

Ocean Trader 🚤

CONFIGURATION

For Ocean Trader CD-ROM to operate properly on your PC the following equipment should be available:

- 386 SX or higher
- At least 4 MB RAM
- SVGA graphics card (colour) with VESA compatible driver
- Mouse and mouse driver (Microsoft compatible)
- MS-DOS 5.0 or higher
- CD-ROM drive, CD audio
- Soundblaster card or sound blaster compatible

INSTALLATION

Start up your computer as usual. Insert the Ocean Trader CD into your CD-ROM drive. Double-click on the icon „My Computer“. Double-click the CD-rom icon where your CD was inserted. Then double-click on the icon named „install.exe“ and follow the instructions.

MAXIMUM INSTALLATION

For maximum installation you need a free memory capacity of 35 MB. Ocean Trader is loaded onto the hard disk in its entirety, with the exception of the intro, and can therefore be played without inserting the CD. Music is via CD audio or soundblasters. The intro is loaded directly from the CD and only runs in higher resolution if the CD is inserted and the CD sound is configured.

MEDIUM INSTALLATION

For medium installation you need a free memory capacity of 16 MB. Ocean Trader is loaded onto the hard disk in its entirety, with the exception of the intro, and can be played without inserting the CD. Music is via CD audio or soundblasters. The resolution of the intro depends on the CD-ROM speed. The intro music only appears from soundblasters if they are installed.

MINIMUM INSTALLATION

For minimum installation you need a free memory capacity of 2 MB. Ocean Trader is loaded onto the hard disk in its entirety but can only be played with the CD. A error message appears if the CD is not inserted. Music is only via soundblasters. The intro is loaded directly from the CD. The resolution of the intro depends on the CD-ROM speed. Music is only via soundblasters if they are installed.

When you have decided on a type of installation (either maximum, medium or minimum) a window appears in which you can select the destination hard disk. After the various hard disk partitions you will see the available capacity at the same time. Select a partition with sufficient space for the installation you require.

If you make a mistake during selection the program will tell you. A window then appears where you can enter the path where you will later find the program. The default is C:\TRADER. Simply press Return to enter the path. If you require a different path, e.g. C:\GAMES\TRADER enter it here. The program automatically begins the copying process.

STARTING THE PROGRAM FROM CD-ROM

The installation process is now complete. Find the folder where you installed your game (Default: C:\TRADER) and double-click on the trader.exe icon. The game will now begin. Please ensure that when starting the program you have always inserted the Ocean Trader CD-ROM in your CD-ROM drive.

SOUNDCARDS

INSTALLATION PROGRAM

In the Trader folder you will also find a icon named „setup.exe“. When you double-click on this icon, you will be able to configure your soundcard.

A screen appears showing a menu entitled „Main Options“. From now on you only have to press four more keys.

- [CURSOR KEYS: up; down;]
-to select a menu option
- [RETURN or ENTER]
-to confirm a menu option
- [ESC]

-to exit

Now move the grey selector bar by means of the up/down cursor keys to one of the four options:

SELECT MUSIC CARD
SELECT SOUND EFFECTS
SAVE SETTINGS
END PROGRAM

and press [RETURN]. A submenu is opened in which you can make the following selections with the cursor keys:

- Select soundcard
- Music via soundcard
- Sound effects via soundcard
- Select port address
- Interrupt
- DMA channel

Confirm the points matching your hardware configuration by pressing [RETURN]. The Setup program then automatically returns to the „Main Options“ menu.

Once you have correctly installed your music card and sound effect card (this can be checked using the grey „Current Settings“ field) move the grey selector bar to „Save Settings“ and again press [RETURN]. A box will then show you that your configuration has been successfully saved.

START MENU

After the intro sequence you will be in the start menu. You can select the following menu options:

START GAME

You immediately begin with a player in continuous mode with the standard settings.

CONTINUE GAME

The menu for loading a game state appears. You can now select any game saved earlier. Further information is given in the section „Loading and Saving Game States“.

SETTINGS

By selecting „Settings“ the important data about the players, the game target and the level of difficulty can be changed in the initial options according to your personal requirements.

INITIAL OPTIONS

All the settings are controlled by buttons and light diodes (LEDs). A green LED means that the appropriate menu option is activated.

ENTERING THE PLAYER DATA

By clicking on the LEDs next to the company logos players can be activated and/or deactivated. Lacking human players are replaced with competent computer opponents. If you do not like the company logos these can be changed by clicking on the mouse.

Under the logos there are four buttons for entering the appropriate player details.

After selecting one of the first two buttons the names of the player and the company can be re-entered.

A home port can be selected by way of the third button. This is the starting point of all your activities during the subsequent course of the game. Hamburg, London, New York and Sydney are available as home ports.

The fourth and last button controls the individual level of difficulty for the player in question. In total there are five different game levels to be selected, from beginner to professional.

For the computer opponent the game level can be determined here.

SELECTING THE AIM OF THE GAME

You can select the duration and aim of the game in accordance with your personal requirements. For this there are three different game modes available which can be selected by activating the appropriate LED.

In „Freely Defined“ mode one or more conditions for the end of the game must be determined. For this the LEDs must be activated and the required parameters determined via the appropriate buttons.

The menu options „One condition“ or „All conditions“ also relate to the free game. Here you can determine whether one or all of the set conditions have to be fulfilled to achieve the game target. The simulation ends as soon as one player has reached the set target.

For „Time Game“ the duration of the game in years can be entered via the appropriate button. The winner is the one achieving the best result in the selected sector at the end of game period. The point „Highest Annual Result“ occupies a special setting as the development of assets during the last year of play is taken into consideration.

In „Continuous Game“ mode there is no particular target and no set duration. You simply play for as long as you like.

SELECTION OF THE GAME LEVEL

For the general level of difficulty you can choose from five different standard settings or select your own self-defined game level. If you wish to use your own settings activate the self-defined LED and operate the button to reach the menus for other settings.

START MENU

Returns you to the start menu.

START GAME

The game starts with the settings you have entered.

DETAIL SETTINGS

Another options menu appears with which you can set various calculations during the course of the game. By clicking on „Settings-2“ you can amend other data, while the „Main Menu“ button takes you back to the start options. The exact level of difficulty is calculated on the basis of your settings before the start of the game. The following sections describe the individual settings.

SETTINGS FOR GOODS

By way of the LEDs the calculations for goods supply and demand, as well as the profit margin can be modified. For example, goods supply relieves the players as there will be fewer production bottlenecks in the various ports. On the other hand, high demand will increase consumption in the ports so that you can deliver additional supplies more quickly. The purchase and sale prices are determined by the profit margin.

SETTINGS FOR SHIPS

Here the most important cost factors for ship operations can be set. Higher costs will of course reduce the remaining profit and thus increase the overall level of difficulty. Port and/or canal charges, berthing costs and fixed costs can be set. The significance of the individual factors is set out in more detail in the section „Cost of Ship Operation“.

OTHER SETTINGS

These options are on the 2nd screen page of the settings. On the basis of the tax rate the payments to the tax office due at the end of the year can be determined. Stock broker costs regulate the costs of buying and selling shares.

In the case of forward business for freighters, the conventional penalties for non-fulfillment of advance or freight business should be taken into account. The settings „tight“ and „very tight“ should therefore initially remain the reserve of the professionals.

COURSE AND END OF THE GAME

COURSE OF THE GAME

The entire game runs in real time, i.e. you can follow the movements of your ships on the action screen precisely, while all the necessary calculations are carried out at the same time. As soon as a ship has reached its destination port or has carried out an action (e.g. repair or maintenance), control is passed to the owner of the ship, who can now implement further action in the relevant port. As soon as a new order for the ship has been determined the game move is ended. Another action screen appears. In between, various events such as storms, strikes, embargoes etc are introduced.

END OF THE GAME

Before starting the game you have the opportunity of setting an own game target according to your personal requirements. To do this you have three different game modes at your disposal.

In continuous game there is no defined game end. You simply play as long as you are enjoying it. The timed game finishes at the end of a predetermined number of years. The freely-defined game ends as soon as one of the players has satisfied the predetermined conditions.

A further, and not necessarily recommended, way of ending the game is your company being declared bankrupt. The player is then excluded from the further course of the game. If at this point there is no human player in the running, the simulation ends.

THE PORT

Ports are among the most important economic centres of a country, through which goods flow out abroad overseas, to the coastal areas of that country, and to ports on the same continent. No industrial complex can compete in extent with a sea port. The purpose of a port is the intermediate storage and transfer of transported goods from the ship to inland traffic and vice-versa.

The traffic in a major sea port is a barometer of the state of the global economy and the course of economic developments. The different enterprises involved in port traffic, such as the shipping companies based at the port, foreign trade, sea port shipping agents, ship-brokers, banks and insurance companies involved in foreign trade and marine navigation, shipyards also working for foreign customers, all make the port a focus of numerous economic interests. Depending on your starting position you will begin your first activities in either Hamburg, London, New York or Sydney.

The upper screen shows a view of your home port followed by a list of the most important information about the ship in question and a world map on which your current position is marked with a flashing point. If the ship is in a port other than her home port, graphics of your captain's cabin and a list of the important information about the port are shown instead of the view of the port.

There are various icons on the lower menu bar with which the various port facilities can be found.

For the operation and control of these and the following functions please see the section Menu Control. The following menu options are available in port:

The options Goods Transshipment, Operating Means, Repair and Maintenance and Map relate to the relevant port. Via the function Cordless Telephone you have access at all times to other, different economic sectors and facilities at the home port.

GOODS TRANSSHIPMENT

The goods transshipment menu appears. Here you can buy warehouses and petroleum tanks, conclude freight and advance business and buy, sell or store various goods. In the right-hand data window all the information about your stores and tanks in the relevant port are shown.

The left-hand window shows an overview of all the business you have currently concluded, agreed delivery deadlines and destination ports. By pressing the right mouse button you can return to the port menu.

Goods Transfer

In one book the goods currently available in the port, your warehouses and the ship in question are shown along with their prices. The precise type and quantity of the available information depends on the selected goods transfer mode. The following six modes can be selected using the menu bar:

Load goods from the ship to the warehouses

The currently activated mode is indicated by a red cross on the appropriate icon. The book page icons are for turning pages and showing other goods. In the lower part of the left book page there is a money bag symbol. Next this the amount currently in your bank account is shown. The symbol with the weight and the ship shows the loading capacity still available. At the bottom of the right-hand book page you can see the capacity of your warehouses and tanks. A negative warehouse or tank capacity means that at present your capacities are insufficient and outside warehouses and/or tanks must be leased.

If, for instance you want to transfer tobacco from the ship to your warehouse, first of all select the first icon to activate the ship-warehouse mode and then click on the tobacco symbol in the book with the left mouse button. Provided that there is tobacco in the hold of your ship you can now enter the required quantity to be transferred via the pocket calculator.

One important point is that not every type of goods can be transported with a particular type of ship. For easily perishable goods such as meat or tropical fruits a refrigerator ship is necessary. (For container ships special refrigerated containers are used). In order to ship petroleum you need a tanker or supertanker.

For a better overview of the available goods the icons for unavailable goods are covered with a black grid and cannot be selected.

With the right mouse button you can return to the goods transfer menu.

BUYING WAREHOUSES

In each port up to 500,000 tonnes of warehousing capacity can be acquired. Your own warehouses are particularly important in ports with a very high turnover of goods, as the frequent leasing of storage areas is very costly.

During the course of the game you will often be offered goods in demand at a very favourable price without the loading capacity of the ship in port being sufficient.

The storage of goods is also necessary in the case of forward business and speculation on more favourable developments in global market prices. In addition, your free warehousing area can be leased to a certain extent if there is sufficient demand.

BUYING PETROLEUM TANKS

For storing petroleum special tanks are required. Further information can be obtained in the section „Buying Warehouses“.

FORWARD BUSINESS

Occasionally you will be offered forward business. If you accept this business you must deliver an agreed quantity of a particular type of goods by a specified point in time to a specified location.

For this you are guaranteed a fixed purchase price which is generally well above the current market price and is payable on delivery of the goods in good time. To fulfil the contract the agreed quantity must be in the warehouses at the appropriate port by the delivery deadline.

This business conceals great financial opportunities but also risks, as non-fulfillment of the contract will incur a hefty penal sum which can in certain circumstances lead to the bankruptcy of your company.

In addition, the world market prices for the goods in question can increase by the delivery deadline so that you would require significantly more means for their acquisition than originally planned. On the other hand with falling prices your profit would be greater.

FREIGHT BUSINESS

The most important difference between advance and freight business is that with the latter you do not need to be concerned with acquiring the goods as the agreed quantity is loaded onto your ship immediately after concluding the contract with your customer.

For transporting the goods within an agreed period of time you will receive a previously determined sum, known as the freight rate, if the goods arrive on time at the destination port. This sum depends on the transported quantity and the distance between the two ports.

You should calculate exactly whether you can reach the destination port with your ship within the agreed period, as a hefty penal sum can be anticipated in the event of non-fulfillment of the contract.

RESOURCES

The resources menu appears. In the data window all the information relating to the diesel consumption of the ship is shown.

REFUELLING

With this menu your ship's fuel tanks can be replenished with diesel fuel.

SPEED

At this point you have the opportunity of setting the engine performance of the ship to between 50 and 100 percent.

For particularly urgent cargos, such as forward freight, the normally set engine performance of 75% may not be sufficient in some circumstances. However, it should be noted that continuous maximum performance significantly increases the engine loading, fuel consumption increases superproportionally and the theoretical range of the ship is thereby reduced.

MAINTENANCE AND REPAIR

The repair menu appears. All the necessary information is shown in the data window.

REPAIR HULL

If the condition of your ship is below 100% you can have any necessary repairs carried out at this point. The costs of maintenance can differ greatly depending on the port. However a lower price can sometimes be at the cost of quality. In extremely inexpensive shipyards you also often have to reckon with considerable deadline delays and thereby longer lay days for the ship.

SERVICE ENGINE

About once a year the engine of your ship should be serviced in order to prevent any possible damage. If you operate frequently at maximum engine power the intervals between the maintenance times must be correspondingly shorter.

The same aspects apply to the quality and duration of maintenance as for repair of the hull.

REPAIR AND MAINTENANCE

If you want to have the hull repaired and the ship's engine serviced at the same time you can use this menu.

MAP

A world map appears on the screen. In both windows at the upper edge of the screen all the important information about the selected port is shown. The current position of the ship is indicated by a yellow flag. On the map various points are marked showing the positions of available ports. If you move the mouse pointer over one of these points the name of the port is displayed on the bottom menu bar. Click on any port with the left mouse button and it is marked with a red flag.

The data relating to the selected ports is now displayed in the information windows. This data is of decisive importance for the selection of a favourable destination port. Tankers and supertankers can only travel to ports with a petroleum terminal. Under main exports and main imports there are various goods symbols showing the goods for which there is generally supply and demand. If you do not know the precise location of a port you can choose from five different regions on the lower menu bar and display a list of the

ports available there. Click on the information icon and you will see the current goods and stocks in the selected port on a separate screen. By again clicking on the destination port you can despatch the ship on the appropriate route. If you wish to let a ship lay over in port simply select the current port as the destination port. Through the entry menu you can now enter the required waiting period from 1 to 365 days.

If you have selected a new route or have left the ship in port your move is ended. Otherwise you can return to the port menu with the right mouse button.

CORDLESS TELEPHONE

The cordless telephone menu can be called up from the port menu or the action screen.

The following places can be reached; by clicking on the right mouse button this selection is cancelled.

BANK

In the data window on the right of the screen all the information about your current financial position is shown.

On the left-hand side you can see a list of your credit obligations and time deposit investments. The credit at your disposal depends on the economic position of your company and is determined anew every month by the bank. Always ensure that this credit limit is not exceeded as otherwise your ship will be confiscated and, in serious cases, your company can be threatened with bankruptcy.

The menu options „Raise Credit“, „Repay Credit“ and „Financial Investment“ are available.

RAISE CREDIT

If your bank grants you credit the pocket calculator appears and you will be asked to enter the required sum to be paid out.

After also entering the credit period up to 6 years, a credit agreement is presented to you. You can check all the information at your leisure and then decide whether you wish to accept or decline the offer. The installments will be deducted from your account at the end of the month.

After returning to the bank menu you can read the credit data in the appropriate data window.

REPAY CREDIT

A credit agreement appears on the screen. If you have concluded several agreements you can move between them using the book page icon on the lower menu bar.

If you now select „Repay“ on the upper menu bar the remaining amount to be paid is shown, taking into account the overcalculated interest due to the shorter credit period in the event of early repayment.

If you have the required sum available in your account you can now repay the credit.

FINANCIAL INVESTMENT

After selecting this menu you will be asked to enter a required investment sum. The minimum sum is \$ 10,000. For the duration of the financial investment you have a choice of 1, 3, 6, 12, 24, 36, 48 and 60 months. After correct entering all the data is again presented in written form. You can accept or decline the offer.

The calculation of interest for financial investments takes place at the end of the year or at the agreed repayment deadline.

After returning to the bank menu you can check the most important investment data in the appropriate data window.

STOCK MARKET

You are now at the stock market. The large board shows the prices of all the 22 available shares and the share index which reflects the development of the overall market. The values in brackets are the previous day's prices.

At weekends the stock market is closed, on other days the following menus are available:

BUYING SHARES

A list of the traded shares is set out. After selecting the required share you can enter the quantity. To implement the order costs are calculated which can be of different values, depending on the broker settings selected in the starting options.

As speculation on the market involves a certain risk and cannot be necessarily included in the usual business activities of your company, the company management may decide to restrict your stock market dealings. You can manage up to 10 different securities in your deposit.

SELLING SHARES

If there are shares from more than one company in your deposit, a list of your securities is first of all set out. After selecting the required share the number to be sold can be entered. To implement the order the same costs as for selling are applied.

PRICE DEVELOPMENT

The already familiar list of available shares appears. However, in this case the share index is also displayed.

After selecting a required security the price development over the last 90 days is shown in graph form.

DISPLAY PRICES

This menu option switches back to showing the share prices on the board if you have in the meantime selected the securities deposit.

SECURITIES DEPOSIT

A detailed list of all the securities available in your deposit appears on the board. In addition to the usual information such as purchase price, number or the current rate of the day, the price development in percent is shown.

MARKET REPORTS

A newspaper appears on the screen in which you can read the latest economic and company news. This news can give you important information about the further development of share prices. By clicking on the life-saving ring icon or operating the right mouse button you can exit this menu.

INVESTMENT ADVISOR

You can appoint or dismiss an investment advisor at any time. In the case of dismissal a hefty settlement sum is generally due. After appointing the advisor the current trends relating to a particular share or the overall market are displayed within the stock market menu. The trend „++“ means that clearly rising prices are anticipated shortly, while „—“ means that falling prices are expected.

Pay particular attention to the development of the overall market as individual shares can normally only avoid a general weaker trend with difficulty.

It is generally only worth having your own investment advisor in the case of larger assets, as his relatively high salary would otherwise considerably cancel out any possible price profits.

OFFICE

In your office you can obtain a precise overview of your company's situation and the position of the other players.

GAME STATES - LOADING AND SAVING:

Users of an Amiga with a floppy disk drive will at this point be asked to insert a game state disk into the DF0: drive. A list of up to 10 saved games appears with an additional autosave game state which is updated by your computer at the end of each month. In addition to the game states an explanatory text is also displayed, so that even after a longer time you can check the state of play. In function „Save Game State“ you are asked, after clicking on the appropriate entry, to enter an appropriate text which is then also saved along with the file. If „No entry available“ appears in the list, nothing has been saved.

HIGH SCORE LIST

Here a list of your hitherto greatest successes in game modes „Freely Defined Game“ and „Timed Game“ is shown. The data is updated at the end of each game, so that in „Continuous Game“ mode no entry in the high score list is possible.

The 10 best results and your current points total, or the current theoretical position if this were the end of the game, are displayed. Although only 10 entries are shown, up to 100 high scores are saved so that your current position can also be 29, for example.

The basis of calculation of the high score list is the current points total, obtained from the company status and the individual game level. A maximum of 1,000,000 points can be achieved with a game level of 100 percent. If the general game level (see initial options) is 60 percent, which corresponds to the standard setting „Normal“ and the individual level of difficulty is also 60 percent, a game level of $60 \times 60 / 100 = 36$ percent is obtained for the player, with a maximum number of 360,000 points. The current game levels can also be checked under the following menu option „Options“.

OPTIONS

The options menu primarily serves to select user settings for the game. By way of the appropriate light diodes you can, for example, switch music or various messages on or off. If the autosave function is activated a game state is automatically saved at the end of the month.

GAME STATE

Here, the company status of the four players is shown as a development over the last 10 years. As in the first months the curves will not differ very much, this menu only becomes significant as the game continues.

INCOME AND EXPENDITURE

For the player it is important to keep an eye on the development of his own income and expenditure. Particularly in the case of purchasing larger ships the costs can easily go over one's head. Before purchasing every ship a precise calculation should be made as to whether there are sufficient means available to cover the fixed and variable costs in addition to the purchase price. An unexpected necessary repair to a passenger ship, for example, can quickly swallow up several millions in berthing costs and fixed costs, quite apart from the costs of repair.

COMPANY DEVELOPMENT

Two curves appear on the screen showing the development of your company's status and assets during the last 10 years. The red curve shows the status and the green curve the assets.

EXIT

You can exit the current game by way of this function and return to the user level of your computer.

INSURANCE

You are now in your insurance broker's office. The various data windows display precise information about your insurance for ships, freight and warehouses. In this menu the following functions are available:

SHIP INSURANCE

After clicking on this menu option a list of ships is displayed (not if you only own one ship). After selecting the required ship the monthly insurance payments are set out. You can now take out a new insurance policy or cancel an existing one.

Particularly in the case of petroleum tankers insurance is of decisive importance as the loss of such a ship can cause environmental damage, the costs of cleaning up of which could lead to the financial ruin of your company.

FREIGHT INSURANCE

In addition to insurance of the ship, a freight insurance policy can also be taken out covering you for financial losses incurred by the possible loss of the cargo.

The taking out or termination of such insurance takes place as described under ship insurance. The insurance premiums depend on the loaded cargo and are calculated on a daily basis. This amounts to 1/1000th of the cost of goods purchased.

WAREHOUSE INSURANCE

At this point you can take out warehouse insurance for Europe, North America, Central America, South America, Africa, Asia or Australia. With this type of insurance your warehouses and tanks as well as the goods stored in them are insured against damage, e.g. by fire, so that you are saved unnecessary loss.

After selecting the required region you can take out the insurance or cancel already existing insurance. The insurance premiums are deducted from your bank account at the end of each month and depend on the available warehouse and tank capacity. If „No Warehouse“ appears in the data window, although you may have taken out insurance for the region in question, you have no warehouse or tank capacity there. In this case, of course, no insurance premium will be payable as long as you do not buy warehouses and/or tanks.

SHIPYARD

In the shipyard you can commission construction plans and have ships built in accordance with your requirements. A maximum of 10 plans per player can be administered. If you wish to have further ships built, you can also delete older plans from your documents with the ship-broker.

The data window displays the current data relating to your selected construction requirements.

TYPE OF SHIP

Before entering the data for your requirements the type of ship has to be determined. The pocket calculator and a list of available standard ship types appear so that you can select from nine different basic types.

SPEED

Your required speed forms the basis of calculating the engine performance. The minimum or maximum selectable speed depends on the type of ship chosen. Please remember that more powerful diesel engines substantially increase the construction costs of the ship and result in much greater diesel fuel consumption and thereby higher operating costs.

MAXIMUM LOAD

This menu is only available for freighters. The maximum load of a ship indicates how many tonnes of cargo can be carried. The possible value depends heavily on the type of ship selected. For example, a supertanker is able to transport more than 300,000 tonnes of petroleum.

PASSENGER CAPACITY

This option is only available for passenger ships. The passenger capacity indicates the number of passengers which can be carried with all the cabins occupied. Values between 800 and 2500 are possible.

RANGE

The range of a ship and its engine performance form the basis of calculating its tank volume. An average engine performance of 75% of the maximum performance is taken as the starting point. When travelling on full power the range is less in accordance with the greater fuel consumption. The ranges are given in nautical miles.

PLACE ORDER

After entering all the data the construction plans can be commissioned. Incomplete specifications are supplemented with standard values by the shipyard.

First of all the costs of drawing up the plans is quoted and on order confirmation received. Several weeks later you will receive news of their completion from the shipyard.

The completed construction plans can then be studied at your ship-broker's and used for the construction of your required ship.

SHIP-BROKER

Graphics appear showing a leather-bound ring folder. By clicking on the register on the right-hand side you can view one of the four following lists.

BUYING SHIPS

The folder is opened and shows the list of contents for the standard ships. By clicking on „Next Page“ or „Last Page“ you can turn pages forward or back. Using the „Select“ function you can go directly to the required page by entering the page number. On the following pages the data relating to the available standard ships is listed.

Once you have decided on the construction of a particular type of ship, click on the picture of the ship on the appropriate page with the left mouse button. Full-screen graphics of the ship appear and you are asked to confirm the order once again. The purchase price is then immediately deducted from your bank account. At the end of the construction period you will be the proud owner of your new ship.

SELLING SHIPS

In the book you can now see the data relating to all the ships in your possession, with control being as for buying ships. By clicking on the appropriate ship picture you can sell one or more of your „death traps“. In order to sell a ship it must be in a port.

USED SHIPS

Here, all current ship offers are listed. As their condition can, in part, be very poor, repair work is generally necessary after acquiring such a ship, which must be taken into account for comparison of the purchase price. Compared with new ships these offers are inexpensive and long construction times are dispensed with.

CONSTRUCTION PLANS

As already described in the section „Shipyard“ you can have individual construction plans for ships prepared according to your requirement. After completion of the plans you can check the construction details and place construction orders. As only 10 plans per player can be administered you can delete those you no longer require by clicking on the picture of the ship and declining the order confirmation request.

ARRIVAL IN PORT

Once your ship has arrived at its destination port, you will immediately be advised of the port and berthing costs. Whereas the port costs are charged only once on arrival of the ship to cover pilot and tug assistance, customs, port doctor etc, the berthing costs are calculated on a daily basis.

As a ship only earns money while profitably transporting goods at sea, you will always try to keep berthing times to a minimum.

Whether a port is considered good or bad, fast or slow, depends on the function of the transshipment point. If a port is considered unfavourable, the

transshipment of goods, i.e. loading, unloading and storage, is too long and the port is probably blocked to the detriment of the waiting ships. In Europe, particularly the north west coast, sea traffic is more intensive than along any other coast. The chain of ports provides the best conditions for transshipment and opportunities for

goods to be forwarded to and from inland. However, you can assume that in nearly all major ports there is sufficient transshipment capacity.

Compared with normal freighters, container ships generally have particularly short handling times, but only if suitable facilities for container transshipment are present in the port.

After arriving at the port you will first of all replenish your resources (diesel fuel) and unload the ship. Then, any necessary repairs and maintenance work will be carried out. Once the ship is ready to sail you load the required cargo and try to conclude a lucrative freight or advance deal. On the map the ship can now be sent on its way to its next destination port.

PASSENGER TRAFFIC

If you are lucky enough to own one of the splendid passenger ships you do not of course need to worry about loading or freight business. Once the fuel tanks have been filled and the necessary repairs and servicing have been carried out, you can select a destination port on the map.

The number of passengers booking for the voyage depends on the importance of the home and destination ports. The ticket prices are determined by the distance between the ports. You will be advised about the financial success or failure of the voyage on arrival at the destination port. At this point, in addition to the port and berthing costs, the number of occupied places and total income will be shown.

ACTION SCREEN

The action screen shows the current movements of your ships. In the top right-hand corner of the picture there is a calendar with the current date. The clock in the bottom left corner shows you the course of time graphically.

While you are in the action screen, all the game calculations, i.e. hourly movements of the ships, daily, monthly and annual settlements, are carried out.

On the bottom menu bar there are four icons, one for each of the players.

The symbols for the computer players are covered with a black grid and cannot be selected.

By way of your own company's icon you can call up the cordless telephone and carry out important activities in the home port. This is of importance if you wish to handle important tasks (e.g. raising credit, market deals etc) while none of your ships are in the immediate vicinity of their destination port.

The movements of your ships on the screen can be activated and deactivated in the option menu.

In the meantime various events are slotted in which have different effects on the course of play. The action screen is ended as soon as one of your ships is again available in a port.

COSTS OF SHIP OPERATION

No inland shipper can compare with the size of the commercial risk involved in marine navigation. For a conventional freighter just one single lay day in a German port, with no work on the ship and no repairs or maintenance being carried out, can incur costs of up to \$ 20,000. As, in the longer term, a ship spends around 60% of its time in port, it can be seen how much hard work and planning is needed in order for such a company to survive.

In addition to the port and berthing costs, the costs of resources (diesel fuel) and costs of repairs and maintenance must be taken into account. The monthly fixed costs include wages and similar costs. The major cost factor is, however, the enormous acquisition cost of ships which can be up to hundreds of millions. If a ship is financed by credit the monthly interest and repayment costs must also be considered.

GAME STATUS

The image of your company and how well known it is are shown by the company status. This is based on many different factors in addition to influences such as company assets and shipping tonnage. For example, if you mess up your advance or freight business, this will have a negative effect on the image of your company.

Another important point is extending your business activities to as many different ports and continents as possible, as you will thereby become known throughout the world. In addition, each influencing factor is only considered to a certain degree. It is therefore not enough to accumulate huge assets while at the same time neglecting other activities.

In conjunction with the selected level of difficulty, the status finally forms the decisive points number for inclusion in the high score list. A highest possible status of 1,000,000 and a game level of 50% would result in a maximum points total of 500,000.

It should also be mentioned that the highest status can only be attained with difficulty and in only a few cases, but is theoretically possible. Players with a points total of 750,000 certainly have the right to consider themselves absolute professionals in the sector.

MENU CONTROL

Most actions are controlled by graphic symbols, known as icons. If you use the mouse pointer over one of these icons an accompanying text is displayed on the right of the bottom menu bar. After clicking on the icon with the left mouse button the action in question is carried out. With the right mouse button you can interrupt the action and/or exit a menu.

THE POCKET CALCULATOR

All numerical entries are carried out via the pocket calculator. With the number keys the required values can be entered in full. The keys HDT (hundred), TSD (thousand) and MIO (million) are to facilitate the input of larger values. For example, if you wish to raise credit of \$ 100 million, you can key in 1, HDT and MIO one after the other instead of all nine figures individually.

The AC button deletes your entry and sets the calculator display to 0. With the DEL button you can delete the last figure. The MAX button has a special function. On calling up the pocket calculator menu the largest possible input value is calculated and can be selected directly by way of this button. Numbers exceeding this maximum value cannot be inputted.

Using the ENTER button you can confirm your selection, the right mouse button terminates the input.
EVENTS

During the entire course of the game various more or less unexpected events occur which have a direct influence on further play.

The most important are briefly explained below:

STRIKE

During a dockworkers' strike no ships in the affected port can be handled. This is particularly annoying as during this time the ships continue to incur costs but no profits can be made.

UN-EMBARGO

The United Nations can impose an embargo against an entire country, the reasons being unimportant for the further course of the game. If a country has several ports they are all closed to trade. As the goods there are rapidly in short supply and better prices can be obtained, certain dubious businessmen could come up with the idea of breaking the embargo. If you are caught red-handed the ship and its entire cargo will be seized.

FIRE

If a fire should occur in the port area you can only hope that your warehouses have not been affected or that warehouse insurance for the relevant area has been taken out in good time.

QUARANTINE

On arrival in port a ship is visited by the port doctor. If, when on board, he finds grounds for imposing a quarantine, all you can do is to follow his orders and wait until the ship is released.

CANAL USE

On travelling through the Panama or Suez Canals, canal charges are due, which depend on the size of your ship. Certain ships, such as supertankers or passenger ships cannot use canals because of their size and take the appropriate detour via Cape Horn or the Cape of Good Hope.

STORM

If your ship finds itself in a storm you can only hope that it survives with as little damage as possible. For this reason your ships should always be in good condition to avoid the danger of sinking.

TUG ASSISTANCE

An event which should not really happen to an experienced ocean trader like yourself. If your ship runs out of diesel fuel during the voyage, or there is engine damage due to poor maintenance, it has to be towed to the nearest port thereby incurring considerable costs.

THE SHIPS

The Development of Freighters

Modern merchant shipping offers special types of ship for almost every application and purpose. These include numerous combined types of ship which can carry out different transporting tasks or even be used universally. Even a century ago any type of goods could be transported with every freighter. The term freighter was at that time applied to every ship which carried freight but no passengers. This distinguished it from combined passenger-freight ships and passenger ships which could carry cargo to some extent.

Although steam ships included both freight and passenger ships, sailing ships were mainly freight sailing ships. For these there were names at the end of the last century which indicated their purpose, such as tea clippers, saltpetre clippers, cotton clippers, coal hulks etc. This was not yet the norm with the steam freighters. However, this was the time in which the refrigerator ship was developed following the invention of the refrigerator by Carl von Linde (1842-1934), and when the first tanker and the first ore carrier were built. Nevertheless their numbers and tonnage was so small that they were not or hardly at all recorded in the world merchant fleet statistics.

During the first half of our century the universal freighter with one or two intermediate decks, also known as a multiple deck freighter, still predominated mainly as a freight steamer. Other types of ship were passenger-freight ships, tankers, ore carriers, combined ore-oil carriers and refrigerator ships. Even at the beginning of the 1950s the world merchant fleet did not have more than the above types of ship. But in the subsequent 1960s more types and combinations of ship were developed than in the entire 5000 year history of shipping together.

The cause of this explosion in ship types was primarily the huge increase in shipping requirements which the multiple deck freighter could no longer cope with. In the past the universal suitability of this type of ship had proved its worth, but it was unsuited to rapid loading and unloading as well as short port lay times. It was therefore this type of ship which essentially contributed to blockages in many of the world's ports. The solution to this was sought in new types of ship which were quicker to load and unload.

The main drawback of the conventional multiple deck ship was the very small hatch dimensions which only opened up a small part of the deck area. The majority of the cargo therefore had to be stowed below decks manually. The breakthrough to new types of ship for general cargo was achieved by the so-called „open ship“. In an „open ship“ the greater part of the deck area consists of hatch covers which can be lifted and the loading space below them accessed directly with a crane hook. In

conjunction with the introduction of containers in seaport transshipment, mass general goods shipping (such as paper, wood, metals) and the enormous increase in vehicle exports, container ships, roll on/roll off ships, metal and timber carriers, modern multi-purpose general cargo ships, light transporters etc were developed almost simultaneously.

Another reason for the rapid development of new types of ship lies in the mass appearance of new goods which used to be shipped as general cargo or not at all. The transportation of general goods in multiple deck freighters, as was previously the norm with grain for instance, was no longer economically justifiable. New special types of ship had to be developed to meet the increasing special transport requirements. The specialised and universal freighter or bulk carrier, cement transporter, liquid gas tanker, chemical and product tanker and the large number of combined freighters thus came about, with which shippers wanted to avoid too much specialisation through greater flexibility.

Even with the large variety of ship types, it can be said that the majority (in terms of numbers of ships) of the world merchant fleet transports general industrial, agricultural and timber goods. Two out of three freighters in the world's merchant fleet today carry some kind of general cargo, e.g. semi-finished products and finished products, loose, packaged or in containers. This group of ships also has the greatest variety of types, even though it amounts to only around 25% of the total tonnage. Ships of these types

carry the most valuable and expensive goods, which also require the greatest expenditure during transshipment and storage at the sea ports. It is not surprising that efforts to increase constantly the quality of cargo transporting by sea by way of improved and new types of ship have not flagged. All the freighters in regular shipping service belong to this type of ship.

The greater part of world tonnage is made up of bulk transporters for raw materials and energy resources, as well as industrial liquid products. All ships of this type are in tramp and special shipping, whereby economical special shipping predominates. This means that the greater part of bulk carrier ships are used for supplying raw materials for major industrial operations (bound by long-term contracts). Every fifth freighter is a tanker. However, in terms of tonnage tankers make up almost half of the world's merchant fleet. This group of ships includes the most expensive freighters, the petroleum tankers.

Ore and bulk carriers as well as combinations thereof for petroleum form the smallest group in terms of numbers of ships with slightly more than 10%. Their proportion of tonnage is however more than 30% of the world's commercial tonnage. The goods transported by these ships are among the cheapest in the shipping trade. They do not therefore involve high transport costs. This can be carried out with relatively inexpensive and slow ships. The ships for the majority of bulk transporting (raw materials), which are simple to construct and are highly economical in operation, are the work horses of the seas.

TYPES OF SHIPS:

1. COASTAL FREIGHTER

Construction costs: \$ 10,000,000
Construction time: 4 months
Gross register tonnes: 1,599 GRT
Maximum load 3,915 t
Speed: 13.0 kn
Engine: 1,570 kw
Tank volume: 100 t
Length x width: 91.4 m x 13.2 m
Height of sides: 6.3 m
Draught: 5.1 m

2. FREIGHTER

Construction costs: \$ 25,000,000
Construction time: 6 months
Gross register tonnes: 6,823 GRT
Maximum load 8,130 t
Speed: 17.0 kn
Engine: 6,612 kw
Tank volume: 550 t
Length x width: 120.5 m x 16.2 m
Height of sides: 9.4 m
Draught: 6.6 m

3. LARGE FREIGHTER

Construction costs: \$ 34,000,000
Construction time: 8 months
Gross register tonnes: 8,850 GRT
Maximum load 12,540 t
Speed: 16.0 kn
Engine: 6,436 kw
Tank volume: 1000 t
Length x width: 140.0 m x 20.6 m
Height of sides: 12.3 m
Draught: 9.0 m

4. REFRIGERATOR SHIP

Construction costs: \$ 45,000,000
Construction time: 10 months
Gross register tonnes: 8,430 GRT
Maximum load 11,430 t
Speed: 23.5 kn
Engine: 17,200 kw
Tank volume: 2000 t
Length x width: 147.0 m x 21.5 m
Height of sides: 12.5 m
Draught: 9.5 m

5. BULK CARRIER

Construction costs: \$ 40,000,000
Construction time: 7 months
Gross register tonnes: 21,739 GRT
Maximum load 38,679 t
Speed: 15.0 kn
Engine: 8,863 kw
Tank volume: 1500 t
Length x width: 200.2 m x 27.0 m
Height of sides: 15.0 m
Draught: 10.9 m

6. CONTAINER SHIP

Construction costs: \$ 68,000,000
Construction time: 12 months
Gross register tonnes: 20,500 GRT
Maximum load 26,350 t
Speed: 18.0 kn
Engine: 8,826 kw
Tank volume: 1200 t
Length x width: 177.0 m x 28.0 m
Height of sides: 16.1 m
Draught: 11.4 m

7. TANKER

Construction costs: \$ 80,000,000
Construction time: 15 months
Gross register tonnes: 42,125 GRT
Maximum load 78,501 t
Speed: 16.0 kn
Engine: 16,760 kw
Tank volume: 3000 t
Length x width: 243.8 m x 38.6 m
Height of sides: 17.1 m
Draught: 13.1 m

8. SUPERTANKER

Construction costs: \$ 192,000,000
Construction time: 24 months
Gross register tonnes: 148,810 GRT
Maximum load 326,585 t
Speed: 14.6 kn
Engine: 27,500 kw
Tank volume: 5000 t
Length x width: 346.0 m x 53.3 m
Height of sides: 32.0 m
Draught: 24.8 m

9. PASSENGER SHIP

Construction costs: \$ 280,000,000
Construction time: 30 months
Gross register tonnes: 80,000 GRT
Passenger capacity: 1800
Speed: 29.0 kn
Engine: 63,067 kw
Tank volume: 5000 t
Length x width: 275.5 m x 31.0 m
Height of sides: 15.7 m
Draught: 9.3 m

LOADING OF THE SHIP TYPES

	1.	2.	3.	4.	5.	6.	7.	8.	
Ballast x		x	x	x	x	x	x	x	
Wheat x		x	x	o	x	x	o	o	
Tropical fruits x	x		x	x	x	o	x	o	o
Bananas o		o	o	x	o	x	o	o	
Tobacco x		x	x	x	o	x	o	o	
Cocoa x		x	x	x	x	x	o	o	
Coffee x		x	x	x	x	x	o	o	
Tea x		x	x	x	o	x	o	o	
Rice x		x	x	o	x	x	o	o	
Oil seed x		x	x	o	x	x	o	o	
Sugar x		x	x	o	x	x	o	o	
Animal products o			o	o	x	o	x	o	o
Wool x		x	x	o	o	x	o	o	
Cotton x		x	x	o	o	x	o	o	
Precious wood x	x		x	x	o	o	x	o	o
Rubber x		x	x	o	o	x	o	o	
Fish products o	o		o	o	x	o	x	o	o
Coal x		x	x	o	x	o	o	o	

X: the ship can carry this type of load.

	1.	2.	3.	4.	5.	6.	7.	8.	
Petroleum o			o	o	o	o	o	x	x
Iron ore x		x	x	o	x	o	o	o	
Copper x		x	x	o	x	o	o	o	
Bauxite x		x	x	o	x	o	o	o	
Lead and zinc x	x		x	x	o	x	o	o	o
Phosphates x	x		x	x	o	x	o	o	o
Textiles x		x	x	o	o	x	o	o	
Iron and steel x	x		x	x	o	o	x	o	o
Aluminium x			x	x	o	o	x	o	o
Machines x	x		x	x	o	o	x	o	o
Motors and vehicles		x		x	x	o	o	x	o o
Electrical devices		x		x	x	o	o	x	o o
Electronics & Computers x				x	x	o	o	x	o o
Chemical products		x		x	x	o	o	x	o o

1. Coastal freighter • 2. Freighter • 3. Large freighter • 4. Refrigerator ship • 5. Bulk carrier • 6. Container ship • 7. Tanker • 8. Supertanker • 9. Passenger ship • See also page 50

SUPPLY

WHEAT AND
OTHER GRAIN
New York
New Orleans
Le Havre
Savannah
Halifax
Vancouver
London

Hamburg
Istanbul
Melbourne
Houston
Buenos Aires
Bordeaux
Fremantle
Adelaide
Barcelona

Rotterdam
Antwerp
Algiers
Bilbao
Porto
Piraeus
Tunis
Odessa

TROPICAL FRUITS

San Francisco
Casablanca
Los Angeles

BANANAS

Guayaquil
Cartagena
Port Limon

TOBACCO

Shanghai
Savannah
Bombay
Madras

COCOA

Abidjan
Belem
Accra
Kuala Lumpur
Guayaquil
Salvador

COFFEE

Santos
Rio de Janeiro
Jakarta
Abidjan
Cartagena
Salina Cruz
Guayaquil
Puerto Barrios
Port Limon

TEA

Madras
Bombay

RICE

Bangkok
Shanghai
Karachi
Bombay

OIL SEED

Savannah
Santos
Buenos Aires
Shanghai
New Orleans

SUGAR

Salvador
Bombay
Madras
Durban
Bangkok
Veracruz

ANIMAL PRODUCTS

Adelaide
Fremantle
Melbourne

Bilbao
Cape Town
Barcelona
Naples

Puerto Barrios

Cristobal
San Jose
San Lorenzo

Salvador

Istanbul
Genoa
Naples
Piraeus

Douala

Rio de Janeiro
Lagos
Cotonou
Colombo
Lome
Boma

Puerto Cabello

Maracaibo
Mombasa
Boma
San Jose
Lome
Douala
Puerto Cortes
Cotonou
Luanda

Calcutta

Colombo
Mombasa

Madras

Calcutta
Abadan
Montevideo
Salvador

Manila

Kuala Lumpur
Dakar
Port Sudan
Alexandria
Douala

Sydney

Cartagena
Puerto Cabello
Kingston
Maracaibo
Santo Domingo
Acajutla

Buenos Aires

Cape Town
Hamburg
London

Salina Cruz

Genoa
Karachi
Buenos Aires

Puerto Cortes

Abidjan
Douala
Corinto

Jakarta

Santo Domingo
Manila

Santo Domingo

Maracaibo
Monrovia
Puerto Cabello
Port Moresby
Cristobal

Port Moresby

Acajutla
Monrovia
Dar-es-Salaam
Santo Domingo
Corinto
San Lorenzo
Aden
Arica

Beira

Jakarta
Dar-es-Salaam

Alexandria

Paramaribo
Belem

Abadan

Tripoli
Lagos
Accra
Cotonou

San Jose

San Lorenzo
Puerto Barrios
Puerto Cortes
Corinto
Cristobal

Rotterdam

Karachi
Le Havre
Montevideo

Wellington Liverpool Antwerp Bilbao Port Limon Algiers	Lisbon Tripoli Mombasa Corinto Abu Dhabi Dubai	Port Sudan Dakar Aden Abadan
WOOL Adelaide Fremantle Melbourne	Wellington Buenos Aires Cape Town Montevideo	Valparaiso Callao Dubai Abadan
COTTON Karachi Bombay Savannah Houston Rio de Janeiro Istanbul San Francisco Santos Los Angeles	Alexandria Cartagena Salina Cruz Veracruz Beira Tampico Dar-es-Salaam Casablanca San Jose Acajutla	Lagos Aden Puerto Barrios San Lorenzo Douala Port Sudan Abadan Puerto Cortes Corinto
PRECIOUS WOOD Belem Vancouver Halifax Jakarta Kuala Lumpur Paramaribo Bomaa Bangkok	Manila Douala Port Moresby Luanda San Lorenzo Wellington Puerto Cortes Corinto Monrovia	Porto Lagos Beira Arica Abidjan Lisbon Valparaiso Accra
RUBBER Bangkok Jakarta	Kuala Lumpur Colombo Port Moresby	Lagos Douala Monrovia
FISH PRODUCTS Tokyo Callao Valparaiso Bangkok	Wellington Porto Cristobal Manila Lisbon	Guayaquil Dakar Aden Luanda Abu Dhabi
COAL New York Durban Sydney	Liverpool Hamburg London Fremantle	Calcutta Odessa Valparaiso Lagos
PETROLEUM Dubai Abadan Tampico Abu Dhabi Vancouver Lagos London New Orleans Maracaibo	Jakarta Houston Oran Tobruk Puerto Cabello Los Angeles Kuala Lumpur Luanda Cartagena Doha	Tripoli Guayaquil Tunis Cristobal Arica Alexandria Puerto Barrios San Jose
IRON ORE Fremantle Rio de Janeiro Calcutta Halifax	Adelaide Puerto Cabello Durban Oran Monrovia	Chanaral Maracaibo Kuala Lumpur Valparaiso Beira

Odessa	Luanda	Algiers
COPPER	Melbourne	Durban
Valparaiso	Adelaide	Port Moresby
Halifax	Boma	Oran
Callao	Jakarta	Manila
BAUXITE	Paramaribo	Accra
Fremantle	Jakarta	
Kingston	Kuala Lumpur	
LEAD AND ZINC	Halifax	Bilbao
Adelaide	Tampico	Arica
Vancouver	Algiers	Oran
Callao	Casablanca	
PHOSPHATES	Algiers	Dakar
Casablanca	Lome	
Tunis	Alexandria	
TEXTILES	Shanghai	Istanbul
Bombay	London	Tampico
Madras	Tunis	Acajutla
Hong Kong	Salina Cruz	Lisbon
Calcutta	Beira	Naples
Singapore	Marseilles	Porto
Savannah	Cape Town	Piraeus
Barcelona	Liverpool	Port Limon
Karachi	Genoa	
Bangkok	Veracruz	
IRON AND STEEL	Calcutta	Adelaide
Tokyo	Antwerp	Rotterdam
New York	Genoa	Singapore
Hamburg	Bilbao	Lisbon
New Orleans	Naples	Algiers
Le Havre	Fremantle	
ALUMINIUM	Hamburg	Calcutta
Houston	Tokyo	Kingston
Vancouver	Marseilles	Paramaribo
New Orleans	Antwerp	
Fremantle	Bordeaux	
MACHINES	Rotterdam	Barcelona
San Francisco	Antwerp	Rio de Janeiro
Los Angeles	Le Havre	Bilbao
Hamburg	New Orleans	Lisbon
Tokyo	Houston	Cape Town
Liverpool	Naples	Porto
London	Genoa	Sydney
London	Savannah	Calcutta
Marseilles	Shanghai	Madras
VEHICLES AND MOTORS	New Orleans	Barcelona
Tokyo	Marseilles	London
San Francisco	Le Havre	Naples
New York	Bilbao	Liverpool
Houston	Genoa	Sydney
Hamburg	Bordeaux	Buenos Aires
ELECTRICAL APPLIANCES	Hamburg	Rotterdam
Tokyo	Manila	
Hong Kong	Singapore	

ELECTRONICS
AND COMPUTERS
Tokyo

New York
San Francisco
Los Angeles

Hamburg
Le Havre
Rotterdam

CHEMICAL PRODUCTS
New Orleans
Houston
Tokyo
Hamburg
Shanghai
Los Angeles
San Francisco

Genoa
Antwerp
Rotterdam
Liverpool
Naples
Barcelona
London
Hong Kong

Tampico
Veracruz
Buenos Aires
Karachi
Melbourne
Port Limon

DEMAND

WHEAT AND
OTHER GRAIN
Shanghai
Alexandria
Tokyo
Abadan
Genoa

Karachi
Naples
Jakarta
Dubai
Casablanca
Hong Kong
Mombasa

Cristobal
Doha
Valparaiso
Abu Dhabi
Kingston
Aden
Port Sudan

TROPICAL FRUITS
Marseilles
Hamburg

Bordeaux
Le Havre
London

Rotterdam
Antwerp

BANANAS
Hamburg
New York
Tokyo
New Orleans
London
Marseilles

Bordeaux
Rotterdam
Le Havre
Antwerp
Los Angeles
Houston
San Francisco

Genoa
Vancouver
Naples
Savannah
Halifax

TOBACCO
New York
Hamburg
London

Rotterdam
San Francisco
Marseilles
Los Angeles

Antwerp
Tokyo

COCOA
New York
London

Rotterdam
Los Angeles
New Orleans

Hamburg
San Francisco

COFFEE
New York
Hamburg
London
Bordeaux

Tokyo
Le Havre
Genoa
San Francisco
Naples

New Orleans
Marseilles
Los Angeles
Houston
Savannah

TEA
New York
London
San Francisco

Karachi
Hamburg
Liverpool
Dubai

Los Angeles
Abu Dhabi
Doha

RICE
Abadan
Manila

Dubai
Hong Kong
Dakar

Kuala Lumpur
Hamburg

OIL SEED
Tokyo
Rotterdam
Hamburg

Sydney
Barcelona
Melbourne
London

Marseilles
Vancouver
Antwerp
Genoa

SUGAR	London	Liverpool
Shanghai	New Orleans	Halifax
Tokyo	San Francisco	Houston
New York	Savannah	
Los Angeles	Vancouver	
ANIMAL PRODUCTS	Marseilles	Genoa
New York	San Francisco	Halifax
Los Angeles	Vancouver	Naples
Tokyo	Barcelona	
WOOL	Le Havre	Rotterdam
Tokyo	Antwerp	Genoa
Hong Kong	Marseilles	Naples
Hamburg	Barcelona	
Bordeaux	Bilbao	
COTTON	Bordeaux	Lisbon
Tokyo	Marseilles	Liverpool
Hong Kong	Rotterdam	Barcelona
London	Genoa	Bilbao
Hamburg	Naples	Porto
Le Havre	Antwerp	
PRECIOUS WOOD	Alexandria	Naples
New York	Genoa	Savannah
Tokyo	Melbourne	Odessa
Hamburg	Marseilles	Barcelona
London	New Orleans	San Francisco
Sydney	Los Angeles	Liverpool
RUBBER	Tokyo	Marseilles
New York	Shanghai	Durban
Los Angeles	Cape Town	London
New Orleans	Hamburg	Le Havre
San Francisco	Savannah	
FISH PRODUCTS	Liverpool	Rotterdam
Hamburg	Los Angeles	Bordeaux
Melbourne	Marseilles	Hong Kong
London	Naples	Antwerp
Vancouver	San Francisco	Bilbao
Sydney	Le Havre	
Genoa	Barcelona	
COAL	Antwerp	Salvador
Tokyo	Barcelona	Santos
Le Havre	Bilbao	Belem
Rio de Janeiro	Piraeus	Guayaquil
Bordeaux	Lisbon	San Lorenzo
Rotterdam	Naples	Puerto Cortes
Marseilles	Port	Corinto
Genoa	Istanbul	Kingston
PETROLEUM	Melbourne	Calcutta
Tokyo	Istanbul	Lisbon
Rotterdam	Le Havre	Odessa
Rio de Janeiro	Genoa	Antwerp
Sydney	Vancouver	Madras
Hamburg	Bilbao	Fremantle
Bombay	Barcelona	Montevideo
Marseilles	Adelaide	

IRON ORE	Le Havre	Naples
Tokyo	Calcutta	Rotterdam
New York	Antwerp	Singapore
Hamburg	Genoa	Lisbon
New Orleans	Bilbao	Algiers
COPPER	Hamburg	Antwerp
New York	London	Bordeaux
Tokyo	Shanghai	Rotterdam
New Orleans	Marseilles	Naples
San Francisco	Le Havre	
Los Angeles	Genoa	
BAUXITE	Hamburg	Bordeaux
Houston	Tokyo	Calcutta
Vancouver	Marseilles	
New Orleans	Antwerp	
LEAD AND ZINC	Shanghai	Antwerp
New York	San Francisco	Liverpool
New Orleans	Los Angeles	Naples
Tokyo	London	Rotterdam
Hamburg	Genoa	
Houston	Marseilles	
PHOSPHATES	Hamburg	Rotterdam
New York	Istanbul	Barcelona
New Orleans	Melbourne	Antwerp
Le Havre	Houston	Bilbao
Savannah	Bordeaux	Porto
Halifax	Buenos Aires	Piraeus
Vancouver	Fremantle	Odessa
London	Adelaide	
TEXTILES	Wellington	Doha
Hamburg	Guayaquil	Abidjan
Tokyo	Dubai	Abu Dhabi
Le Havre	Alexandria	Douala
Bordeaux	Algiers	Boma
Buenos Aires	Lagos	Kingston
IRON AND STEEL	Montevideo	Karachi
San Francisco	Istanbul	Kingston
Sydney	Bombay	Alexandria
Los Angeles	Wellington	Tripoli
Melbourne	Tampico	Dubai
Bordeaux	Savannah	Casablanca
Barcelona	Veracruz	San Jose
Vancouver	Callao	Abu Dhabi
Marseilles	Manila	Lome
Halifax	Puerto Barrios	Abadan
Shanghai	Port Limon	Boma
Houston	Tunis	Madras
ALUMINIUM	Montevideo	Tunis
San Francisco	Shanghai	Le Havre
London	Liverpool	Savannah
New York	Genoa	Bilbao
Halifax	Naples	Dubai
Los Angeles	Barcelona	
MACHINES	Cristobal	Tampico
Melbourne	Mombasa	Lagos
Buenos Aires	Adelaide	Maracaibo

Puerto Cabello
Karachi
Cartagena
Jakarta
Abu Dhabi
Chanaral
Oran
Abadan
Singapore
Port Limon
Fremantle
Halifax
Valparaiso
Dubai
Veracruz
Puerto Barrios
Kuala Lumpur
Bangkok
Manila

VEHICLES AND MOTORS

Vancouver
Halifax
Shanghai
Antwerp
Hong Kong
Lisbon
Tampico
Porto
Piraeus
Melbourne
Adelaide
Veracruz
Singapore
Montevideo
Dubai
Abu Dhabi
Calcutta
Jakarta
Cristobal
Doha
Bombay

ELECTRICAL APPLIANCES

New York
Los Angeles
San Francisco
Rio de Janeiro
London
Marseilles
New Orleans
Le Havre
Bordeaux
Cape Town
Houston
Mombasa
Antwerp
Cristobal
Salvador
Alexandria

ELECTRONICS AND COMPUTERS

Sydney

Tobruk
Monrovia
Istanbul
Wellington
Guayaquil
Luanda
Odessa
Kingston
Puerto Cortes
Acajutla
Hong Kong
Doha
Alexandria
San Lorenzo
Callao
Colombo
Port Moresby
Piraeus
San Jose

Karachi
Maracaibo
Lagos
Fremantle
Puerto Cortes
Puerto Cabello
Alexandria
Madras
Manila
Port Limon
Cartagena
Kuala Lumpur
Mombasa
Puerto Barrios
Dakar
Douala
Wellington
Valparaiso
Bangkok
Santo Domingo
San Lorenzo
Chanaral

Lagos
Durban
Dubai
Savannah
Liverpool
Callao
Algiers
Karachi
Istanbul
Valparaiso
Abu Dhabi
Cartagena
Belem
Monrovia
Doha
Puerto Barrios
Santos

Marseilles
Hong Kong
Melbourne

Paramaribo
Corinto
Arica
Algiers
Beira
Santo Domingo
Salina Cruz
Tripoli
Casablanca
Dar-es-Salaam
Abidjan
Dakar
Accra
Boma
Aden
Lome
Cotonou
Port Sudan

Arica
Algiers
Monrovia
Callao
Luanda
Corinto
Tunis
Salina Cruz
Boma
Colombo
Guayaquil
Tripoli
San Jose
Paramaribo
Dar-es-Salaam
Oran
Port Moresby
Tobruk
Lome
Beira
Cotonou
Port Sudan

Tunis
Jakarta
Tripoli
Aden
Casablanca
Acajutla
Guayaquil
Luanda
Bangkok
San Jose
Douala
Kuala Lumpur
Wellington
Arica
Boma
Colombo

London
Halifax
Vancouver

Barcelona
Bordeaux
Shanghai
Antwerp
Singapore

Genoa
New Orleans
Rio de Janeiro
Naples
Montevideo

Cape Town
Houston
Abu Dhabi
Liverpool
Cristobal

CHEMICAL PRODUCTS

New York
Vancouver
Halifax
Sydney
Rio de Janeiro
Cape Town
Maracaibo
Bilbao
Adelaide
Mombasa
Montevideo
Durban
Jakarta
Singapore
Bombay
Alexandria
Savannah
Salvador

Cartagena
Dakar
Madras
Cristobal
Monrovia
Calcutta
Wellington
Piraeus
Fremantle
Lisbon
Dubai
Puerto Barrios
Tunis
Porto
Istanbul
Manila
Puerto Cabello
Belem
Bangkok

Tripoli
Accra
Luanda
Santos
Guayaquil
Puerto Cortes
Doha
Kuala Lumpur
San Lorenzo
San Jose
Abu Dhabi
Santo Domingo
Corinto
Colombo
Abidjan
Aden
Port Sudan

PORTS

ANTWERP (BELGIUM)

Europe

Container transshipment and tanker terminal

Main imports: Electrical appliances, motors and vehicles, coal, tropical fruits, wool

Main exports: Iron and steel, machines, aluminium, grain, animal products

BARCELONA (SPAIN)

Europe

Container transshipment and tanker terminal

Main imports: Petroleum, coal, animal products, iron and steel, oil seed

Main exports: Motors and vehicles, machines, textiles, chemical products, grain

BILBAO (SPAIN)

Europe

Tanker terminal

Main imports: Chemical products, coal, aluminium, iron ore, petroleum

Main exports: Motors and vehicles, machines, animal products, iron and steel, lead and zinc

BORDEAUX (FRANCE)

Europe

Container transshipment and tanker terminal

Main imports: Electrical appliances, coal, tropical fruits, bananas, textiles

Main exports: Motors and vehicles, grain, aluminium

GENOA (ITALY)

Europe

Container transshipment and tanker terminal

Main imports: Petroleum, coal, iron ore, grain, aluminium

Main exports: Machines, motors and vehicles, textiles, chemical products, iron and steel

HAMBURG (GERMANY)

Europe

Container transshipment and tanker terminal

Main imports: Petroleum, iron ore, textiles, tropical fruits, coffee

Main exports: Machines, chemical products, motors and vehicles, electrical appliances, electronics and computers

ISTANBUL (TURKEY)

Europe

Tanker terminal

Main imports: Machines, petroleum, chemical products, iron and steel, electrical appliances

Main exports: Cotton, textiles, tobacco, grain

LE HAVRE (FRANCE)

Europe

Container transshipment and tanker terminal

Main imports: Electrical appliances, coal, iron ore, phosphates

Main exports: Machines, motors and vehicles, iron and steel, grain, animal products

LISBON (PORTUGAL)

Europe

Container transshipment and tanker terminal

Main imports: Motors and vehicles, chemical products, petroleum, coal, iron ore

Main exports: Textiles, machines, precious woods, animal products, fish products

LIVERPOOL (GREAT BRITAIN)

Europe

Container transshipment and tanker terminal

Main imports: Electrical appliances, tea, aluminium, cotton, sugar

Main exports: Machines, motors and vehicles, chemical products, textiles, coal

LONDON (GREAT BRITAIN)

Europe

Container transshipment and tanker terminal

Main imports: Electrical appliances, tea, cotton, aluminium, electronics and computers

Main exports: Machines, motors and vehicles, chemical products, textiles, coal

MARSEILLES (FRANCE)

Europe

Container transshipment and tanker terminal

Main imports: Electrical appliances, coal, petroleum, iron and steel, electronics and computers

Main exports: Machines, motors and vehicles, aluminium, textiles

NAPLES (ITALY)

Europe

Container transshipment and tanker terminal

Main imports: Iron ore, aluminium, grain, coal, cotton

Main exports: Machines, motors and vehicles, textiles, chemical products, iron and steel

ODESSA (UKRAINE)

Europe

Tanker terminal

Main imports: Petroleum, precious wood, machines

Main exports: Iron ore, coal, grain

PIRAEUS (GREECE)

Europe

No special transshipment facilities

Main imports: Machines, chemical products, coal, motors and vehicles, phosphates

Main exports: Textiles, grain, tobacco

PORTO (PORTUGAL)

Europe

No special transshipment facilities

Main imports: Motors and vehicles, chemical products, coal, cotton, phosphates

Main exports: Textiles, machines, precious wood, grain, animal products

ROTTERDAM (NETHERLANDS)

Europe

Container transshipment and tanker terminal

Main imports: Petroleum, coal, tobacco, tropical fruits, oil seed

Main exports: Machines, chemical products, grain, animal products, iron and steel

ACAJUTLA (EL SALVADOR)

Central America

No special transshipment facilities

Main imports: Machines, electrical appliances

Main exports: Coffee, sugar, cotton, textiles

CORINTO (NICARAGUA)

Central America

No special transshipment facilities

Main imports: Machines, motors and vehicles, chemical products

Main exports: Coffee, cotton, animal products, sugar, bananas

CRISTOBAL (PANAMA)

Central America

Container transshipment and tanker terminal

Main imports: Chemical products, machines, motors and vehicles, grain, electrical appliances

Main exports: Petroleum, bananas, tropical fruits, sugar, cocoa

HALIFAX (CANADA)

North America

Container transshipment and tanker terminal

Main imports: Motors and vehicles, iron and steel, machines, chemical products, electronics and computers

Main exports: Precious wood, grain, iron ore

HOUSTON (USA)

North America

Container transshipment and tanker terminal

Main imports: Electrical appliances, bauxite, iron and steel, bananas, lead and zinc

Main exports: Petroleum, cotton, machines, motors and vehicles, chemical products

KINGSTON (JAMAICA)

Central America

Container transshipment

Main imports: Machines, iron and steel, textiles

Main exports: Bauxite, aluminium, sugar

LOS ANGELES (USA)

North America

Container transshipment and tanker terminal

Main imports: Iron and steel, aluminium, electrical appliances, animal products, cocoa

Main exports: Electronics and computers, cotton, petroleum, machines, tropical fruits

NEW ORLEANS (USA)

North America

Container transshipment and tanker terminal

Main imports: Iron ore, bauxite, phosphates, rubber, bananas

Main exports: Petroleum, machines, motors and vehicles, chemical products, iron and steel

NEW YORK (USA)

North America

Container transshipment and tanker terminal

Main imports: Electrical appliances, iron ore, copper, phosphates, precious wood

Main exports: Coal, iron and steel, electronics and computers, motors and vehicles

PORT LIMON (COSTA RICA)

Central America

Container transshipment

Main imports: Machines, iron and steel, motors and vehicles

Main exports: Coffee, bananas, animal products, chemical products, textiles

PUERTO BARRIOS (GUATEMALA)

Central America

Tanker terminal

Main imports: Machines, motors and vehicles, electrical appliances

Main exports: Petroleum, coffee, bananas, sugar, cotton

PUERTO CORTES (HONDURAS)

Central America

Container transshipment

Main imports: Chemical products, machines, motors and vehicles

Main exports: Coffee, bananas, precious wood, cotton, sugar

SALINA CRUZ (MEXICO)

Central America

No special transshipment facilities

Main imports: Machines, motors and vehicles

Main exports: Textiles, cotton, coffee

SAN FRANCISCO (USA)

North America

Container transshipment and tanker terminal

Main imports: Iron and steel, aluminium, electrical appliances, tea, tobacco

Main exports: Electronics and computers, cotton, machines, chemical products, motors and vehicles

SAN JOSE (GUATEMALA)

Central America

Tanker terminal

Main imports: Machines, motors and vehicles, electrical appliances

Main exports: Petroleum, bananas, sugar, cotton

SAN LORENZO (HONDURAS)

Central America

No special transshipment facilities

Main imports: Chemical products, machines, motors and vehicles

Main exports: Coffee, bananas, precious wood, cotton, sugar

SANTO DOMINGO (DOMINICAN REPUBLIC)

Central America

No special transshipment facilities

Main imports: Motors and vehicles, chemical products, machines

Main exports: Sugar, cocoa, tobacco, coffee

SAVANNAH (USA)

North America

Container transshipment

Main imports: Chemical products, electrical appliances, iron and steel, phosphates, rubber

Main exports: Cotton, tobacco, grain, textiles, machines

TAMPICO (MEXICO)

Central America

Tanker terminal

Main imports: Machines, motors and vehicles

Main exports: Petroleum, textiles, cotton, lead and zinc, chemical products

VANCOUVER (CANADA)

North America

Container transshipment and tanker terminal

Main imports: Motors and vehicles, iron and steel, bauxite, chemical products, electronics and computers

Main exports: Precious wood, grain, petroleum, lead and zinc

VERACRUZ (MEXICO)

Central America

Tanker terminal

Main imports: Machines, motors and vehicles

Main exports: Textiles, cotton, chemical products, sugar

ARICA (BOLIVIAN FREEPORT)

South America

Container transshipment and tanker terminal

Main imports: Machines, motors and vehicles, electrical appliances

Main exports: Petroleum, lead and zinc, precious wood, coffee

BELEM (BRAZIL)

South America

No special transshipment facilities

Main imports: Coal, electrical appliances, chemical products

Main exports: Precious wood, cocoa, rice

BUENOS AIRES (ARGENTINA)

South America

Container transshipment and tanker terminal

Main imports: Machines, textiles, phosphates

Main exports: Animal products, motors and vehicles, grain, oil seed, chemical products

CALLAO (PERU)

South America

Container transshipment

Main imports: Machines, electrical appliances, motors and vehicles, iron and steel

Main exports: Fish products, lead and zinc, wool, copper

CARTAGENA (COLOMBIA)

South America

Container transshipment and tanker terminal

Main imports: Machines, chemical products, motors and vehicles, electrical appliances

Main exports: Coffee, petroleum, bananas, cotton

CHANARAL (CHILE)

South America

No special transshipment facilities

Main imports: Machines, motors and vehicles

Main exports: Iron ore

GUAYAQUIL (ECUADOR)

South America

Container transshipment and tanker terminal

Main imports: Chemical products, machines, textiles, electrical appliances, motors and vehicles

Main exports: Petroleum, cocoa, fish products, coffee, bananas

MARACAIBO (VENEZUELA)

South America

Container transshipment and tanker terminal

Main imports: Machines, chemical products, motors and vehicles

Main exports: Petroleum, iron ore, cocoa, coffee, sugar

MONTEVIDEO (URUGUAY)

South America

Container transshipment and tanker terminal

Main imports: Petroleum, chemical products, iron and steel, motors and vehicles, aluminium

Main exports: Animal products, rice, wool

PARAMARIBO (SURINAM)

South America

No special transshipment facilities

Main imports: Machines, motors and vehicles

Main exports: Bauxite, aluminium, rice, precious wood

PUERTO CABELLO (VENEZUELA)

South America

Tanker terminal

Main imports: Machines, chemical products, motors and vehicles

Main exports: Petroleum, iron ore, cocoa, coffee, sugar

RIO DE JANEIRO (BRAZIL)

South America

Container transshipment and tanker terminal

Main imports: Petroleum, coal, electrical appliances, chemical products, electronics and computers

Main exports: Coffee, iron ore, machines, cotton, cocoa

SALVADOR (BRAZIL)

South America

No special transshipment facilities

Main imports: Coal, electrical appliances, chemical products

Main exports: Cocoa, sugar, tobacco, rice

SANTOS (BRAZIL)

South America

Container transshipment

Main imports: Coal, electrical appliances, chemical products

Main exports: Coffee, cotton, oil seed

VALPARAISO (CHILE)

South America

No special transshipment facilities

Main imports: Motors and vehicle, electrical appliances, machines, grain

Main exports: Copper, iron ore, coal, precious wood, wool

ABIDJAN (IVORY COAST)

Africa

No special transshipment facilities

Main imports: Chemical products, textiles, machines

Main exports: Cocoa, coffee, precious wood, bananas

ACCRA (GHANA)

Africa

Container transshipment

Main imports: Machines, chemical products

Main exports: Cocoa, precious wood, bauxite, oil seed

ALEXANDRIA (EGYPT)

Africa

Container transshipment and tanker terminal

Main imports: Motors and vehicles, machines, chemical products, iron and steel, electrical appliance

Main exports: Cotton, petroleum, rice, oil seed, phosphates

ALGIERS (ALGERIA)

Africa

Tanker terminal

Main imports: Machines, textiles, motors and vehicles, electrical appliances

Main exports: Lead and zinc, phosphates, grain, animal products

BEIRA (MOZAMBIQUE)

Africa

No special transshipment facilities

Main imports: Machines, motors and vehicles

Main exports: Cotton, textiles, tea, precious wood, iron ore

BOMA (ZAIRE)

Africa

No special transshipment facilities

Main imports: Motors and vehicles, electrical appliances, machines, textiles, iron and steel

Main exports: Copper, coffee, cocoa

CASABLANCA (MOROCCO)

Africa

Container transshipment and tanker terminal

Main imports: Machines, electrical appliances, iron and steel

Main exports: Tropical fruits, phosphates, lead and zinc, cotton

COTONOU (BENIN)

Africa

Container transshipment

Main imports: Motors and vehicles, machines

Main exports: Oil seed, cocoa, coffee

DAKAR (SENEGAL)

Africa

Container transshipment and tanker terminal

Main imports: Chemical products, machines, motors and vehicles

Main exports: Oil seed, phosphates, animal products, fish products

DAR-ES-SALAAM (TANZANIA)

Africa

Container transshipment

Main imports: Machines, motors and vehicles

Main exports: Coffee, tea, cotton

DOUALA (CAMEROON)

Africa

Container transshipment and tanker terminal

Main imports: Motors and vehicles, electrical appliances, textiles

Main exports: Cocoa, coffee, cotton, rubber, bananas

DURBAN (SOUTH AFRICA)

Africa

Container transshipment and tanker terminal

Main imports: Chemical products, electrical appliances, rubber

Main exports: Copper, coal, iron ore, sugar

CAPE TOWN (SOUTH AFRICA)

Africa

Container transshipment and tanker terminal

Main imports: Chemical products, electrical appliances, rubber, electronics and computers

Main exports: Wool, tropical fruits, animal products, machines, textiles

LAGOS (NIGERIA)

Africa

Tanker terminal

Main imports: Motors and vehicles, machines, textiles, electrical appliances

Main exports: Petroleum, oil seed, cocoa, rubber, cotton

LOME (TOGO)
Africa

No special transshipment facilities
Main imports: Iron and steel, motors and vehicles, machines
Main exports: Phosphates, coffee, cocoa

LUANDA (ANGOLA)
Africa

Tanker terminal
Main imports: Electrical appliances, chemical products
Main exports: Petroleum, coffee, fish products, iron ore, precious wood

MOMBASA (KENYA)
Africa

Container transshipment
Main imports: Machines, chemical products, motors and vehicles, electrical appliances
Main exports: Coffee, tea, animal products

MONROVIA (LIBERIA)
Africa

No special transshipment facilities

Main imports: Machines, chemical products
Main exports: Iron ore, rubber, precious wood, coffee, cocoa

ORAN (ALGERIA)
Africa

Tanker terminal
Main imports: Machines, motors and vehicles
Main exports: Petroleum, iron ore, lead and zinc, copper

PORT SUDAN (SUDAN)
Africa

No special transshipment facilities
Main imports: Machines, chemical products, motors and vehicles, grain
Main exports: Cotton, oil seed, animal products

TOBRUK (LIBYA)
Africa

Tanker terminal
Main imports: Machines, motors and vehicles
Main exports: Petroleum

TRIPOLI (LIBYA)
Africa

Tanker terminal
Main imports: Motors and vehicles, machines, iron and steel, electrical appliances
Main exports: Petroleum, animal products, oil seed

TUNIS (TUNISIA)
Africa

Tanker terminal
Main imports: Motors and vehicles, chemical products, iron and steel
Main exports: Petroleum, textiles, phosphates, oil seed, grain

ABADAN (IRAN)

Asia

Tanker terminal

Main imports: Machines, iron and steel

Main exports: Petroleum, cotton, animal products, wool, rice

ABU DHABI (UNITED ARAB EMIRATES)

Asia

Container transshipment and tanker terminal

Main imports: Electrical appliances, machines, motors and vehicles, iron and steel, textiles

Main exports: Petroleum, animal products, fish products

ADEN (YEMEN)

Asia

No special transshipment facilities

Main imports: Chemical products, electrical appliances

Main exports: Coffee, animal products, fish products, cotton

BANGKOK (THAILAND)

Asia

Container transshipment

Main imports: Chemical products, machines, motors and vehicles, electrical appliances

Main exports: Rice, rubber, textiles, precious wood

BOMBAY (INDIA)

Asia

Container transshipment and tanker terminal

Main imports: Petroleum, motors and vehicles, chemical products, iron and steel

Main exports: Tea, cotton, textiles, tobacco, rice

COLOMBO (SRI LANKA)

Asia

No special transshipment facilities

Main imports: Machines, electrical appliances, motors and vehicles, chemical products

Main exports: Tea, rubber, cocoa

DOHA (QUATAR)

Asia

Container transshipment and tanker terminal

Main imports: Chemical products, machines, motors and vehicles, electrical appliances

Main exports: Petroleum

DUBAI (SAUDI ARABIA)

Asia

Container transshipment and tanker terminal

Main imports: Electrical appliances, machines, motors and vehicles, iron and steel, chemical products

Main exports: Petroleum, animal products, wool

HONG KONG (GREAT BRITAIN)

Asia

Container transshipment

Main imports: Machines, motors and vehicles

Main exports: Textiles, chemical products, electrical appliances

JAKARTA (INDONESIA)

Asia

Tanker terminal

Main imports: Machines, chemical products, electrical appliances

Main exports: Petroleum, copper, rubber, bauxite, coffee

CALCUTTA (INDIA)

Asia

Tanker terminal

Main imports: Petroleum, motors and vehicles, chemical products, bauxite

Main exports: Textiles, machines, tea, rice, iron ore

KARACHI (PAKISTAN)

Asia

Container transshipment and tanker terminal

Main imports: Electrical appliances, machines, motors and vehicles

Main exports: Rice, cotton, textiles, animal products, chemical products

KUALA LUMPUR (MALAYSIA)

Asia

Container transshipment and tanker terminal

Main imports: Electrical appliances, motors and vehicles, chemical products

Main exports: Rubber, petroleum, oil seed, iron ore, bauxite

MADRAS (INDIA)

Asia

Container transshipment and tanker terminal

Main imports: Petroleum, motors and vehicles, chemical products, iron and steel

Main exports: Tea, machines, textiles, tobacco, rice

MANILA (PHILIPPINES)

Asia

Container transshipment

Main imports: Machines, motors and vehicles, chemical products, rice, iron and steel

Main exports: Electrical appliances, oil seed, tobacco, copper

SHANGHAI (CHINA)

Asia

No special transshipment facilities

Main imports: Grain, motors and vehicles, sugar, iron and steel, rubber

Main exports: Rice, textiles, machines, tobacco

SINGAPORE (SINGAPORE)

Asia

Container transshipment and tanker terminal

Main imports: Chemical products, machines, motors and vehicles

Main exports: Electrical appliances, textiles, iron and steel

TOKYO (JAPAN)

Asia

Container transshipment and tanker terminal

Main imports: Petroleum, iron ore, textiles, oil seed

Main exports: Machines, electrical appliances, electronics and computers, iron and steel, motors and vehicles

ADELAIDE (AUSTRALIA)

Australia and Oceania

Container transshipment and tanker terminal

Main imports: Machines, motors and vehicles, chemical products, petroleum, phosphates

Main exports: Animal products, grain, wool, iron ore, lead and zinc

FREMANTLE (AUSTRALIA)

Australia and Oceania

Container transshipment and tanker terminal

Main imports: Machines, motors and vehicles, chemical products, petroleum, phosphates

Main exports: Iron ore, grain, animal products, wool, bauxite

MELBOURNE (AUSTRALIA)

Australia and Oceania

Container transshipment and tanker terminal

Main imports: Machines, motors and vehicles, petroleum, iron and steel, electronics and computers

Main exports: Chemical products, grain, animal products, wool, copper

PORT MORESBY (NEW GUINEA)

Australia and Oceania

Container transshipment

Main imports: Machines, motors and vehicles

Main exports: Copper, coffee, cocoa, rubber, precious wood

SYDNEY (AUSTRALIA)

Australia and Oceania

Container transshipment and tanker terminal

Main imports: Chemical products, petroleum, iron and steel, electronics and computers, oil seed

Main exports: Machines, motors and vehicles, coal, sugar

WELLINGTON (NEW ZEALAND)

Australia and Oceania

Container transshipment

Main imports: Chemical products, machines, motors and vehicles, textiles, iron and steel

Main exports: Animal products, wool, precious wood, fish products

CREDITS

IDEA & CONCEPT

MARTIN WÖLK

EXECUTIVE PRODUCER

MATHIAS REICHERT

PROGRAMMING PC & AMIGA

MARTIN WÖLK

PIXEL • GRAPHICS

OLIVER PAPOULIAS & RAMIRO VACA

GRAPHICS • ILLUSTRATIONS

CELEL KANDEMIROGLU & TOM THIEL

MUSIC

MICHAEL FRANCK

TEST PLAYERS

OLAF ERNST, HPW & CARSTEN BAHNSEN

INFO • CONCEPT

MARC WARDENGA

3D ANIMATIONS

DIRK BALTIOWITZ

INSTRUCTIONS

MARTIN WÖLK

SETTING & LAYOUT

KATRIN EISMANN