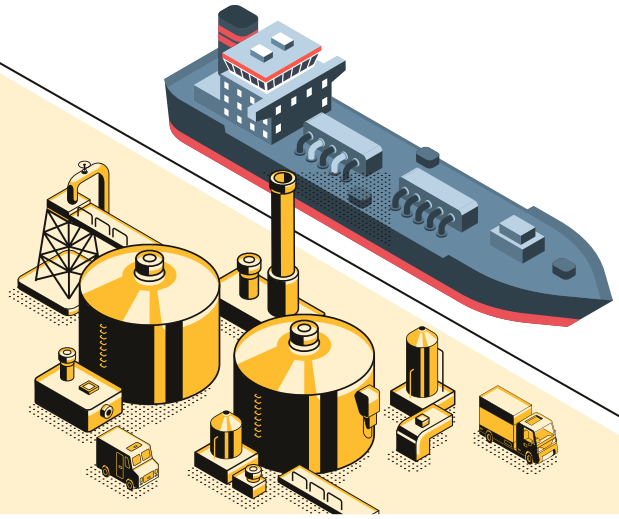
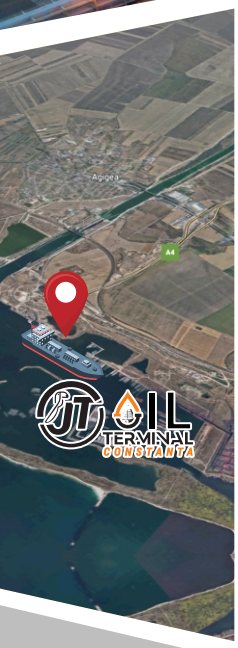
BLACK SEA TERMINAL

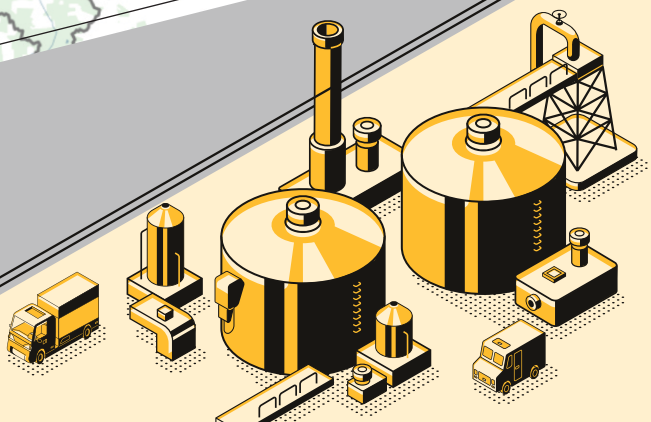


OIL TERMINAL CONSTANTA

PETROLEUM MULTI PRODUCTS TERMINAL

DANUBE RIVER CONNECTION & BLACK SEA





INVESTMENT VALUE
30 - 35.000.000 EUR

- **Beneficiary of the investment**

  SC JT OIL TERMINAL CONSTANTA SRL
  Address. Navodari nr 1 - Constanta

  National Trade Register Office :
  J13/734/06.04.2012

  CUI : RO27021021

  E-MAIL: oilterminal@jtgroup.ro

  CONTACT: 004 0723.31.33.00 / 004
  0730.55.62.00

  CODE CAEN: 4671

  SHARE CAPITAL: 2.262.180 RON / 500.000 USD

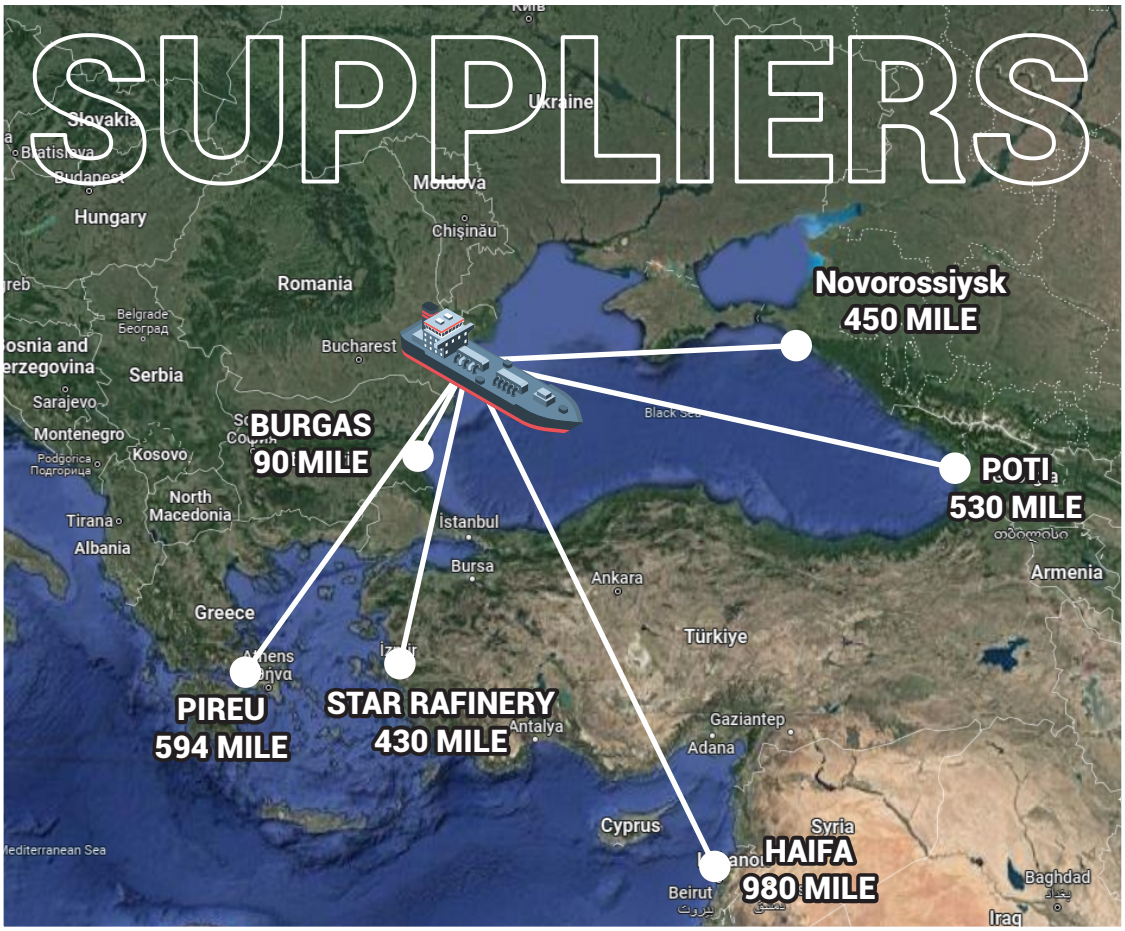
BLACK SEA TERMINAL

OIL TERMINAL CONSTANTA

BLACK | SEA | TERMINAL

MARKET PLACES

SUPPLIERS



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JT OIL TERMINAL CONSTANTA

THE EXISTING SITUATION AND THE NEED TO ACHIEVE THE INVESTMENT OBJECTIVE

Constanta Port is a seaport owned by the Romanian state. It is administered by the National Company "Administratia Porturilor Maritime" S.A. - Constanta (CNAPMC), in accordance with the provisions of the Concession Contract no. LO4113/31.10.2008 signed between CNAPMC and the Ministry of Transport (MT). CNAPMC operates under the authority of MT, in accordance with the provisions of GD no. 76/2009 on the organization and functioning of the Ministry of Transport, as amended and supplemented.

The objectives of the concession are:

- *Development of the Port of Constanta as the main link between Europe and Asia and its inclusion in the maritime motorway network;*
- *Maintenance, repair, modernisation and development of the shipping network;*
- *Development of the functional structure of the Port of Constanta in order to transform it into a logistics centre and integrate it into the intermodal transport system;*
- *Ensuring traffic safety by ensuring minimum depths in harbour basins and berths and signage on access channels and in the harbour;*
- *Development of shipping infrastructure and port facilities for port operations.*

The Port of Constanta is strategically located at the crossroads of trade routes linking the landlocked markets of Europe and the Transcaucasian Area, Central Asia and the Far East. The port is located at the intersection of TEN-T priority axes 7 (road), 18 (Danube) and 22 (rail).

Maritime - Rail. Each port terminal has direct access to the railway system. The total length of the railways in the Port of Constanta reaches 300 km. Taking into account the increasing trends of freight traffic on the railways in the southern part of the port, APMC has initiated two projects for the development of railway capacity: "Development of railway capacity in the southern part of the Port of Constanta" and "Development of railway capacity in the sea-river sector (berths 86-103)".

Maritime - Road. The total length of the road transport network within the port reaches 100 km, ensuring fast and flexible transport for all types of cargo. For the development of the road infrastructure, AMPC initiated and completed the project "Road bridge at km 0+540 of the Danube - Black Sea Canal and related road and access infrastructure works in the Port of Constanta".

Maritime - River. The Danube - Black Sea Canal provides the sea-river connection for the transport of goods. The canal, managed by C.N. Administratia Canalelor Navigabile S.A., is 64.4 km long, 90 m wide, 7 m deep and 17.5 m under bridges.

The Port of Constanta has a total area of 3,926 ha, of which 1,313 ha dry and 2,613 ha water. The two breakwaters located on the north and south side, shelter the port ensuring the necessary conditions for the port activities. The length of the North Breakwater is 8.344 m, but APMC has obtained the financing and has carried out the works to extend it by 1050 m, contributing to increase the efficiency and safety of the porting operations. The length of the South Dike is 5560 m.

The port complex is made up of two (2) large areas, the northern one called "Constanta North Port" and the southern one called "Constanta South Port".

1. GENERAL

The JT Group Oil terminal is located in Constanta port, berth 97 and covers an area of approximately 12,500 square meters.

Due to its location in this area, the terminal has access to all transport routes for transporting petroleum products.

2. TERMINAL CAPACITY

The technological structure of the terminal allows the handling of the following quantities(aprox.):

- Diesel storage: 30.000 tons
- Biodiesel storage: 1500 tons
- Loading/unloading ships: 700/1000 tons
- Loading/unloading railway: 700/300 tons
- Loading/unloading trucks: 80/40 tons

3. THE PHYSICAL STRUCTURE OF THE TERMINAL

a. Maritime berth:

- barge capacity: 12.000 tons
- barge connection: two 8"

b. Loading/unloading railway

- two groups of 8 wagons parked on two railway lines
- two railway scale
- 16 skids for controlling the simultaneous loading of wagons (on top)

c. Loading/unloading trucks

- two truck loading stations simultaneous
- two skids for controlling and measuring loading/unloading quantity

d. Tankfarm

- 6 tanks 5000 tons capacity per each for diesel and blending diesel – biodiesel
- 2 tanks 750 tons capacity per each for biodiesel

e. Fire fighting

- Fire fighting station sized and dedicated to the terminal (all areas). 1300 m3/h water
- Chemical fire foam circulation system from the fire fighting station to all the terminal facilities
- Cooling water system (in case of fire) from the fire fighting station to all terminal facilities

f. Electrical station

- the capacity of the electrical station ensures the operation of all consumers in the terminal – approx. 2MW
- underground cables connections

g. Administrative building

- ground fand and two floors. The control room is located on the 2nd floor with a 3600 view

The Port of Constanta has 156 berths, of which 140 are currently operational. The total length of the quays is 29.83 km and the depths vary between 5 and 19 m.

At the moment in the Port of Constanta, biodiesel and diesel (import) and bunkering activities of maritime and river vessels are carried out at a rather low level in a rather unoptimized framework compared to other specific operating activities in the Port of Constanta.

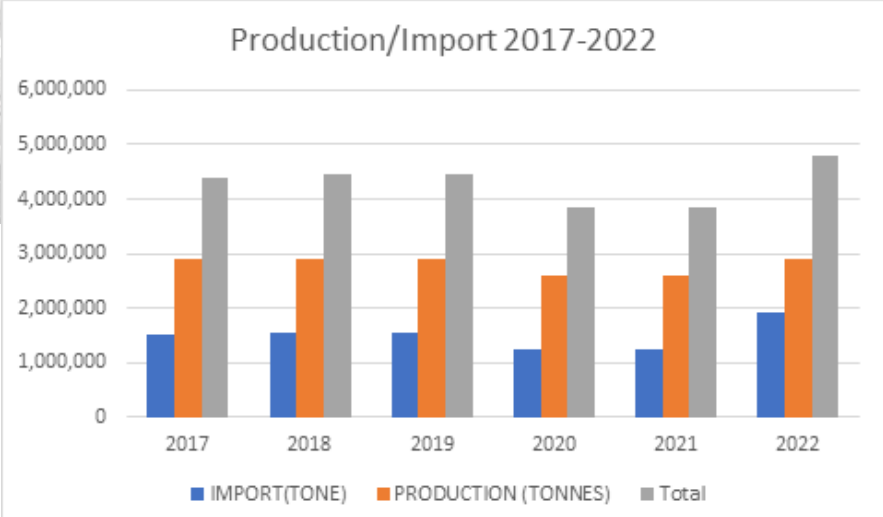
In the case of diesel import activity, in Constanta there is the state-owned terminal "Oil Terminal" built in the 70s and operating almost all types of petroleum products fuels, combustibles, chemical and petrochemical products, etc. Oil Terminal has a capacity of 1,700,000 tons and is generally characterized by the technology of the period in which it was built. Its modernization requires substantial investments and adequate implementation time.

What is specific to the proposed objective is that in addition to the biodiesel and diesel handling operations, there will also be the facility to inject and blend biodiesel into diesel.

Diesel imports and production in 2017-202 2

TONE IMPORT PRODUCTION

- *2017 2.900.000 1.500.000*
- *2018 2.900.000 1.550.000*
- *2019 2.900.000 1.550.000*
- *2020 2.600.000 1.250.000*
- *2021 2.600.000 1.250.000*
- *2022 2.900.000 2.600.000*



As can be seen in the graph above, the production is carried out by the 3 operational refineries in Romania

- *-Petrobrazi/PETROM-OMV*
- *-Rompetrol*
- *-Lukoil*

EVOLUTION OF ROMANIA'S DIESEL PRODUCTION, CONSUMPTION, IMPORT AND EXPORT IN 2017-2022

Until 2019, production was constant and in the period 2020-2022 it recorded a decrease of about 15% due to the COVID pandemic but returned to normal values starting in 2022.

Imports also had an increasing trend from 2017 until 2020 when it decreased by about 20% due to the COVID pandemic.

In 2022 imports peaked and are expected to reach 2.6 million tonnes by the end of the year.

This increase is not due to the increase in consumption in Romania but to the export to the Ukrainian market due to the war.This increase will continue for some years as the oil ports on the Black Sea in Ukraine have been destroyed. Due to this OIL TERMINAL is working at full capacity but only covers 7-8% of the monthly diesel consumption of Ukraine which before the war was about 1.5 million tons per month.

From this it follows that it is beneficial to build another terminal to provide logistics for the export of diesel to Ukraine and even deliveries to warehouses in Romania as the demand increases by about 600-800,000 tons annually.

OBJECTIVES EXPECTED TO BE ACHIEVED BY THE IMPLEMENTATION OF THE PUBLIC INVESTMENT

In principle, through the proposed investment, JT OIL TERMINAL CONSTANTA aims to build a modern marine platform/terminal for petroleum products, which can operate specific products for the handling of biodiesel and diesel products as well as the injection of biodiesel into diesel and thus be able to deliver to the domestic and/or foreign market diesel fuels with the required biodiesel content.

For the above mentioned products, the JT OIL TERMINAL CONSTANTA terminal has a total capacity of approx. 30.000 tons of diesel and 1.500 tons of biodiesel. The structure of the terminal and the respective areas/facilities is as follows:

- Area 100 - tank farm
- Area 200 - Auto loading-unloading ramp
- Area 300 - CF loading/unloading ramp
- Area 400 - Pump station
- Area 500 - Administrative and social building
- Area 700 - Utilities
- Area 800 - PSI
- Area 600 - Maritime dome

The download load capacities are as follows:

Area of activity Loading (approx.) t/hDischarge (approx.) t/h200 - AUTO ramp 8040300 - CF ramp 720300600 - Maritime dune 7201000

The object of the investment is the development of a petroleum products terminal on the site of plot 51, which is the subject of lease contract no. CNAPM - 07399 -IDP.

According to the building permit number 54 from 11.01.2023, the land is located in the urban area of Constanta Municipality, and the building is the property of the Romanian State with a concession right for CN Administratia Porturilor Maritime SA.

RAILWAY CONNECTION

The current use of the land is: area for port activities.

The land use established by the approved town and country planning is for port, storage, industrial and CF construction.

The petroleum products terminal will have mainly technical capacities for the following products: biodiesel and diesel

Biodiesel storage capacity of 1500 tons in two tanks of 750 tons each.

Diesel storage capacity of about 30.000 tons in 6 tanks of 5000 tons each.

Vessel unloading/loading capacity approx. 1000 mc/h

Loading/unloading capacity approx. 80/40mc/h (two arms to operate two tankers simultaneously).

Wagon loading/unloading capacity approx. 720/300 mc/h (16 wagons simultaneously.

The technological process is described below:

Given that the above mentioned and described areas work in a total interconnection, the technological process will be presented in a flow chart by functional technological flows and not by areas.

Vessels loaded with diesel or biodiesel are berthed at sea berth 97.

They are connected by two flexible connections to the discharge manifold which continues with a terminal transfer pipe to all 6 tanks B1 - B6. The technological flow is controlled by On-Off valves that isolate each facility: dock, tanks, etc. The product is discharged into the tanks with a maximum flow rate of 1000 m3/h.

Once the wagons are loaded with the prescribed quantity of product, they are closed and sealed. The documents accompanying the goods are drawn up and issued from the Ordering Office.

Unloading of the tankers is done via the AUTO ramp where the tankers are connected to the technological system via articulated arms.

For the injection of biodiesel into diesel, the product stored in tanks B7 - B8 is transferred to tanks B1 - B6.

The petroleum products terminal, will have mainly technical capabilities for the following products: biodiesel and diesel with the following characteristics, including customs or tax warehousing:

Receiving/storage capacity of approx. 31,500 tonnes;

- *Biodiesel storage tanks 3000 tons - 2 pieces;*
- *Diesel storage tanks 30.000 tons - 6 pieces;*

Ship unloading/loading capacity of approx. 1000 mc/h;

Loading/unloading capacity approx. 80/40mc/h (two arms to operate two tankers simultaneously).

Wagon loading/unloading capacity approx. 720/300 mc/h (16 wagons simultaneously.

Main diesel transfer pipelines from vessel to storage tanks/secondary transfer pipelines between storage tanks and CF loading/unloading ramps and tankers;

Product pumping units to allow handling of product within the storage capacity/to the operating facilities on railcars and tankers as well as loading of product from the storage capacity to the vessel;

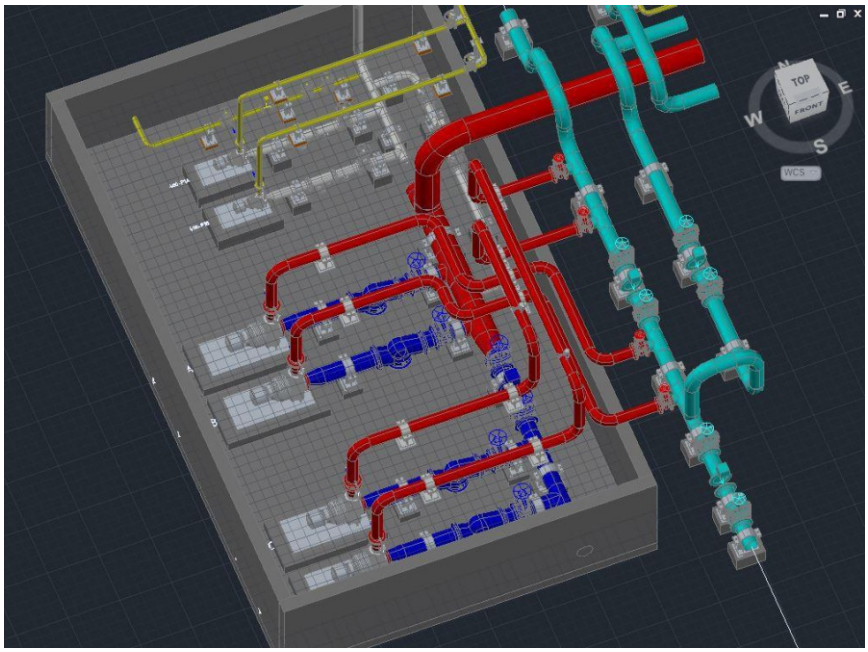
Pump automation installations, remote control equipment and elements of the main and secondary pump circuits (SCADA), tank heating installations and transfer piping, fire extinguishing installations and installations;

The products arrive at the terminal via specialised transport vessels that will use the existing port infrastructure. The ship's tanks are connected to their unloading pumps. After connection to the terminal system the products are pumped through the technological pipelines into the 6 tanks of 5000 tons capacity each.

The products once in the tanks are left, according to the procedures, in a quiet period then samples are taken for laboratory tests and if they are compliant they are available for delivery.

The products once in the tanks are left, according to the procedures, in a quiet period then samples are taken for laboratory tests and if they are compliant they are available for delivery.

Related installations: unloading booms specific to the two products specified above; product transfer pipelines to storage tanks; pumping groups from tanks to the ship; heating installation in tanks as well as in transfer pipelines; remote management installation; automation of all elements of the technological circuits (SCADA).



SEA DANA

It is located on the eastern side of the terminal and is intended for the connection of ships to it. The maritime berth is used to operate both unloading and loading vessels.

The vessels will be connected on two circuits each, allowing them to discharge at a flow rate of 500 m^3/h. In total the discharge flow is 1000 m^3/h.

Different circuits are provided for charging and discharging.

For the further development of the terminal, a bitumen discharge manifold is provided in the dock and continued to the west side of the terminal with a pipe that will be heated and thermally insulated.

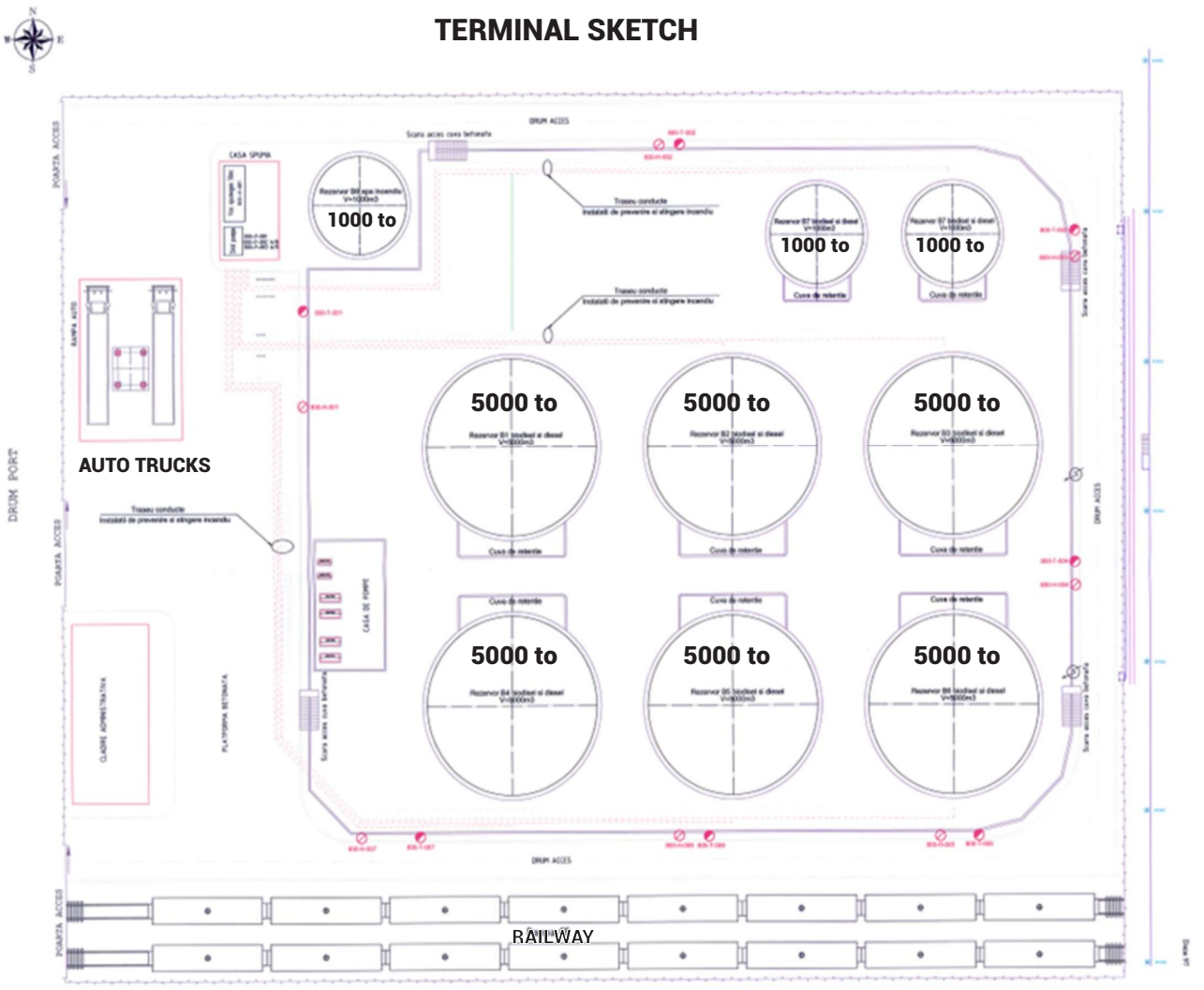
The product handling capacity in the terminal is 720,000 t/year.

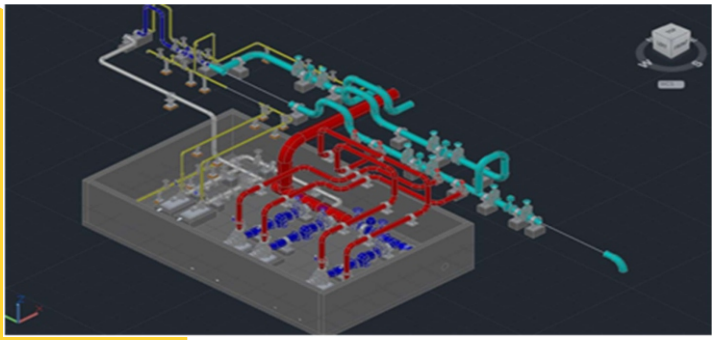
The advantages of the AOP terminal compared to the existing situation in the Port of Constanta are the following:

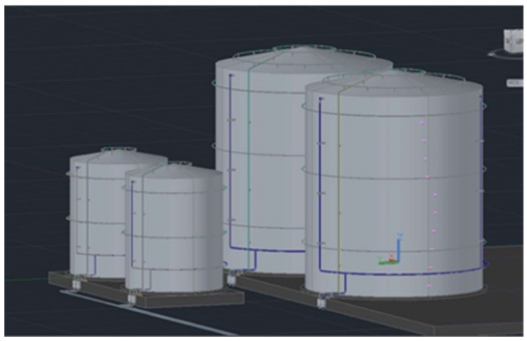
- *Specialized receiving/storage/delivery capacities strictly for the mentioned products, operational 24/24h, 365 days;*
- *Specialised and automated installations and equipment, leading to minimal operating costs, hence very low storage and operating charges;*
- *Very low loss coefficients, due to short installation and routing distances from the operating quay and the degree of automation;*
- *Very high unloading/discharging rate of products, both by ship and CF and road tankers;*
- *Very good connectivity both by rail through the national railway system, by road with direct connections to the A4 and A2 and by sea and*
- *inland waterway, where the delivery of products is made by road or by river vessels.*

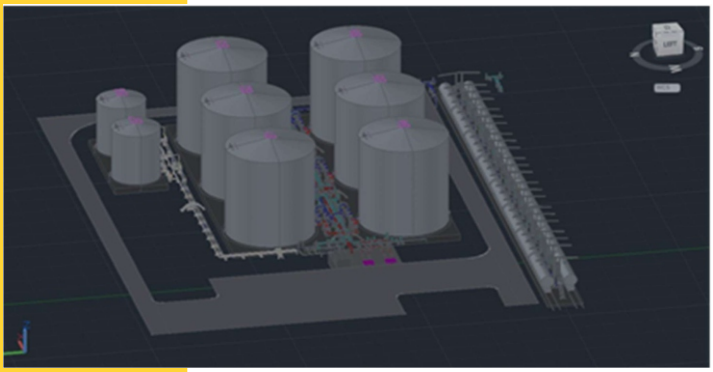
The land subject to the lease contract between JT OIL TERMINAL CONSTANTA and CN APMC is the public domain of the state handed over in concession to CN APM Constanta according to the Concession Contract no. LO4113/31.10.2008 signed between CNAPMC and the Ministry of Transport (MT).

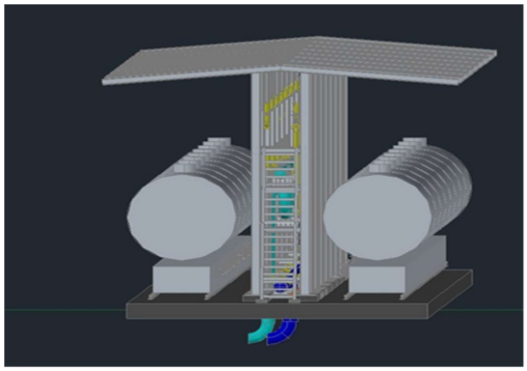
TERMINAL SKETCH

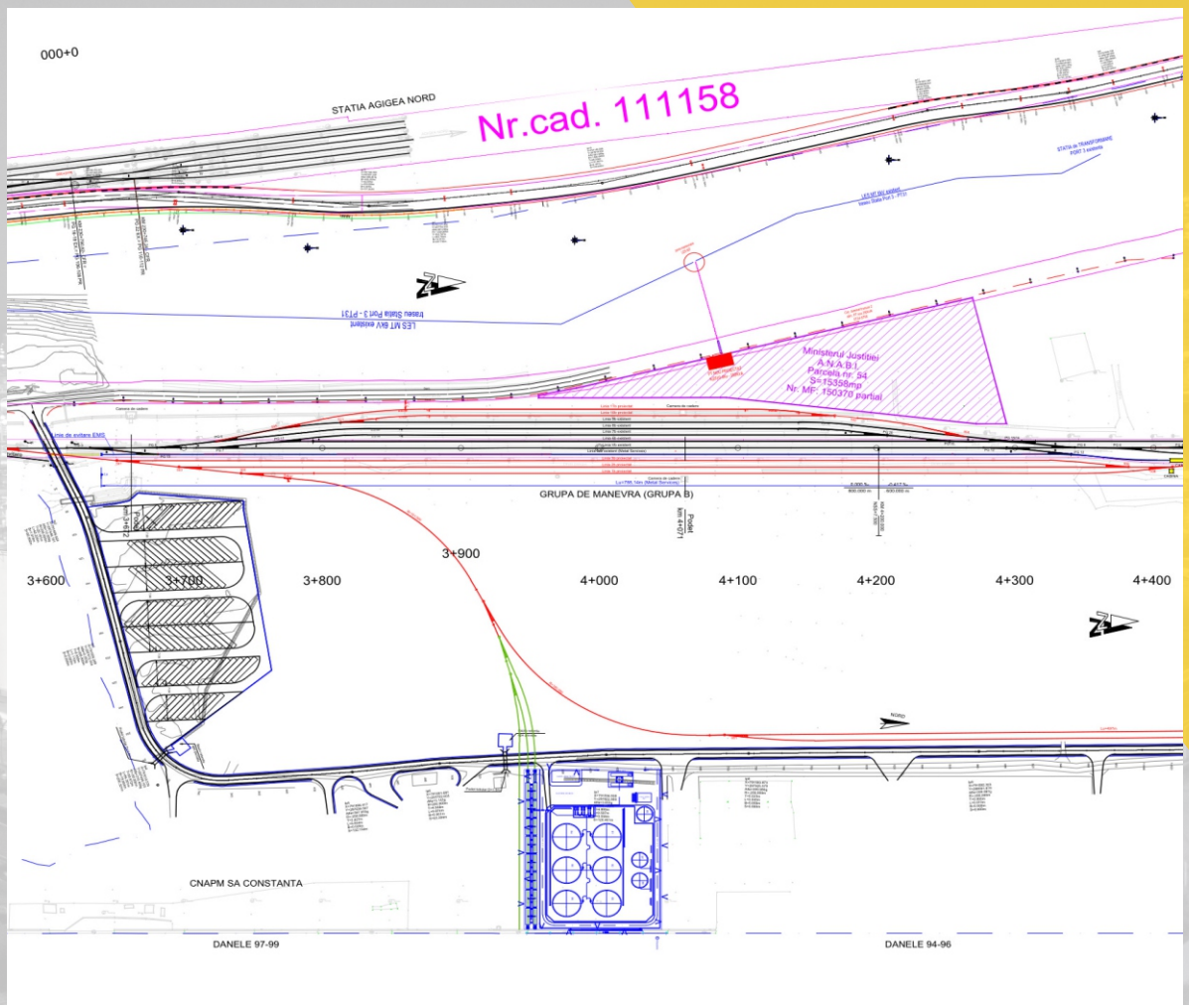












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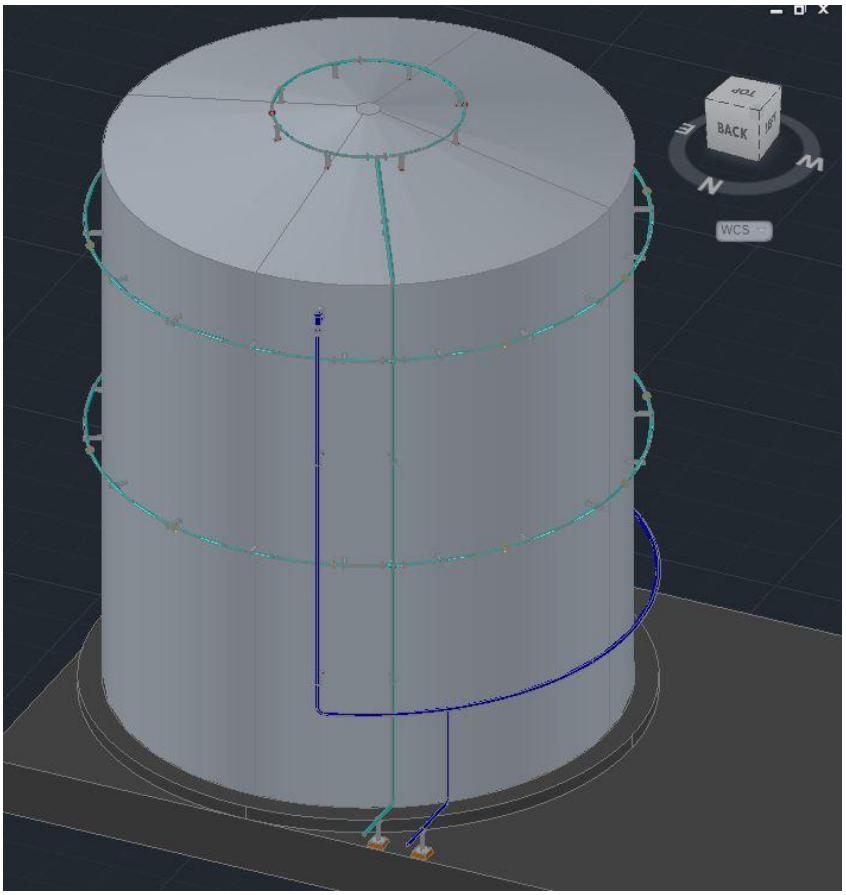
JT OIL TERMINAL CONSTANTA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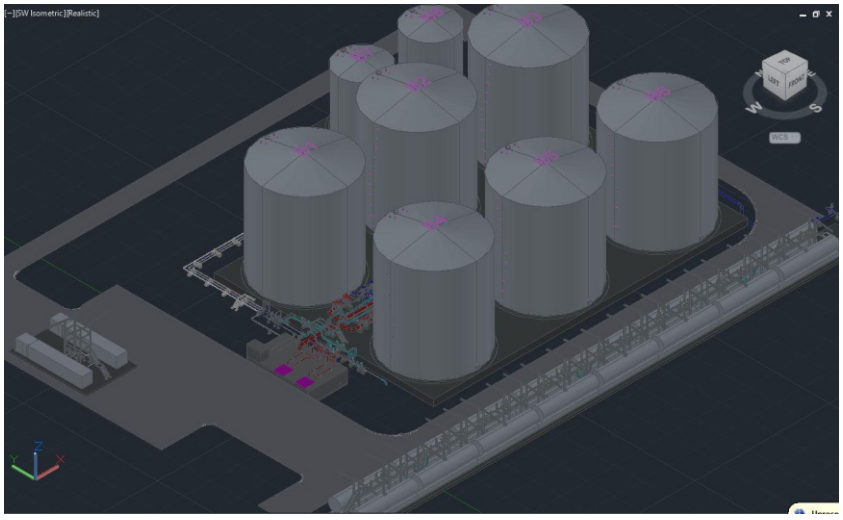

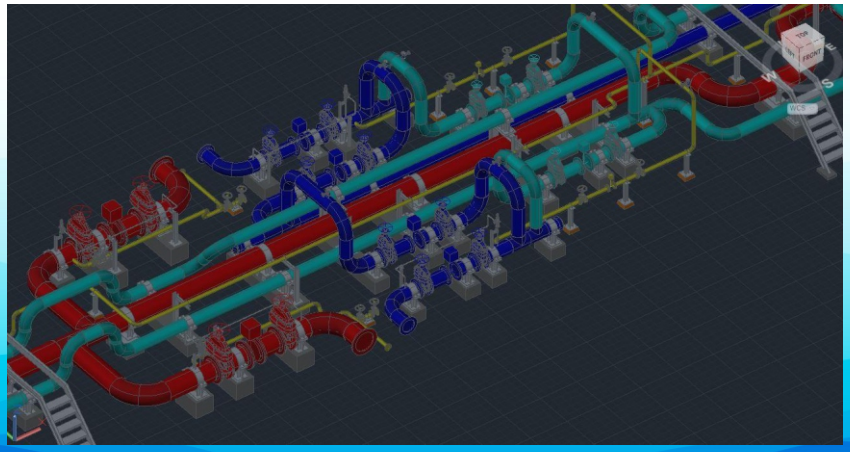


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