

ТЕМПЕРИЛОДЖИСТИКСЕООД TEMPERI LOGISTICS LTD



Член на Търговско-Промышлена Палата Стара Загора Chamber of Commerce and Industry Stara Zagora member

9000 България, гр. Варна, р-н Младост, бул. Сливница 166A, ет. 6 ап. офис 459000, Bulgaria, Varna, district Mladost, 166A, Slivnitsa blv, fl. 6, off 45

Company Registration № (EИК): 206032947

VAT Number: BG206032947

Web page: www.temperi-logistics.com E-mail: temperilogistics.bg@gmail.com

Port terminals of the Danube

Slovakia. Austria. Germany.



Contents

Introduction	2
1. Slovakia	3
1.1. Port of Bratislava	3
1.2. Port of Komarno	5
2. Austria	7
2.1. Port of Linz	7
2.2. Port Enns Port – Ensdorf	9
2.3. Port lbbs	11
2.4. Port of Krems	11
2.5. Port of Vienna	
3. Germany	
3.1. Port of Kölheim	15
3.2. Port of Regensburg	
3.3. Port Straubing	18
3.4. Port of Deggendorf	18
3.5. Port of Passau	

Introduction

The Danube is the most international river on earth, which is also a huge transport axis, an important networked hydrological basin, and a world-famous ecological corridor.

As a transport axis, the Danube connects important purchasing, production, and sales markets of pan-European importance. The gradual integration of the countries bordering the Danube into the European Union has created dynamic economic zones and trade links along the waterway.

The Danube catchment area is home to numerous production facilities of the metallurgical, paper, oil, and chemical industries, as well as mechanical and automotive industries. Increasingly, the Danube is transporting not only traditional bulk cargoes but also project cargoes and higher-value general cargo. Due to its fertile soil, the Danube region is an important region for the cultivation of agricultural raw materials. They serve not only to supply urban agglomerations near the Danube but are also transported and processed along the Danube logistics axis. The Danube ports play a special role here as storage and processing sites, as well as centers for the collection and distribution of goods.

The large water potential of the river is used for energy purposes (the large hydroelectric complex "Jerdap-1" and "Jerdap-2" in Romania and Serbia, the cascade of hydroelectric power stations in Germany and Austria, the hydroelectric power station "Gabčíkovo" in Slovakia).

In Slovakia, located on the left bank of the Danube, the length of the river is 172 km.

In Austria, the length of the Danube is about 349 kilometers. The Danube Valley and its tributaries form the heart of Austria. In Germany, the Danube covers 663 kilometers from Donaueschingen to Jochenstein.

1. SLOVAKIA

Name	Km	General cargo	Bulk cargo	Liquid cargo	Containers	Ro-Ro
Port of Bratislava	1867	٧	٧	٧	V	٧
Port of Komarno	1769	٧	٧	X	٧	X

1.1. Port of Bratislava

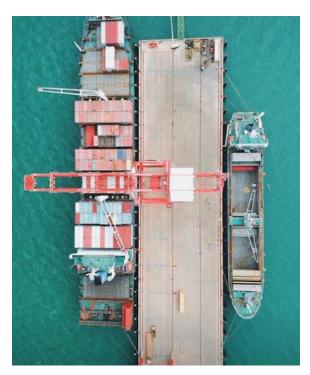
The port of Bratislava is located on the left bank of the Danube waterway, between km 1867 and km 1862 and the Rhine-Main-Danube canal, and is formed by four harbor basins.

The port of Bratislava is strategically the most important public

port in Slovakia on the international Danube waterway.

Currently, it performs the functions of a universal, cargo, and passenger port. Its potential is enhanced by its advantageous geographical position at the crossroads of the Rhine, Danube, and Baltic - the Baltic-Adriatic Corridor, which is part of the Trans-European transport network, as well as good accessibility to other European capitals and important ports - Vienna and Budapest.

The Port of Bratislava is a territorial complex of water areas (in the amount of 6), hydraulic structures, berthing basins, adjacent surface structures, and storage areas, serviced and territorially connected by a transport and technical infrastructure with the transport network (road and rail).



The cargo port is divided into three parts:

The Winter Harbor with two pools is the original old harbor (construction began in 1897),

Port of Palenisco (built between 1975 and 1983) - a newer basin with transshipment and service positions, including a transfer station for mineral oils,

A ship repair shop or "Shipyard" "Slovenska Plavba a Pristavy a.s." (built in the period from 1975 to 1983) - in the basin there is a repair shop and a repair base of the Slovenian Water Management Company.

The maximum depth at the berth is 2.5 meters. There are reloading facilities: portal cranes - 23/3.2-50, floating cranes - 2/300.

Warehouse area: covered - 22840 sq.m., open - 59720 sq.m.

There is also a rail connection. The port is connected to roads, railways, and the Slovnaft pipeline.

Cargo operations are carried out in two water areas - the Winter Port and Palenisco. In the port of Bratislava, there is a port captain, customs, a sanitary service, a pilot station, and a telephone. Ships are supplied with potable water.

The cargo port is used for the transshipment of goods between types of rail, road, and water transport directly or with intermediate storage. It has favorable direct road and rail links with the economic and industrial regions of Slovakia, as well as with the neighboring Czech Republic, Austria, and Hungary.

The port of Palenisco has a swimming pool measuring 700 x 180 m, with three perpendicular sides with a total length of 1400 m, and three container cranes its building simultaneously houses a combined transport terminal and a warehouse for general goods, an oversized and extra heavy cargo transshipment complex, and a Ro-Ro.

A separate small pool, the dimensions of which allow two DE-II-b vessels to moor simultaneously, is located in the continuation of the "heavy crane" runway, which makes it possible to handle oversized cargo to or from ships either on trailers or in rail cars. The access of the railway track to the "difficult" place is carried out from the territory of the port in a special way.

The unique gantry crane, consisting of two separate portals with an individual lifting capacity of 300 tons, has a total lifting capacity of 560 tons in the coupled mode of both portals and with the help of a transverse traverse.



Port specialization:

- Transshipment and storage of bulk cargo

In the port of Bratislava, bulk cargo handling is possible at positions in the northern and southern pools and transshipment positions on the Danube. All positions are trimodal. Storage is possible in open landfills with an area of 75,335 m2.

- Transshipment and storage of Ferro materials

Covered workshop "Ferroservice" with an area of 26,000 m 2 and a capacity of 30 t/m 2 has a capacity of 60,000 tons of dense material.

The workshop has 11 single-girder cranes with a lifting capacity of up to 32.5 tons. We have a device for turning rolls from vertical to horizontal and vice versa.

- Transfer and storage of oversized cargo

The oversized cargo terminal "Heavy Position" is a trimodal transshipment area equipped with two gantry cranes. Each crane has a main lifting capacity of 280 tons. When working in tandem, they are capable of lifting loads to 560 tons.

The area of the oversized cargo warehouse is 2000 m2.

- Ro-Ro

The Roll-on/Roll-off position is designed to handle vehicles entering the vessel along its axis. The width of the weighbridge is 24 meters with a slope of 12.5%.

- Container terminal

The container terminal at the Port of Bratislava is the only three-modal container terminal in Slovakia. A warehouse area of 30,000 m2 can store up to 2,000 TEU.

Both adjacent banks of the Danube, which are used for passenger traffic, also belong to the territorial zone of the public port.

The passenger port of Bratislava is located in the free flow of the Danube near the historical center of the capital of Slovakia on the section between 1870 and 1867 km of the river. The port has a decisive influence on passenger traffic in the Slovak Republic.

Management company: Verejné přináty, a.s. (The founder of the company is the Slovak Republic, on behalf of which the Ministry of Transport and Construction of the Slovak Republic acts)

State management company: Verejné prístavy, a.s. (Public ports, JSC.). The port area is controlled by Verejné prístavy, a.s., and all facilities are owned by Slovenská Plavba a Prístavy, a.s.

Official site: http://www.spap.sk/

1.2. Port of Komarno

The port of Komarno is located on the 1767th kilometer of the river, on the border of two states - Slovakia and Hungary. The port is the second most important port in Slovakia. It is located 100 km downstream from the port in Bratislava, at the confluence of the Danube and Vah rivers.

The territory of the port covers an area of more than 20 hectares.

The port has 2 water areas and is divided into **western** and **eastern** parts. Its location is partly on the banks of the river and partly in the common basin of the port and shipyard.

External (or eastern) - designed to serve the ships themselves: temporary parking, repair, unloading, loading, customs, and border control.

Internal (western) - serves mainly as a warehouse for temporary deployment of goods. On the northern coast of the Western Basin, there are cargo areas.

In addition, the port of Komarno has all the necessary conditions for sailors: a sanitary zone, communication, restrooms, a canteen, and customs.

The port of Komarno is a public port used for the transshipment of goods between rail, road, and water transport, either directly or with intermediate storage.

The mooring front is 2700 meters, where the mooring front is 1350 meters, and the sloping coast is 1350 meters. The maximum depth at the berth is -2.5 meters. There are reloading facilities: portal cranes - 4/5-8, floating cranes - 1/16. Warehouse area: covered - 7235 sq.m., open - 20570 sq.m. There is also a rail connection.

Conceptually, technologically and constructively, the port of Komarno was built for the transshipment of bulk materials, currently mainly agricultural products.

In case of emergencies (floods, glaciers, floods, etc.), it serves as a protective harbor for ships on the Danube and part of the Vah.

In terms of passenger traffic, it is mainly used during the summer months.

Port specialization:

Transfer and storage of bulk cargo

In the port of Komarno, bulk cargo handling is possible at positions in the western part of the harbor basin and the eastern part of the Danube. All positions are trimodal. Storage is possible in open landfills with an area of 26,130 m 2.

Transfer and storage of piece goods

It is possible to transfer piece cargo to a maximum weight of 16 tons.

Storage is possible in open landfills or covered warehouses with an area of 6,597 m 2.

State management company: Verejné prístavy, a.s. (Public ports, JSC.). The port area is controlled by Verejné prístavy, a.s., and all facilities are owned by Slovenská Plavba a Prístavy, a.s.

Official site: https://www.portslovakia.com/, https://www.spap.sk/



2. AUSTRIA

Name	Km	General cargo	Bulk cargo	Liquid cargo	Containers	Ro- ro
Port of Linz, Industrial Port of Linz	2128,1- 2130,7, 2124,73	V	٧	٧	٧	٧
Port of Enns – Ensdorf	2112	٧	٧	٧	V	٧
Port Ibbs	2057,67	٧	٧	X	V	X
Port of Krems	1998	٧	٧	X	٧	X
Port of Vienna	1917- 1918- 1920	V	٧	٧	٧	٧

2.1. Port of Linz (including factory port of Linz)

The port of Linz is Austria's largest river port on the Danube, the administrative center of Upper Austria. Subdivided into City Port of Linz, and Factory Port (Voestalpine and Linz–Felbermayr).

Berthing front - 9304 meters. The maximum depth at the berth is 4.2 meters. There are reloading facilities: portal cranes - 6/3-32. Warehouse area: covered - 56000 sq.m., open - 21350 sq.m.

City port of Linz

Location of the port: Commercial port - 2130.8 km of the river. Reservoir port - 2,128.19 km of the river.

Port operator: Linz Service GmbH. Official website: https://www.linzag.at/portal/de/home,

Factory port: Voestalpine

Port location: 2,127.16 km on the right bank of the Danube

Port operator: Logistik Service GmbH

The basin of the port of Linz at 2,127.16 km of the river is the industrial port of the concern "Voestalpine AG (Vereinigte Österreichische Eisen und Stahlwerke)" of the Association of Austrian Steel Mills.

Web site: www.voestalpine.com, www.logserv.at

Linz – Felbermayr

Port location: river 2124.73 km, right bank.

Port operator: Felbermayr Transport- und Hebetechnik GmbH & Co KG. W: www.felbermayr.cc

The city port has a total coastline length of about 8000 m. The total area is 135 hectares (of which the water surface is 39 hectares).

The port has:

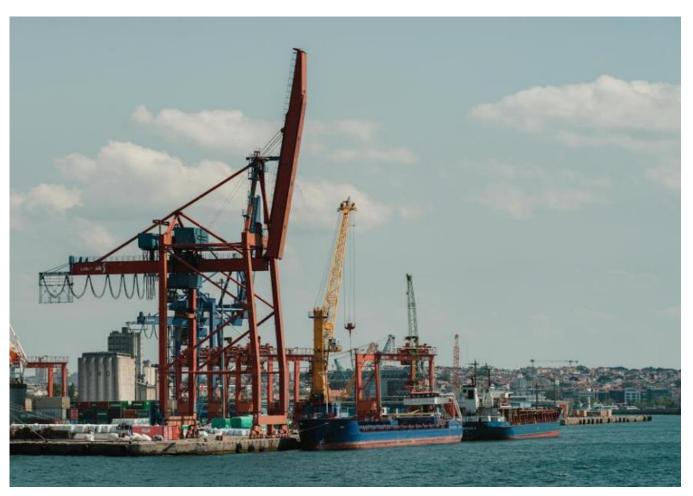
Dangerous goods warehouse for 15,900 pallet places. Freezing and refrigerating warehouse for 15,500 pallets. Warehouse of pharmaceutical products for 8000 pallet places. 110 000 m2 of the covered warehouse. 15,000 m2 of shelving. 5000 m2 of open storage. Tank farm 250,000 m3. Container storage area: 15,000 m2.

Railway communication, own port railway - track length: 37 km

Road connection, distance to the nearest highway: 2 km

Specialization:

The commercial port of Linz handles bulk and general cargo and has a berth for handling tankers and a container terminal. A water measuring post has been installed here, there is a pilot station.



Container terminal

The container terminal has an area of about 120,000 m². Offers the following services:

- Trimodal transport access (rail, road, water) and a total of six block train tracks with a maximum length of up to 720 meters, as well as electric access to the terminal area.
- Handling and storage of containers, swap bodies, and semi-trailers using modern GPS-enabled handling equipment.
- Two modern gantry cranes with a lifting capacity of 45 tons each, powered by environmentally friendly energy sources.

The container terminal has an area of about 120,000 m². Offers the following services:

- Trimodal transport access (rail, road, water) and a total of six block train tracks with a maximum length of up to 720 meters, as well as electric access to the terminal area.
- Handling and storage of containers, swap bodies, and semi-trailers using modern GPS-enabled handling equipment.
- Two modern gantry cranes with a lifting capacity of 45 tons each, powered by environmentally friendly energy sources.

Appropriate equipment such as cranes with a lifting capacity of up to 40 tons, telescopic and forklift trucks, rail and bridge scales, as well as the necessary personnel guarantee thorough, fast and flexible processing.

Oil terminal

Offers storage and distribution services for petroleum products: Huge tank farms with a capacity of 250,000 m³ provide proper storage and at the same time are a supply reserve for the whole of Upper Austria. Almost all well-known oil companies are based here. A bunker for supplying ships is also located in the tank port.

Ship repair work is carried out at the Linz shipyard.

Voestalpine factory port has: 2000m total berth length, 150,000m2 total area, 1 forklift (3-5t), covered water transshipment, 1 conveyor belt, 20 truck parking spaces, 6 overhead cranes (3 x coal berth, 3 x ore berth), 1 truck crane, lifting capacity not more than 3 tons, 2 covered cranes.

Additional services: recycling, refueling with electricity and water, customs.

Road connection, distance to the nearest motorway: 2 km.

Linz – Felbermayr has: a 220,000 m² total area, closed water transfer, Ro/Ro ramp,

gantry cranes (number: 2, max. lifting capacity: 600 t (single use)), mobile cranes (number: 300, maximum lifting capacity: 750 t (single use)) final assembly of industrial goods.

Linz is the largest port on the upper Danube. About 3 million tons of cargo is handled annually at the public port of Linz.

The factory port of Voestalpine recorded the largest transshipment volume among the ports on the Austrian Danube in 2020. Almost 2.7 million tons were handled here, which corresponds to a decrease of 1.1% compared to the previous year. The volume of transshipment at the ports of Linz AG (commercial and oil ports) amounted to about 0.8 million tons in 2020, which corresponds to an increase of 14.3%.

2.2. Port of Enns - Ensdorf

Port location: river 2111.83 km, right bank.

Port operators:

Ennshafen OÖ GmbH and Ennshafen NÖ GmbH (as operating companies responsible for the expansion and operation of the infrastructure),

EHG Ennshafen GmbH (as an interstate marketing company).

Website: www.ennshafen.at

Port Enns - Ensdorf is located in the most developed industrial region of Austria, on an area of 3.5 million square meters. m as a trimodal transshipment point in the upper Danube. The water area connects the two business parks Enns and Ennsdorf.

It is a public port that connects the main transport routes for international freight traffic, the Rhine-Main-Danube waterway from west to east, and the north-south railway lines from the North Sea to the Adriatic Sea. Ships, trains, and trucks make it a hub for the international transport of goods and raw materials for logisticians and companies based there.

The total length of the berth is 2750 m. The total land area is 303 ha (including business parks Enns and Ennsdorf). 50 hectares of water surface.

ТЕМПЕРИ ЛОДЖИСТИКС ЕООД

9000 България, гр. Варна, р-н Младост, бул. Сливница 166А, ет. 6 ап. офис 45

Container terminal (container bridges, reach stackers). Loading and unloading cranes, loading and unloading excavators, and conveyor belts. Ro/Ro terminal for cars and trucks. Warehouse areas (open, covered,

warehouses).

Garbage removal, bilge water discharge, power and water supply at the pier, bunkering station (refueling ships),

bonded warehouse

Railway connection (2 interchange stations), length of the railway connection: about 38 km. Road communication,

distance to the nearest highway 4 km.

Services:

handling, warehousing, packaging, or bunkering.

Terminals:

Ennshafen is a service, logistics, and competence center for processing and storage. Its high-performance infrastructure, roads, marinas, and rail facilities provide companies with neutral access to modes of transport.

Approximately 2,500 meters of berth provide optimal transshipment options.

Enns Container Terminal - CTE in Enns with an area of approximately 275,000 sq. m and a capacity of 500,000

TEU in twenty-foot equivalent, has the most modern loading and unloading infrastructure in Austria.

It has a railway connection and can serve block trains, and loading and unloading cranes and a wide range of services guarantee optimal handling of containers. The railway connection with its siding is provided directly

through two interchange stations with companies located there.

Ro/Ro terminal

Roll-on/roll-off terminal for heavy and special transport. Vehicles and agricultural machinery enter and leave the

vessel directly without the need for additional funds. Direct connection to the reverse and reverse osmosis

ramp, available storage space of 8500 sq.m.

Ennshafen's cargo turnover was around 0.9 million tonnes in 2020, up 18.2%, continuing its positive momentum

and posting the third-highest growth in cargo turnover among Austrian ports.

Official site: https://www.ennshafen.at/hafen/

2.3. Port Ybbs (Schaufler)

Port location: river 2057.67 km, right bank

Operator: Schaufler GmbH

Official site: www.hafen-ybbs.at, https://www.schaufler-metalle.at/de/aktuell

The port of Ybbs is located in Ybbs-an-der-Donau in Lower Austria at the coordinates N 48° 10' 19.38" - E 015° 05' 34.80". It is a transport hub for water, rail, and road transport, designed for the production and transshipment of

all types of goods.

The official UN/Locode for this port is ATYBB.

11

Port specialization: general and bulk cargoes, containers.

Total berth length 90 m, total area 7 ha, approx. 60,000 m2 of open storage areas, approx. 4,000 m² of covered storage areas, approx. 1 reach stacker up to 40 t, 1 wheel loader.

Additional services:

Maintenance and repair of containers; container filling and cleaning, platform scales (max. 60 t), quality control, waste disposal.

Railway communication, track length 250 m

Road connection, distance to the nearest highway: 2 km

Types of ships that regularly call at YBBS AN DER DONAU: domestic, passenger, ferries, cruise ships, liners, pushers, and cargo barges.

The maximum length of ships calling at this port is 270 m. The maximum draft is 2.5 m. The maximum deadweight is 320t.

2.4. Port of Krems/ Hafen Krems

Port of Krems is a passenger river port. The Port of Krems is a part of the Port Authority of City Works of Krems, a limited liability company.

The port hosts Krems port captain, customs, sanitary service, and freshwater supply are provided. A water meter has been installed, there is a post office.

Port location: 1,998 km on the left bank of the Danube.

Operator: Rhenus Donauhafen Krems Gesellschaft mbH & Co KG

Official site: <u>www.rhenus-hafenkrems.com</u>

Total berth length 1560 m, total area 322,000 m2, 30,000 m2 covered warehouse, 61,000 m2 open storage, bonded warehouse, silo capacity: 25,000 m3 (grain), 4,000 m3 (fertilizers), bulk products: 23,000 m3, container terminal (Metrans), 20 parking spaces for trucks, 1 container bridge, capacity not more than 50t, 1 mobile crane, 1 gantry crane 40t, 8 forklifts (<2t), 7 forklifts (<3-5 t), 5 forklifts (7t), 1 forklift (14t), 2 stationary belt conveyors, 2 mobile belt conveyors, 2 mobile dinosaurs (loading bulk cargo into silos), 2 wheel loaders, a mobile crane with a lifting capacity of up to 200 tons.

Terminals

Agricultural:

- fertilizer terminal (fully automatic packaging 10-50 kg), packaging solutions for fertilizer, wood pellets, de-icer.
- grain terminal (silo 20,000 tons 66 cells), ship/rail/truck management, own laboratory, certified for organic grain.



Container:

- container cargo station,
- -packaging center Krems (industrial packaging). Website: http://www.packingcenter-krems.com/
- weighing according to SOLAS.

Stock:

- halls with a canopy: 30,000 m², outdoor warehouse: 60,000 m².

Transshipment:

- bulk cargo, general cargo, and containers. Cranes: up to 50 tons, forklifts, and loaders up to 40 tons.

Additional services:

Maintenance and repair of containers, container terminal (Metrans), filling and cleaning of containers, quality control of several products, refueling with electricity and water, customs clearance, and customs warehouse.

Railway connection, length of the railway line: 8 km

Road connection, distance to the nearest highway: 1 km

Transshipment volumes in the port of Krems in 2020 showed the second-largest growth among Austrian ports with 456,186 tons (+23.4%). Loading and unloading in Krems increased by almost 90,000 tons compared to the previous year.

2.5. Port of Vienna

Location of the port: river kilometers from 1920 to 1917 of the right bank of the Danube.

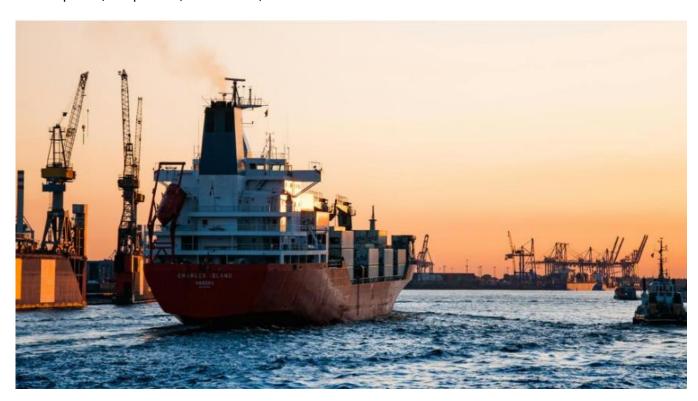
Operator: Hafen Wien GmbH

Official site: www.hafen-wien.com

The port of Vienna has located about 2000 km from the Black Sea and about 1500 km from the North Sea and is distinguished by its three-modality - optimal direct connection to the three main modes of transport: sea, rail, and freight transport.

The port of Vienna includes the ports of Freudenau, Albern, and Lobau, as well as the warehouse and port of Zwischenbrücken, and, in fact, Vienna) (Hafen Wien GmbH, a Wien Holding company, 5% owned by the Vienna Chamber of Commerce, owns port facilities consisting of land, buildings, and berths, and manages port operations at the ports of Freudenau, Alber, and Lobau).

Berth length: 5,000 m (vertical), 8,000 m (inclined), about 300 ha area, 200 truck parking spaces, 70,000 m2 covered warehouse, 200,000 m2 open storage, 50,000 m2 pavilion, storage boxes, bulk halls storage capacity: 44,000 m3, Albern granary: 45,000 m3, 3 container bridges, maximum capacity 45 t, mobile crane up to 84 t, heavy loads up to 450 t in normal operation, indoor crane up to 10 t, electric crane up to 15 t handling of bulk cargo, big bags, 26 forklifts (<3 t), 2 forklifts (3-5 t), 10 forklifts (>5 t), 14 container stackers, covered water transshipment, ramp Ro-Ro, car terminal, containers.



Additional services:

maintenance and repair of containers, storage of containers, filling and cleaning of containers, scales, quality control: containers, garbage disposal, bilge water discharge, electricity and water filling station, customs.

Railway communication, length of the railway line: 50 km.

Road connection, distance to the nearest highway: 2 km.

Official site: https://www.hafen-wien.com/de/home/unternehmen/konzernstruktur

Port of Vienna:

The port of Vienna itself handles mainly general cargo and grain. In the port of Vienna, there is a port captain, customs, a sanitary service, a water-measuring post has been installed, and there is a post office.

The mooring front is 1282 meters, where the mooring front is 125 meters, and the sloping coast is 1157 meters. The maximum depth at the berth is 2.0 meters. There are handling facilities: portal cranes - 3/3 - 12. Warehouse area: covered - 8620 sq.m., open - 3000 sq.m. There is also a rail connection.

The port of Vienna-Freudenau consists of two basins, handles general and bulk cargoes, liquid cargo, and large-capacity containers, and has a berth for receiving Ro-Ro-type vessels. There is a customs house in the port, supply of vessels with fresh water is provided. There is a pilot station.

Bulk/general cargo: Crane up to 84 tons capacity, storage boxes, bulk material storage space of approx. 44,000 m³, raw material storage space of approx. separately, 276 hp wheel loader. and an operating weight of 24 tons, loading of a silo for bulk materials, an unloading chute for a car of bulk materials, scales, railway communication, unloading/loading of trucks, trains, and ships, transshipment of big bags by trucks, trains, and ships, loading of tank trucks.

Container handling is carried out in Freudenau by the WienCont subsidiary.

Container Terminal WienCont GesmbH: As a subsidiary of Hafen Wien, WienCont operates one of the largest container terminals in Europe's inland ports. Clients include the most important international shipping companies; Leasing companies, freight forwarders, and carriers.

Regular rail links to Hamburg, Bremerhaven, Rotterdam, and the rest of Europe ensure fast delivery of goods.

Depot capacity 10,000 TEU, 3 container crane bridges (capacity of each crane bridge max. 45 t), 4 block train transfer tracks, container handling and storage, 110 block trains per week, container trade, repair and cleaning, trucking, and customs services. Official site: www.wiencont.com

The mooring front is 6120 meters, where the mooring front is 3270 meters, and the sloping coast is 2850 meters. The maximum depth at the berth is 2.0 meters. There are reloading facilities: portal cranes - 6/6-35. Warehouse area: covered - 60,000 sq.m., open - 145,000 sq.m. There is also a rail connection.

The port of Vienna-Lobau consists of two basins - for reloading operations and parking of ships. The cargo basin specializes in the transshipment of bulk oil cargoes. Handling and storage of goods are carried out exclusively by private firms. There is a customs house in the port, supply of ships with fresh water is provided. The post office is located 3 km from the port.

The mooring front is 4470 meters, whereas the slanting coast is 4470 meters. The maximum depth at the berth is 3.5 meters. There is also a rail connection.

Port of Vienna Albern

Port Albern serves as a transshipment point for agricultural products, building materials, and steel. In addition, the Port of Albern hosts a heavy cargo center for high and heavy loads. Cargo handling 450 tons in normal mode. The mooring front is 61650 meters, whereas the mooring front is 1650 meters. The maximum depth at the berth is 3.8 meters. Handling facilities are available: a hydraulic luffing jib crane with a lifting capacity of 12 tons in grab

mode and a lifting capacity of 13.5 tons in hook mode and a new mobile harbor crane for handling cargo weighing up to 84 tons.

Warehouse area: covered -4000 m² in the center of heavy loads. There is also a rail connection.

Cargo turnover

In the port group of Freudenau, Albern, Lobau, and Zwischenbrücken, just over 0.9 million tons were handled on the waterside in 2020. This placed the port of Vienna in fourth place, just behind the port of Enns. Transshipment volume decreased by 26.4% compared to the previous year.

3. GERMANY

Name	Km	General cargo	Bulk cargo	Liquid cargo	Containers	Ro-Ro
Port of Kelheim/Saal	2411	٧	٧	٧	٧	٧
Port of Regensburg	2373- 2379	٧	٧	٧	٧	٧
Port of Straubing	2312,3	٧	٧	X	٧	٧
Port of Deggendorf	2282,92- 2283,87	٧	٧	٧	٧	٧
Port of Passau	2228,38- 2233,45	X	٧	X	V	٧

3.1. Port of Kelheim/Saal

The port of Kelheim/Saal is located at km 2411 on the right bank of the Danube in the district of Kelheim, Lower Bavaria, in the region of the town of Kelheim in the municipality of Saal ad Donau.

Port owner and manager: Zweckverband Häfen im Landkreis Kelheim

Official site: www.hafen-kelheim.de

The port of Kelheim-Saal consists of a 675 m long quay parallel to the Danube in an east-west direction and a 120 m turn basin in the inlet area. Transport-intensive companies settled along the transshipment banks.

The port is connected to the railway network of the Regensburg-Ingolstadt railway line via the railway station Zaval. Connected to DeutscheBahn. There are Ro-Ro ramps for loading vehicles onto ships and trains. There is a

 $60 \text{ m} \times 20 \text{ m}$ heavy-duty platform at the northern berth as a transshipment area for heavy and oversized cargo. The port also handles general and bulk cargo.

The port has a water-measuring station and a telephone.



The territory of the port occupies a total area of 85 hectares.

There are handling facilities: portal cranes -2/45t, 3/25t. Warehouse area: covered - 40,000 sq.m., open - 45,000 sq.m. There is also a rail connection.

The port handles bulk materials, has a container terminal of 16,000 m² (including a reach stacker), 5 road scales, 2.5 km of port railway, open storage facilities including 80,000 m² for bulk/bulk/unit cargo, 400,000 m² of space for car storage, 7000 parking spaces on the parking shelf.

For sightseeing and passenger transportation there is a separate pier on the Danube 2414.5 km on the left with a bus stop and public transport stops. For small boats, there is a pier on the Danube 2410.2 kilometers on the right.

The ZweckverbandHafen in the district of Kelheim also manages the Riedenburg/Haidhof piers on the Main-Danube canal at km 149.70 MDK, which has a 180 m long berth and covers a total area of 8 ha.

In 2013, the port of Kelheim accounted for 5.19% of ship freight traffic in Bavaria with a cargo flow of 401,879 tons, which 2013 amounted to 7,742,816 tons, in 2017. port cargo turnover amounted to 348,000 tons.

3.2. Port of Regensburg (BayernhafenRegensburg)

The port of Regensburg is located on the right side of the Danube from 2373 to 2379 km. and is a transport hub and grain center of eastern Bavaria.

Port owner: Bayernhafen GmbH & Co. KG, Linzerstrasse 6, 93055 Regensburg, Germany

Port Authority: Bayernhafen GmbH & Co. KG

Official site: http://www.bayernhafen.de/

Types of cargo handled in the port: Dry bulk, Container, Break bulk, High & heavy cargo, Petroleum products refined, RoRo cargo

The range of goods ranges from bulk and liquid cargo to high-quality industrial products. A wide range of products includes, for example, automobiles, construction machinery, containers, fertilizers, iron ore, and iron scrap, animal feed, generators and grains, wood and wood products, plastics and coal, machinery and mineral oil, paper, and quartz sand, steel and stone, wind turbines and cement.

The total area of the port is 1,850,000 m2. 80 companies are operating in the port.

The port has a conveyor belt, Ro/Ro ramp, covered liquid cargo handling facilities, 7 slewing cranes with a lifting capacity of 45 tons, 1 mobile crane with a lifting capacity of 15 tons, warehouses with open and covered storage areas, equipment for maintenance and disposal, bunkering facilities, fresh water supply.

The port of Regensburg has several areas (ports): Vostochny, Oil loading, Western, and Donauland.

The Eastern port is subordinated to the shipping companies "Bavarischer Lloyd AG" and DDSG-Cargo, as well as to the forwarding company "Primeisser". The port processes general and bulk cargoes, and large containers.

A container terminal is available to handle conventional loading units. The terminal is connected to the North Sea ports of Bremerhaven and Hamburg.

Terminal operator: IGS Intermodal Container Logistics GmbH.

Website: https://www.igs-intermodal.de/de/regensburg

The oil loading port belongs to four owners - transport and forwarding companies. The port has a customs office, a pilot station, and a water-measuring station. There is a telephone. The post office is located in Regensburg.

The entrance to the Western Port is combined with the entrance to the Oil Port.

The above services are common to both ports. The Western Port handles general and bulk cargo, grain, and mixed fodder.

In the port of Donauland, the eastern section is under the jurisdiction of the port of Regensburg, the middle section is managed by the Danube transshipment company and forwarding company.

There is also a section with a Ro-Ro ramp.

High-quality heavy goods such as transformers are shipped from Bavaria Regensburg on barges to the world market. The companies also use the combined transport terminal at the port of Regensburg to export and import their products.

Port of Regensburg transports 2,785,000 metric tons per year by sea and rail.

3.3. Port of Straubing Sand

Port Straubing-Sand is a river port located at 2313.3 km on the right bank of the Danube, which has access to the North Sea (Baltic Sea) and the Black Sea (Mediterranean Sea) through the Rhine-Main-Danube Canal.

The official UN/Locode of this port is **DESTB**.

Port owner: Zweckverband Hafen Straubing-Sand

Port authorities: Hafen Straubing-Sand GmbH

Official site: www.hafen-straubing.de

Straubing is a medium-sized port. Types of ships that regularly call at the port: land, motor cargo ships, passenger ships, ferries, cruise ships, and push cargo ships. The maximum length of vessels registered at the time of entry into this port is 270 meters. The maximum draft is 2.6 meters. The maximum deadweight is 3609 tons.

Total port area: 220.000 m2.

Types of cargo handled at the port: dry bulk, dry bulk, high and heavy cargo, and RoRo cargo (Dry Bulk, Break bulk, High & heavy cargo, RoRo cargo).



The port has a conveyor belt, Ro/Ro ramp, 3 cranes with a capacity of 35 tons, warehouses with open and covered storage areas, equipment for maintenance and disposal, and bunkering facilities.

Straubing Port is a cruise port and city on the Danube River in the German state of Bavaria (Goboden region in Niederbayern, Straubing-Bogen district) with a population of approximately 50,000. The city is best known for its annual Gaubodenvolksfest (held here in August), which is the second largest in Bavaria after Oktoberfest (the world's largest folk festival) held in Munich.

3.4. Port of Deggendorf

The port of Deggendorf is located on the 2283 km of the left bank of the Danube and is connected by the Main-Danube canal with the North Sea and the European major navigable Danube strait with the Black Sea.

Port owner: Zweckverband Donau-Hafen Deggendorf. He also manages.

Official site: www.hafen-deggendorf.de

Types of cargo handled at the port: Dry bulk, Container, Break bulk, High & heavy cargo, Petroleum products refined, RoRo cargo, Liquid bulk

The total area of the port is 550,000 m2.

The port has a conveyor belt, Ro / Ro ramp, pneumatic equipment, 1 gantry crane with a lifting capacity of 35 tons, 2 mobile cranes with a lifting capacity of 25 tons, warehouses with open and covered storage areas, a customs warehouse, equipment for maintenance and disposal, bunkering structures.

Port parts:

General port Allgemeiner Hafen (2282.970 - 2283.700 km left on the Danube)

Approximately 17,000 m2 of handling area in the quay area, gantry and rocker slewing crane, plate for heavy and dangerous goods, RoRo ramp, cement handling equipment, conveyor belt, liquid fertilizer loading station, container handling, direct railway connection.

Owner: Zweckverband Donau-Hafen Deggendorf

Ehemaliger Freihafen (2282.374 - 2282.629 km on the left along the Danube)

Opened in 1992 as the second landlocked free port next to Duisburg. Since 2002 Type II free control zone.

With the introduction of the Union Customs Code (May 2016), free zones disappeared; thus, no more restrictions on the settlement.

Approximately 7,000 m2 of the loading area, 2 mobile cranes, cement loading plant, conveyor belt, etc., direct rail connection.

Owner: Zweckverband Donau-Hafen Deggendorf

Oil port Oil transshipment/tank pontoon Ölumschlag (2282.629 – 2282.970 km on the left-hand side of the Danube)

Ship berth (floating pontoon) for loading and unloading tankers, loading and unloading facilities for rail tank cars, and tank trucks.

Warehouses: 14 tanks; volume: 25,800 m3

Owner: Friedrich Scharr KG / Sailer Mineral Oil Handel GmbH

Via bhf. Deggendorf and railway junction Bhf. Plattling Port Deggendorf is directly connected to the DB/TEN-T (Trans-European Transport Network) rail network.

The port has more than 5 km of track network as a service facility (of which more than 3 km are passable); route class D4 - V / max: 15 km / h - highest gradient: 0.5%

The equipment is available to all licensed rail transport companies (EVU) on a non-discriminatory basis.

The delivery of wagons as well as shunting work in the port is also possible with the help of shunting locomotives owned by the port (J. Wallner GmbH a railway service company).

Separate secondary tracks of companies based in the port are connected to the port railway network.

Also connected to the Deggendorf junction (BAB A3 / A92) 2 km on the state motorway St2125 and to the Hengersberg junction (111) on the BAB A3 8 km on the BAB A3 motorway.

3.5. Port of Passau

The port of Passau is located at km 2232.38 on the left bank of the Danube. The total area is 250,000 m2.



Port owner and manager: Bayernhafen GmbH & Co. KG

Official site: www.bayernhafen.de

Types of cargo handled at the port: Dry bulk, Container, Breakbulk, High & heavy cargo, and RoRo cargo.

Available: covered liquid handling facilities, conveyor belt, Ro/Ro ramp, 1 slewing crane with a lifting capacity of 120 tons, 1 mobile crane with a lifting capacity of 15 tons, warehouses with open and covered storage areas, customs warehouse, maintenance equipment, and disposal, bunkering facilities.

The Port of Passau has several swimming pools. Passenger ships are moored to the berths of Passau - the city. The berths belong to the Garage Company of Passau. There is a sanitary service, there is a post office.

Cargo handling in Passau-Schalding is carried out at the Ro-Ro terminal owned by the shipping company Bavarischer Lloyd AG.

The Port of Schalding is owned by the Warehouse Enterprises Gerbrüder Voglmeier KG (Passau). The port specializes in the transshipment of grain cargoes in bulk in bags Passau-Schalding:

The mooring front is 300 meters, whereas the mooring front is 100 meters, and the sloping coast is 200 meters. The maximum depth at the berth is 3.5 meters.

The warehouse area is designed for 20 trailers. There is also a rail connection.

Schalding: The mooring front is 430 meters, whereas the sloping coast is 430 meters.

Warehouse area: covered - 9000 sq.m., open - 10000 sq.m. There is also a rail connection.

In addition to traditional commodities such as grains, fertilizers and animal feed, stones, earth, and cement, heavy goods of any type are also handled.

In Passau, water, rail, and road transport routes are optimally combined. Thanks to the trimodal connection, efficient transportation is carried out in both combined (KV) and single-railway (EWV) transport. This allows us to implement sustainable and climate-friendly intermodal transport concepts for you. Compared to pure road transport, rail transport reduces greenhouse gas emissions by about 80%.

Bayernhafen Passau is connected to the seaports of Hamburg, Bremerhaven, Bremen, and Wilhelmshaven by daily freight trains via the AlbatrosExpress network of DB Cargo subsidiary TFG Transfracht.

Modern and regular Ro-Ro traffic guarantees fast and smooth operation, especially on the Danube in the direction of Hungary and Bulgaria, as well as in the opposite direction. Loads on wheels, such as vans, tractors or combine harvesters, enter Ro-Ro vessels at the port of departure, i.e., coasting, and re-launch at the port of destination, i.e. Stationary goods, such as transformers or wind turbine blades, are loaded on barges by trucks.

Since July 2015, Donau Star BG EOOD has been connecting Bavaria Passau with the Bulgarian port of Ruse and other ports on the Danube suitable for Ro-Ro with a regularly scheduled StarLines service that departs once every two weeks. Two catamarans "Jumbo II" and "Jumbo III" can carry up to 1500 tons. They need about seven days down the Danube to Ruse and nine days back to Passau.

Thanks to its lighter function, Bayernhafen Passau plays a key role in shipping on the Danube. Because for ships arriving from Southeast Europe and Austria, this is the last port on the Danube before the undeveloped section of Vilshofen-Straubing. In this section of the Danube, cargo ships must adapt their cargo to the appropriate draft by transferring part of their cargo to another ship or temporarily storing it on land.

With good access to very wide and high pieces of equipment and the corresponding handling capabilities, Bayernhafen Passau is also an important location factor for the Bavarian engineering and mechanical engineering industry. For example, filter systems or complete wind blades are loaded onto barges in Passau and transported from there to destinations around the world. Bayernhafen Passau is also connected to the seaports of Hamburg, Bremerhaven, Bremen, and Wilhelmshaven by daily freight trains.

Based on 2020 data the port of Passau handled 309,000 mt of cargo by sea and rail, 212 million river tkm*, 383 vessels, and 3,453 wagons.

* In freight transport, the transport performance of a mode of transport is calculated in tonne-kilometers (tkm). The transported mass (t) is multiplied by the distance traveled (km).

Container and combined transport 69.7%, cement 24.9%, vehicles

4.2%, agricultural goods 1.2%.

Container shipping: ship 16 TEU, rail transport 2,922 TEU, total 2,938 TEU*.

*TEU corresponds to a 20ft container.



All photos in the review are provided for free commercial use by Pexels. No attribution required.

https://www.pexels.com/license/