Protect ropes shrap and rough surfaces  
 • Protect from heat  
 • Do not exceed working load limit  
 • Do not use damaged ropes

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 Purchaser : J. DE A. GUERREIRO  
 Purchase Order : 6211  
 Delivery Date : 24/10/2022  
 Production Order : 20220894  
 Product Description : LANOPLINE Synthetic Rope – Braided 12 Strands  
 Diameter : 38mm (Design) /38mm (measured)  
 Quantity : 8 Units  
 Product Standard : ABNT NBR ISO 10125/2013  
 Inspection Standard : ABNT NBR ISO 2307/2012  
 Material and Type : HMPE – HIGH MODULUS POLYETHYLENE  
 Splice Type : Tuck  
 Jacket : Rope with jacket  
 Chemical Composition : 100% HMPE - High Modulus Polyethylene  
 Minimum Breaking Load (MBS) : 121,45 ton - 1191,42 kN  
 Breaking Strength Result (MSR) : 121,73 ton - 1194,17 kN  
 Weight per Meter : 0,80 kg/m  
 Scope of Inspection : Visual and dimensional examination  
 Linear density measurement  
 Breaking Load

**Rope Identification and Length:**

Item	Batch number	TAG (Seal No)	Weight Kg	Length (m)
01	22101306834ENE	719164	38,0	20
02	22101306834ENE	719165	38,0	20
03	22101306834ENE	719166	38,0	20
04	22101306834ENE	719171	38,0	20
05	22101306834ENE	719172	38,0	20
06	22101306834ENE	719174	38,0	20
07	22101306834ENE	719175	38,0	20
08	22101306834ENE	719176	38,0	20

Remarks:  
 • Inspected thoroughly before re-use  
 • Protect ropes shrap and rough surfaces  
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