Port Information

Nacala-a-Velha Coal Terminal Information

Summary

1. Introduction 3

2. Terminal Development Background... 3

3. Nacala-à-Velha Coal Terminal Panormic Overview.. 3

4. Port Infrastructure 4

4.1 Location 4

4.2 Nautical Chart 4

4.3 Weather Conditions 4

4.4 Currents, Tides and Waves 4

4.5 Communications and Services 5

4.5.1 VHF Communication Channels 5

4.5.2 Piloge and Tugs 6

4.6 Anchorage 6

4.6.1 Outer Anchorage 6

4.6.2 Inner Anchorage 6

4.7 Access Channel 6

4.7.1 Turning Area 7

4.8 Berth 7

4.8.1 Operational Characteristics..... 7

5. Environment 7

5.1 Marine Environment 7

5.2 Ballast Water 8

5.3 Sewage 8

6. Security 8

7. Personal Protective Equipment 8

8. Attach 1 9

1. Introduction

The information contained herein is merely intended to acquaint agents, ship owners, operators and masters with the facilities and general conditions of Nacala-a-Velha Coal Terminal.

This information neither substitutes nor alters other regulations included in official Mozambican or international publications referring to navigation.

The Terminal is not responsible for any accident or damage resulting from the information given herein. While the information given herein is based on design data and field surveys, the Terminal is not responsible for any errors or omissions.

2. Terminal Development background

The company - Corredor Logístico Integrado de Nacala S.A. (CLN) – is a Mozambican rail and port concessionaire responsable for the coal logistics in north of the country. Its activities include the operation of a railway and port.

The railway which connects the Moatize coal mine to the Nacala-à-Velha Port has an extension of 912 km e passes through two countries, Mozambique and Malawi, it has a capacity of 18 million coal tonnes per year. CLN is in charge of the coal transport in the Nacala Corridor as well as Railway maintenance and the Operational Control Center (CCO), which manages all trains Operation in the railway corridor.

The Nacala-a-Velha Multiuser Port Terminal is composed by a modern infrastructure with ultimate technlogy and it was projected to export 18 MT initially. The Terminal is also composed by a Car Dumper, 2 Stackers, 2 Reclaimers, 2 Shiploaders, 03 coal yards and 13 km of Conveyor Belt.

In 2016, CLN began its operations in the Nacala-a-Velha Multiuser Port Terminal for thermal and metallurgical coal exportation to several countries.

3. Nacala-à-Velha Coal Terminal Overview Panoramic

4. Port Infrastructure

4.1. Location

The Nacala-à-Velha Coal Private Terminal is located in the city of Nacala-à-Velha, 160 km (100 miles) northeast of Nampula and 60 km (40 miles) north Mozambique Island.

It is located in the geographical coordinates:

Latitude: 14º 31,46' South Longitude: 040º 39,34' East

Latitude: 14º 31,69' South Longitude: 040º 39,29' East

4.2. Nautical Chart

The region is located where the Nacala-à-Velha Coal Terminal is represented in the following Nautical Charts:

- Chart 16311 published by the Instituto Nacional de Hidrografia e Navegação (INAHINA);

- British Admiralty Charts nº 649.

4.3. Weather Conditions

The climate type is tropical with an average temperature of 77.9°F and variation throughout the year from 54.5°F to 99.7°F. The average air relative humidity is 79.5%.

The average annual rainfall is 843 mm, with more rainfall in summer than in winter.

The predominant wind direction is Southeast from March to September and from October to February is the Northeast.

4.4. Currents, Tides and Waves

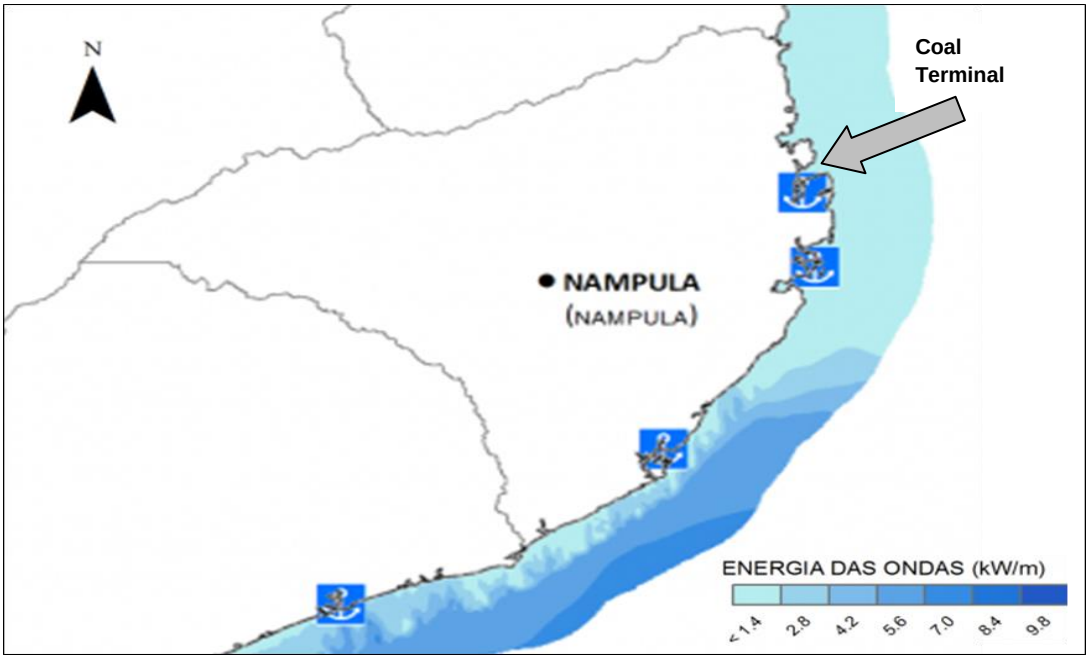
The currents in the Nacala-à-Velha Coal Terminal region are influenced by the South Equatorial Current, which when approaching the coast of Africa, is divided by the Mozambique Channel between Madagascar and the mainland, and along the east coast of Madagascar. These currents have southwest, reaching speeds up to 5 knots.

According to Chart No. 16311, published by INAHINA, the tides in Nacala Port are semidiurnal and the heights above Chart Datum are (meters):

ELEMENTOS DE MARÉS (TIDAL LEVELS)									
Local Place	Lat S	Long E	Alturas em metros acima do Zero Hidrográfico Heights in metres above Chart Datum						
			PMmáx. HAT	PMAV. MHWS	PMAM. MHWN	NM. MSL	BMAM. MLWN	BMAV. MLWS	BMmin. LAT
Nacala	14º 27.8'	40º 40.8'	4.32	3.88	2.74	2.25	1.73	0.62	0.26

Observações - As marés são do tipo semidiurno regular.
Remarks - Semidiurnal tides.

As the Bay of Nacala is sheltered, the Nacala-à-Velha Coal Terminal does not suffer significant influence of waves. The Bay of Fernão Veloso, northeast of the Terminal, is hit by residual waves and the area east of Cape Columulomo is influenced by waves with low energy, as indicated below:



4.5. Communication and Services

4.5.1. VHF Communication Channels

General Call	CHANNEL 16 / 70 (DSC)
Pilot Station	CHANNEL 10 / 27
Ship/Terminal	CHANNEL 13

4.5.2. Pilotage and Tugs

The pilot and tugs application are mandatory during maneuvers at Nacala-à-Velha Coal Private Terminal.

4.6. Anchorage

4.6.1. Outer Anchorage

The outer anchorage is located in the northwestern portion of the Bay of Fernão Veloso in location with reference depth ranging between isobathics 10 and 40 meters, as indicated in rectangular polygon (1 mile wide and 2 miles long).

This area is limited by a rectangle in the following coordinates:

A) Latitude: 14º 23,5' South Longitude: 40º 42,3' East

B) Latitude: 14º 22,8' South Longitude: 40º 41,5' East

C) Latitude: 14º 21,3' South Longitude: 40º 42,8' East

D) Latitude: 14º 21,9' South Longitude: 40º 43,6' East

4.6.2. Inner Anchorage

The location of internal anchorage providing security and adequate depth to Nacala-à-Velha Coal Terminal will be set in agreement between the Master of the ship and the pilot of the maneuver. It is forbidden to navigation and anchoring in Nacala Bay without assistance local pilot station. The recommended position for ships of light draft, in ballast, waiting berthing at the Terminal is:

Latitude: 14º 23,12' South Longitude: 040º 39,28' East

4.7. Access Channel

The navigable safe way to Nacala-à-Velha Coal Terminal has extension of 5.5 nautical miles in direction south south west (SSW).

The average width of the channel in almost the entire length, it is 800.00 m, and the minimum width found is 450.00 meters.

The minimum natural depth of channel is 22.00 meters.

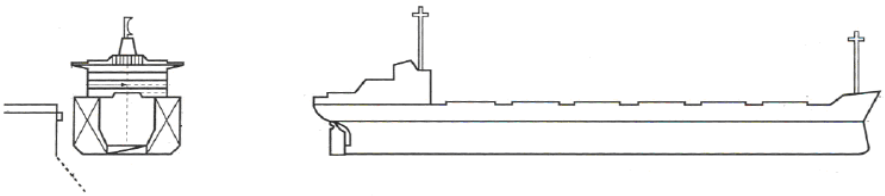
4.7.1. Turning Basin

The turning basin is bounded to west by the line mooring and measures 350.00 meters radius. The minimum natural depth is 22.00 meters.

4.8. Berth

4.8.1 Operational Characteristics

Length of pier:	435.00 meters
Maximum length of berth:	360.00 meters



Ship`s Limits

Length Overall:	302.00 meters
Maximum Beam:	51.00 meters
Maximum draft:	18.70 meters

5. Environment

5.1 Marine Environment

Vessels must observe the rules of coexistence and preservation of the marine environment described in the relevant legislation, during ship´s stay at port.

Diving services for cleaning the hull or propellers are not allowed.

5.2 Ballast Water

Discharge of clean ballast water is allowed in the Port area provided the Master complies with following procedures:

- Management of ballast must be in compliance with the guidelines for controlling and management of ship’s ballast water as per International Convention for the Control and Management of Ships' Ballast Water and Sediments.
- Master must have full acknowledgement about the good quality of the water, free of any kind and quantity of oil and without any pathogenic organisms or bacteria and/or exotic/unwanted species.
- Ballast water cannot be discharged on the quay, shiploader railway or electrical facilities.
- Master must assure that the vessel is provided with necessary protection in the top side tank outlets in order to avoid any kind of damage or stoppage on loading operation.

5.3 Sewage

The discharge of sewage directly into the sea is prohibited. The sewage treatment system should be kept operating during the ship's stay at Port.

6. Security

This Port operates in accordance with international norms and standards of safety ISPS (International Ship and Port Facilities Security Code).

7. Personal Protective Equipment

The use of personal protective equipment (PPE) is required.

Attach 1: Consolidated framework of terminal & ship

PIER

CHARACTERISTICS		COMMENTS
Length of pier	435.00 meters	Concrete pier extension
Maximum berth length	360.00 meters	Extension between fenders
Ship's air draft	21.00 meters	Maximum air draft allowed
Maximum tide	+ 4.32 meters	Nautical Chart
Medium tide	+ 2.25 meters	Nautical Chart
Minimum tide	+ 0.26 meters	Nautical Chart

VESSEL

CHARACTERISTICS	RANGE OF VESSEL'S SIZE (1)	
	FROM	TO
Overall length	180.00 meters	302.00 meters
Beam	30.00 meters	51.00 meters
Summer Deadweight	30,000 metric tons	210,000 metric tons
Sailing draft	12.00 meters	18.70 meters
Arrival draft	5.40 meters	8.50 meters
Free board (minimum)	5.00 meters	5.00 meters
Free board (maximum)	12.60 meters	16.50 meters
Air draft: Maximum admitted (HAT Reference)	17.10 meters	21.00 meters
Depth Extreme	18.00 meters	25.00 meters
Berthing Displacement (in ballast) (2)	30,000 metric tons	131,250 metric tons
Berthing Displacement (extreme) (2)	50,000 metric tons	218,750 metric tons
Sailing Displacement (extreme) (2)	50,000 metric tons	218,750 metric tons
Cargo Hold's Volume (maximum)	50,000 m^3	205,000 m^3
Cargo Weight (maximum)	40,000 metric tons	184,500 metric tons (3)
Cargo Handling characteristic	Coal specific weight: 900 kg/m^3 (average estimated)	

Observations:

(1) Clarification: Vessel's type represents a great variety characteristics of pure bulk carrier fitted for loading at Nacala Coal Terminal – Mozambique.

(2) The displacement refers to ship's total weight, including light ship, consumables, cargo and ballast.

(3) With full usage of cargo space, stowage factor reduction not considered.

Others:

a) Maximum age of vessel should not exceed 25 years old;
b) Hatch coaming minimum dimension: Length 12.00 m with total area of 140 sq meters.